List of Appendices

Appendix A

Chemical Engineering Faculty of Purdue University

Heads	**1911-21**	**1926**	**1931**	**1936**	**1941**	**1946**	**1951**
	Peffer	Peffer	Peffer	Bray	Bray	Bray	Comings
Professors		Bray	Bray	Servias	Serviss	Enos	Bray
			Leckie	Shreve	Shreve	Lovell	Enos
			Shreve			Serviss	Serviss
						Shreve	Sherman
							Shreve
							Smith, J.M.
Visiting* Professors							Golding
Associate Professors		Maxwell	Serviss	Lovell	Eckel	Holcomb	Doody
					Lovell	Sherman	Evers
					Sherman		Lottes
Assistant Professors			Campbell	Hoelscher	Miller	Miller	Bennett
					Swift	Eaton	Myers
						Hite	
						Hughel	
						McCormack	
						Smith, J. M.	

* Only visiting professors with a tenure of more than three years are reported.

† All positions are reported on September 1 of the specific year. Instructors and part-time professors or professors of other Departments "associated with the School" are not reported.

Heads	1956	1961	1966	1971	1976	1981	1986
	Comings	Golding	(Grosh)	Greenkorn	Koppel	Andres	Andres

Professors	Guy	Albright	Albright	Albright	Albright	Albright	Albright
	Marek	Myers	Coughanowr	Chao	Chao	Chao	Chao
	Morgen	Rushton	Doody	Emery	Eckert	Delgass	Delgass
	Parlee	Sesonske	Emery	Koppel	Emery	Eckert	Eckert
	Rushton		Rushton		Greenkorn	Emery	Emery
	Schuhmann		Sesonske		Kessler	Greenkorn	Greenkorn
	Sherman		Williams		Lim	Kessler	Houze
					Ramkrishna	Koppel	Kessler
					Squires	Lim	Lim
					Tsao	Ramkrishna	Peppas
						Reklaitis	Ramkrishna
						Squires	Reklaitis
						Tsao	Squires
						Wankat	Tsao
							Wankat

Visiting* Professors	Golding			Hannemann	Hannemann	Hannemann	Hannemann

Associate Professors	Albright	Briggs	Case, P.W.	Barile	Barile	Houze	Caruthers
	Bennett	Case, P.W.	Eckert	Eckert	Delgass	Peppas	Franses
	Briggs	Coughanowr	Greenkorn	Kessler	Houze		Wang
	Doody	Doody	Koppel	Lim	Reklaitis		
	Myers	Emery	Squires	Squires	Wankat		
	Rautala	Smith, B.D.	Tucker	Woods	Weigand		
	Sesonske	Tucker	Woods		Woods		
	Tucker	Woods					
	Van Ness						

Assistant Professors	Case, L.C.	Case, L.C.	Barile	Houze	Peppas	Caruthers	Takoudis
	Coughanowr	Koppel	Kessler	Reklaitis		Franses	
	Eaton	Pinzelik	Lahti	Schneider		Takoudis	
	Emery	Shannon	Lim	Theofanous		Wang	
	Grace	Vaughn	Miller	Wankat			
	Tierney		Pinzelik	Weigand			

Heads	1991	1996	2001	2006	2011
	Reklaitis	Reklaitis	Reklaitis	Varma	Varma

Professors	Andres	Andres	Andres	Agrawal	Agrawal
	Caruthers	Basaran	Basaran	Basaran	Basaran
	Chao	Caruthers	Caruthers	Beaudoin	Beaudoin
	Delgass	Delgass	Delgass	Caruthers	Caruthers
	Eckert	Eckert	Eckert	Delgass	Corti
	Emery	Franses	Franses	Franses	Delgass
	Franses	Greenkorn	Houze	Harris	Franses
	Greenkorn	Houze	Kessler	Houze	Harris
	Houze	Kessler	Pekny	Kim	Houze
	Kessler	Peppas	Peppas	Pekny	Litster
	Peppas	Ramkrishna	Ramkrishna	Pipes	Pekny
	Ramkrishna	Squires	Sinclair (Curtis)	Ramkrishna	Pipes
	Squires	Takoudis	Squires	Reklaitis	Ramkrishna
	Tsao	Tsao	Tsao	Ribeiro	Reklaitis
	Wang	Venkat	Venkat	Venkat	Ribeiro
	Wankat	Wang	Wang	Wang	Venkat (on leave)
		Wankat	Wankat	Wankat	Wang
					Wankat

Visiting* Professors	Hannemann	Hannemann	Blau	Hannemann	Hannemann
			Hannemann		Martínez-Sáenz

Associate Professors	Takoudis	Doyle	Lauterbach	Corti	Morgan
	Venkatasubramanian (abbreviated Venkat)	Lackritz (on leave)	Lee, G.	Morgan	Thomson
		Pekny		Thomson	Won
		Sevick-Muraca			

Assistant Professors	Lackritz	Lauterbach	Corti	Baertsch	Boudouris
	Pekny	Talbot	Morgan	Hillhouse	Chakrabarti
	Talbot		Thomson	Won	Liu
	Wiest				Wu
					Yuan

Appendix B

Purdue ChE Alumni in Academic Positions

Name	University	Purdue Degree	Degree Year
Abbrecht, Peter H.	University of Health Sciences	B.S.	1952
Abraham, William H.	Iowa State University-Medicine	Ph.D.	1957
Agrawal, Pramod	University of Calif. Santa Barbara	M.S. Ph.D.	1980 1983
Ahn, Dong-June	Korea University, Seoul, S. Korea, Department Chemical Engineering	Ph.D.	1993
Androulakis, Ioannis P.	Rutgers University, Department of Chemical and Biochemical Engineering	M.S. Ph.D.	1990 1993
Anseth, Kristi S.	University of Colorado - Department of Chemical and Biological Engineering	B.S.	1992
Aoyama, Atsushi	Ritsumeikan University, Graduate School of Technology Management	Ph.D.	1995
Arce, Pedro	Tennessee Technological University-Department of Chemical Engineering	Ph.D.	1990

Arnold, David W.	University of Alabama-Department of Chemical and Biological Engineering	Ph.D.	1980
Austin, George T.	Washington State University	Ph.D.	1943
Bailey, Allan H.	University of South Florida-Medicine	B.S.	1976
Bankoff, S. George	Northwestern University	Ph.D.	1952
Beatty, Charles L.	University of Florida-Materials Engineering	B.S.	1965
Beckett, Brandt H.	Indiana University -Purdue University Indianapolis-Mechanical Engineering Technology	B.S.	1947
Bell-Huff, Christie	William Tyndale College-Michigan, Department of Chemistry	Ph.D.	1994
Bennett, Robert B.	University of Florida	M.S. Ph.D.	1933 1936
Berg, Lloyd	Montana State University	Ph.D.	1942
Bhan, Aditya	University of Minnesota-Twin Cities-Department of Chemical Engineering and Materials Science	Ph.D.	2005
Bienkowski, Paul B.	University of Tennessee	M.S. Ph.D.	1972 1975
Bishop, Kenneth A.	University of Kansas	B.S.	1958
Blyholder, George D.	University of Arkansas-Chemistry	B.S.	1953
Botset, Holbrook G.	University of Pittsburgh-English	B.S.	1922
Bowden, Warren W.	Rose-Hulman Institute Technology	Ph.D.	1965

Bowers, Geoffrey	Alfred University - Department of Chemistry	B.S.	2002
Bowman, Christopher N.	University of Colorado - Department of Chemical and Biological Engineering	B.S.	1988
Brannon-Peppas, Lisa	University of Texas-Austin, Biomedical Engineering	M.S. Ph.D.	1986 1988
Brazel, Christopher S.	University of Alabama-Department of Chemical and Biological Engineering	Ph.D.	1997
Brink, Joseph A., Jr.	Purdue University, Washington State University	Ph.D.	1953
Burgos-Rubio, C. Nelson	University of Puerto Rico-Mayaguez; Department of Chemical Engineering	Ph.D.	1997
Byrne, Mark E.	Auburn University Department of Chemical Engineering	M.S.	1997
Chang, Chien-Hsiang	National Cheng Kung University, Taiwan, Department of Chemical Engineering	Ph.D.	1993
Chang, Yong Keun	KAIST, S. Korea	Ph.D.	1987
Chen, Bill J.	Worcester Polytechnic Institute	B.S. M.S. Ph.D.	1972 1974 1977
Chen, Ling Y.	National Cheng Kung University, Taiwan	Ph.D.	1975
Cho, Daechul	Soonchunhyang University, S. Korea	Ph.D.	1996
Choi, Ho-Suk	Chungnarn National University, Korea - Department of Chemical Engineering	Ph.D.	1995
Chou, Tse C.	National Cheng Kung University, Taiwan	Ph.D.	1975
Ciborski, John M.	New Jersey Institute of Technology-Industrial Engineering	B.S.	1939

Cichowski, Robert S.	California Polytechnic State University-Chemistry	B.S.	1964
Clay, David T.	Institute of Paper Chemistry	B.S.	1967
Cobb, James T., Jr.	University of Pittsburgh	M.S. Ph.D.	1963 1966
Coleman, James S.	University of Chicago-Sociology	B.S.	1949
Cooper, Arnold C.	Purdue University-Management and Business Administration	B.S.	1955
Cooper, Fredric M.	University of Texas-San Antonio-Management and Business Administration	B.S.	1947
Cortissoz, Ernesto	Universidad del Atlantico, Colombia	B.S.	1941
Costas, Louis P.	University of Maryland	B.S.	1951
Cremaschi, Selen	University of Tulsa Department of Chemical Engineering	Ph.D.	2006
Crynes, Billy L.	Oklahoma State University	M.S. Ph.D.	1966 1968
Curtis, Jennifer Sinclair	University of Florida, Department of Chemical Engineering	B.S.	1983
Curtis, Wayne R.	The Penn State University Department of Chemical Engineering	Ph.D.	1988
Cutshall, Chester S.	Purdue University-Engineering Science	B.S. M.S.	1919 1924
Cutshall, Theodore W.	Indiana University-Purdue University Indianapolis-Chemistry	B.S.	1949
Dale, Bruce E.	Michigan State University Department of Chemical Engineering and Materials Science	Ph.D.	1979

Davidson, G.W. Raymond	Purdue University-Calumet, Computer Science	M.S. Ph.D.	1982 1985
Davison, Richard L.	(Australia)	M.S. Ph.D.	1969 1971
Dhurjati, Prasad	University of Delaware-Department of Chemical Engineering	Ph.D.	1982
DiBiasio, David	Worcester Polytechnic Institute Department of Chemical Engineering	B.S. M.S. Ph.D.	1972 1977 1980
Dietz, J. Eric	Purdue University, School of Technology	Ph.D.	1994
Dolch, William L.	Purdue University-Civil Engineering	B.S.	1947
Doyle, Donald F.	Georgia Institute of Technology School Of Chemistry and Biochemistry	B.S.	1987
Duffey, Richard	University of Maryland-Nuclear Engineering	B.S.	1939
Duncan, William G.	University of Florida-Agronomy	B.S.	1930
Dziubla, Thomas	University of Kentucky-Department of Chemical and Materials Engineering	B.S.	1998
Edwards, Richard M.	University of Arizona	B.S.	1941
Elkamel, Ali	University of Waterloo Department of Chemical Engineering	Ph.D.	1993
Fahien, Raymond W.	Iowa State University, University of Florida	Ph.D.	1954
Faust, John W., Jr.	University of South Carolina-Electrical Engineering	B.S.	1944
Feinberg, Martin R.	The Ohio State University Department of Chemical and Biomolecular Engineering	M.S.	1963

Fisher, John M.	Western Michigan University-Paper Engineering	B.S.	1947
Friehe, Carl A.	University of California, Irvine-Mechanical Engineering	B.S.	1961
Fry, Bill W.	Medical College of Georgia-Medicine	B.S.	1951
Furnas, Clifford C.	Yale University, President SUNY Buffalo	B.S.	1922
Galles, C. Rundell	U.S. Naval Academy-Chemistry	B.S. M.S.	1971 1973
Garritano, Jeremy R.	Purdue University - Associate Professor of Library Science	B.S.	1998
Gehr, Todd W.B.	Medical College of Virginia-Medicine	B.S. M.S.	1976 1978
Goetz, Douglas J.	Ohio University, Department of Chemical and Biomolecular Engineering	B.S. M.S.	1985 1987
Goetz, William H.	Purdue University-Civil Engineering	M.S.	1942
Golding, Brage	Professor and Head of ChE at Purdue University. President Wright State University, San Diego State and Kent State University	B.S. Ph.D.	1941 1948
Gottfried, Byron S.	University of Pittsburgh-Industrial Engineering	B.S.	1956
Grace, Richard E.	Purdue University-Materials Engineering	B.S.	1951
Graham, Eldon L.	Saginaw Valley State College-Mech. Eng. Technology	B.S.	1946
Graham, Loren R.	Columbia University, M.I.T.-History	B.S.	1955
Griffin, Abbie	University of Utah, Distinguished Professor Dept Marketing	B.S.	1974

Grosh, L. Eugene, Jr.	Kansas State University-Industrial Engineering	B.S.	1947
Gross, Joseph F.	University of Arizona	Ph.D.	1956
Grubbs, Stephen S.	Dartmouth Medical Center-Medicine	B.S.	1975
Gu, Tingyue	Ohio University- Department of Chemical and Biomolecular Engineering	Ph.D.	1990
Guingrich, Jessica (Alameda)	University of Illinois at Peoria - Medical School	B.S.	1989
Guinnup, David E.	North Carolina State University	B.S. M.S.	1975 1976
Hanna, Owen T.	University of Calif. Santa Barbara	B.S. Ph.D.	1957 196
Hannemann, Robert E.	Purdue University School of Chemical Engineering	B.S.	1952
Harding, David W.	University of New Haven-Department of Chemistry and Chemical Engineering	B.S.	1980
Harper, Dean O.	University of Louisville	B.S.	1956
Harris, William J., Jr.	Texas A & M University-Civil Engineering	B.S. M.S.	1940 1940
He, Huang	ChE, Nanjing University of Technology, Nanjing, China	Ph.D.	2002
Henthorn, David Brian	St. Louis University- Biomedical Engineering	B.S. Ph.D.	1999 2004
Henthorn, Kimberly Hayden	Rose-Hulman Institute of Technology -Department of Chemical Engineering	Ph.D.	2004
Hessert, Paul B.	Northwestern University-Theology	B.S.	1945

Hill, Thomas C.	Harvard Medical School-Medicine	B.S.	1967
Hilt, J. Zachary	University of Kentucky-Department of Chemical and Materials Engineering	M.S.	2002
Hite, Samuel C.	Purdue University, University of Kentucky, Rose-Hulman Institute Technology	B.S. Ph.D.	1943 1951
Holloway, Clark	University of South Carolina-Management and Bus. Admin.	B.S.	1937
Holtzmeier, Lindell R.	Ohio University	B.S. Ph.D.	1963 1967
Hong, Juan	University of California, Irvine-Chemical Engineering and Materials Science	Ph.D.	1979
Hoyt, Charles D., Jr.	Arizona State University-Interdisciplinary Engineering	B.S.	1935
Hruska, Samuel J.	Purdue University-Materials Engineering	B.S.	1959
Huang, Yanbin	Tsinghua University, Beijing, China- Dept. Polymer Science	Ph.D.	2001
Hughel, Thomas J.	Purdue University-Materials Engineering	B.S. Ph.D.	1942 1951
Hummel, Richard L.	University of Toronto	B.S.	1950
Jabbari, Esmaiel	University of South Carolina- Department of Chemical Engineering	Ph.D.	1993
Janis, Mark D.	Indiana University-School of Law	B.S.	1986
Karimi, Iftekhar A.	Northwestern University	M.S. Ph.D.	1982 1984
Kessler, David P.	Purdue University	B.S.	1956

Kim, Bumsang	Hongik University	Ph.D.	2002
Kim, Dukjoon	Sung Kyun Kwan University, S. Korea	Ph.D.	1993
Kim, Hwayong	Seoul National University, S. Korea	Ph.D.	1984
King, Julia A.	Michigan Technological University-Department of Chemical Engineering	B.S.	1982
Kirk, Roy V.	Murray State University-Management and Bus. Admin.	B.S.	1955
Knopf, F. Carl	Louisiana State University-Department of Chemical Engineering	Ph.D.	1980
Kompala, Dhinakar S.	University of Colorado - Department of Chemical and Biological Engineering	M.S. Ph.D.	1982 1984
Koo, Yoon-Mo	Inha University, Inchon, S. Korea-Department of Chemical and Biological Engineering	Ph.D.	1987
Korchinsky, Walter S.	University of Manchester	Ph.D.	1965
Kraybill, Richard R.	University of Rochester, University of Michigan	B.S.	1942
Laddha, Ganesh S.	A.C. College of Technology	M.S. Ph.D.	1947 1949
Ladisch, Michael R.	Purdue University-Agricultural & Biological Engineering	M.S. Ph.D.	1974 1977
Lauderback, Lee L.	University of Colorado	B.S. M.S. Ph.D.	1975 1977 1982
Lee, Bom-sock	Kyung Hee University-Chemical Engineering Major in College of Engineering, S. Korea	Ph.D.	1992
Lee, Ching Yi	Ming-zhi University of Science and Technology, Taiwan, Department of Chemical Engineering	Ph.D.	1994

Lee, Euy Soo	Dongguk University, S. Korea	Ph.D.	1988
Lee, Gil	University College Dublin- Physical Chemistry	B.S.	1987
Lee, HongHe	Seoul National University, S. Korea	Ph.D.	1971
Lee, In-Beum	Pohang University, Pohang, S. Korea-Department of Chemical Engineering	Ph.D.	1987
Lee, Myung Cheon	Dongguk University, S. Korea	Ph.D.	1991
Lee, Wen-Chien	ChE, National Zhong Zhen University, Taiwan, China	Ph.D.	1989
Lee, Young H.	Drexel University	M.S. Ph.D.	1974 1977
Leffert, Charles B.	Wayne State University	B.S.	1943
Lele, Tanmay	University of Florida, Department of Chemical Engineering	Ph.D.	2002
Liao, Ying-Chi	National Taiwan University, Department of Chemical Engineering	Ph.D.	2004
Liedl, Gerald L.	Purdue University-Materials Engineering	B.S. Ph.D.	1955 1960
Lim, Kyung-Hee	Chung Ang University, S. Korea, Department Chemical Engineering	Ph.D.	1986
Liou, Ching T.	National Taiwan Institute of Technology	M.S. Ph.D.	1971 1972
Loewenberg, Michael	Yale University-Department of Chemical Engineering	B.S.	1982
Lottes, John C.	Purdue University	B.S. Ph.D.	1935 1949

Lowman, Anthony M.	Temple University (Vice Provost)	Ph.D.	1997
Lozier, M. Susan (Ogg)	Duke University-Earth & Ocean Sciences, Marine Science & Conservation	B. S.	1979
Lund, Carl R. F.	University at Buffalo-The State University of New York-Department of Chemical & Biological Engineering	B.S.	1976
Lynn, R. Emerson	Ohio State University	B.S.	1942
Mace, Rachel (Lenox)	Vanderbilt University- Department of Pediatrics	B. S.	1982
Mack, Darrel E.	Lehigh University-Material Engineering	B.S. Ph.D.	1934 1941
Mack, David J.	University of Wisconsin	Ph.D.	1944
Mahalingam, Ramamurthi	Washington State University	M.S.	1963
Mallapragada, Surya	Iowa State University-Department of Chemical& Biological Engineering	Ph.D.	1996
Mallinson, Richard G.	University of Oklahoma- School of Chemical, Biological, and Materials Engineering	M.S. Ph.D.	1979 1983
Maniotes, John	Purdue University-Calumet City-Management and Bus. Admin.	B.S. M.S.	1957 1959
Marsel, Charles J.	New York University	Ph.D.	1945
Marten, Mark R.	University of Maryland Baltimore County-Department of Chemical and Biochemical Engineering	M.S. Ph.D.	1988 1991
Martin, George C.	Syracuse University- Department of Biomedical and Chemical Engineering	B.S.	1970
Mason, Frank R.	Purdue University	B.S.	1965

McClellan, Scott J.	Rose-Hulman Institute of Technology -Department of Chemical Engineering	M.S. Ph.D.	2002 2005
McCormack, John T.	Purdue University-Material Engineering	M.S. Ph.D.	1948 1950
Mellichamp, Duncan A., Jr.	University of California Santa Barbara	Ph.D.	1964
Mikos, Antonios G.	Rice University-Department of Chemical and Biomolecular Engineering	M.S. Ph.D.	1985 1988
Militec, Marina	University Illinois-Champaign Urbana, Chemical Engineering	B.S.	1998
Miller, Irving F.	University of Illinois at Chicago	M.S.	1956
Modak, Jayant	I.I.T, Bangalore	Ph.D.	1988
Mohler, Robert D.	Ohio State University	M.S. Ph.D.	1974 1979
Moore, Noel E.	Rose-Hulman Institute Technology	B.S. Ph.D.	1956 1967
Mrazek, Robert V.	Oregon State University	B.S.	1957
Myers, Lawrence, Jr.	Syracuse University-Communications	B.S.	1942
Narang, A.	I.I.T. Delhi	Ph.D.	1994
Narasimhan, Balaji	Iowa State University-Department of Chemical & Biological Engineering	Ph.D.	1996
Nelson, Leon H.	Monaca Community College-Chemistry	B.S.	1919
Oh, Ihn Hwan	KIST, S. Korea	Ph.D.	1991

Oral, Ebru	Harvard Medical School	Ph.D.	2002
Papoutsakis, E. Terry	University of Delaware-Department of Chemical Engineering	M.S. Ph.D	1977 1980
Park, Chang-Ho	Kyung Hee University-Chemical Engineering Major in College of Engineering, S. Korea	Ph.D.	1989
Park, Seung Bin	KAIST, S. Korea	Ph.D.	1988
Park, Tai Hyun	Seoul National University, S. Korea	Ph.D.	1990
Parulekar, Satish J.	Illinois Institute of Technology-Department of Chemical and Biological Engineering	Ph.D.	1983
Patel, Rutton D.	Polytechnic Institute of New York	Ph.D.	1967
Pershing, David W.	University of Utah	B.S.	1970
Petroulas, Theodore S.	New Jersey Institute of Technology	M.S.	1980
Phillips, Robert G.	Indiana University-East	B.S.	1953
Pinnick, Harold W.	Bucknell University-Chemistry	B.S.	1968
Poehlein, Gary W.	Georgia Institute of Technology	B.S. M.S. Ph.D.	1958 1963 1966
Prien, Charles H.	University of Colorado	Ph.D.	1948
Punnathanam, Sudeep	Indian Institute of Science-Bangalore; Department of Chemical Engineering	Ph.D.	2003
Radavich, John F.	Purdue University-Material Engineering	B.S. M.S. Ph.D.	1946 1948 1953

Raman, Anantha K.S.	Rose-Hulman Institute Technology	M.S. Ph.D.	1960 1962
Ramey, Henry J., Jr.	Stanford University-Petroleum Engineering	B.S. Ph.D.	1949 1952
Raupp, Gregory B.	Arizona State University-Department of Chemical Engineering	B.S. M.S.	1976 1978
Reid, Robert C.	M.I.T.	B.S. M.S.	1950 1951
Rengaswamy, Raghunathan	Texas Tech University-Department of Chemical & Biomolecular Engineering	Ph.D.	1995
Resnick, William	Israel Institute of Technology	B.S.	1943
ReVelle, Jack B.	Chapman University, Dean Emeritus Business & Management; University of Nebraska, Chair Emeritus, Dept. Decision Sciences	B.S.	1957
Reynolds, Allan E.	Bethel College, Gordon College-Management and Bus. Admin.	B.S.	1943
Rice, Jon D.	California State University Sacramento-Biomedical Engineering	B.S.	1969
Rockstraw, David A.	New Mexico State University-Department of Chemical Engineering	B.S.	1986
Roman, Graciela N.	Universidad Nacional del Sur Bahia Blanca	Ph.D.	1983
Ross, Julia (Myers)	University of Maryland Baltimore County-Department of Chemical and Biochemical Engineering	B.S.	1990
Routh, Joseph I.	University of Iowa-Biochemistry	B.S.	1933
Ruaan, Ruoh-Chyu	National Central University, Taiwan-Department of Chemical Engineering	Ph.D.	1991
Russ, Gerald	University of Rochester	B.S.	1958

Rust, James	Georgia Tech-Department Nuclear Engineering	B.S.	1958
Saliceti-Piazza, Lorenzo	University of Puerto Rico-Mayaguez; Department of Chemical Engineering	Ph.D.	1996
Sampson, Kendree J.	Ohio University- Department of Chemical and Biomolecular Engineering	Ph.D.	1981
Santhanam, Venugopal	Indian Institute of Science-Bangalore; Department of Chemical Engineering	Ph.D.	2002
Santiago-Ruiz, Felix D.	University of Puerto Rico	Ph.D.	1969
Scarrah, Warren P.	Montana State University	M.S.	1959
Scranton, Alec B.	University of Iowa-Chemical and Biochemical Engineering Department	Ph.D.	1990
Sellman, Hunton D.	San Diego State University-Drama	B.S.	1922
Seo, Sung-Sup	Hongkik University, S. Korea, Department Chemical Engineering	Ph.D.	1988
Shaffer, Michael R.	University of Florida	B.S. M.S.	1950 1953
Sheldon, John W.	Florida International University	B.S. M.S.	1955 1959
Shieh, Lisa Y.	Stanford University, Medicine	B.S.	1989
Shih, Yen P.	Natl. Taiwan Institute Techn.	Ph.D.	1967
Shin, Dongil	Departments of Chemical Engineering/ Fire Engineering, Myongji University	Ph.D.	1995
Shrode, William A.	Florida State University-Management and Business Administration	B.S.	1953

Sinclair, Gavin	Purdue University-School of Technology	B. S.	1983
Smith, Clayton S.	I.I.T. Chicago	B.S. Ph.D.	1958 1963
Smith, Peter G.	Washington University-Medicine	M.S. Ph.D.	1970 1972
Snider, Neil S.	Queen's University-Chemistry	B.S.	1959
Song, Dong-Ik	Kyungpook National University, S. Korea	Ph.D.	1991
Spees, Steven T., Jr.	Michigan State University-Chemistry	B.S.	1956
Sproull, Robert D.	Oregon State University	B.S. M.S. Ph.D.	1972 1974 1986
Srinivasan, Raj	Department of Chemical and Biomolecular Engineering, National University of Singapore	Ph.D.	1998
Stefanovic, Sava	University of Cincinnati	M.S.	1968
Sternberg, Steven	University of Minnesota-Duluth, Department of Environmental Science	M.S. Ph.D.	1992 1994
Stitz, Ervin O.	Purdue University-Astronomy	B.S.	1932
Stoops, Charles E., Jr.	University of Toledo	Ph.D.	1942
Storvick, Truman	University of Missouri-Columbia	Ph.D.	1959
Stutzman, Leroy F.	Northwestern University, University of Connecticut	B.S.	1939
Stynes, Stanley K., Jr.	Wayne State University	Ph.D.	1963

Swift, David L.	Johns Hopkins University-Envir. Health Sci.	B.S.	1957
Syu, Mei-Jywan	National Cheng-Kung University, Taiwan, Department of Chemical Engineering	Ph.D.	1992
Takehara, Donald	Taylor University, Professor of Research	B.S.	1982
Tarrer, Arthur R.	Auburn University	Ph.D.	1973
Thomas, James A., Jr.	University of Nebraska-Military Science	B.S.	1970
Tierney, John W.	Purdue University, University of Pittsburgh	B.S.	1947
Toner, Richard K,	Lehigh University, Princeton University	M.S. Ph.D.	1936 1939
Torres-Lugo, Madeline	University of Puerto Rico-Mayaguez; Department of Chemical Engineering	Ph.D.	2001
Tory, Elmer M.	Mount Allison University-Chemistry	Ph.D.	1961
Tramper, Johannes	Agricultural University, Wageningen-Process Engineering	M.S.	1974
Traylor, William H.	Temple University-Law	B.S.	1942
Tsai, Chung-Hu	(Houston)	M.S. Ph.D.	1973 1975
Tsao, Ming L.	(People's Republic of China)	B.S.	1921
Van Cott, Kevin	University of Nebraska-Department of Chemical and Biomolecular Engineering	B.S.	1991
Van Winkle, Matthew	University of Texas	B.S.	1933

Varner, Jeffrey D.	Cornell University-School of Chemical and Biomolecular Engineering	B.S. M.S. Ph.D.	1992 1995 1997
Vaughn, Robert D.	Purdue University	B.S.	1951
Venkatesh, Kareenhalli V.	I.I.T. Bombay	Ph.D.	1993
Wales, Charles E.	Purdue University, West Virginia University	Ph.D.	1965
Walker, Richard E.	Lamar University	B.S.	1945
Wankat, Phillip C.	Purdue University School of Chemical Engineering	B.S. M.S. Ed	1966 1982
Wark, Kenneth, Jr.	Purdue University-Mechanical Engineering	B.S.	1950
Weinstein, Herbert	City University of New York	M.S.	1957
Welch, James T.	Villanova University-Naval Science	B.S.	1966
White, Mark G.	Georgia Institute of Technology	M.S.	1973
Wiegandt, Herbert F.	Cornell University	B.S. M.S. Ph.D.	1938 1939 1941
Williams, Christopher T.	University of South Carolina- Department of Chemical Engineering	Ph.D.	1997
Willoughby, S. Margaret C.	University of Texas-Arlington-Chemistry	Ph.D.	1950
Winter, Edward M.	Wayne State University	B.S. Ph.D.	1957 1963
Wisniak, Jaime M.	Ben Gurion University	Ph.D.	1960

Yang, Sung-Kwang	Governmental Department of Science and Technology, S. Korea	Ph.D.	1993
Ybarra, Robert M.	University of Missouri-Rolla	M.S. Ph.D.	1976 1980
Yi, Gyeongbeom	Pukyong National University, S. Korea	Ph.D.	1992
Young, Jamey D.	Vanderbilt University-Department of Chemical and Biomolecular Engineering	Ph.D.	2005
Yue, Alfred S.	University of California Los Angeles-Material Engineering	Ph.D.	1957
Zager, Stanley E.	Youngstown State University	Ph.D.	1950

Appendix C

Plan of Study of 1907-1908

Freshman Year

First Semester

(7 1/2)*	English 1
(7 1/2)	German 7
(12 1/2)	Trigonometry 1
(6)	Mechanical Drawing 1
(3)	Military Drill 1
(5)	Shop Lectures 1
(9)	Shop Work 1 & 2, or 4
(50 1/2)	

Second Semester

(7 1/2)	English 2
(7 1/2)	German 8
(12 1/2)	College Algebra 2
(6)	Mechanical Drawing 2
(3)	Military Drill 2
(5)	Shop Lectures 2
(9)	Shop Work 4 or 1 & 2
(50 1/2)	

Sophomore Year

Third Semester

(11)	Gen. Chem. & Qual. Anal. 25
(6)	Desc. Geom. 1
(5)	German 9
(7 1/2)	History 1
(10)	Analytical Geometry 3
(3)	Military Drill 3
(10)	Physics 1
(52 1/2)	

Fourth Semester

(11)	Gen. Chem. & Qual. Anal.
(6)	Desc. Geom. 2
(7 1/2)	English 7
(5)	German 10
(10)	Calculus 4
(3)	Military Drill 4
(7 1/2)	Physics 2
(50)	

Junior Year

Fifth Semester

(7 1/2)	Applied Elec. 1
(11)	Quantitative Analysis 5
(8)	Organic Chemistry 27
	English 10
(7 1/2)	German 3
(5)	Calculus 5
(10)	Mechanics 1
(49)	

Sixth Semester

(7 1/2)	Applied Elec. 2
(11)	Quantitative Analysis 6
(8)	Organic Chemistry 28
(7 1/2)	Economics 1
	English 10
(7 1/2)	German
(5)	Calculus 6
(7 1/2)	Mechanics 2
(54)	

Senior Year

Seventh Semester

(4)	Biology 5
(22)	Indus. Chem. &
	Tech. Anal. 9
(7 1/2)	Engines & Boilers 2
(7 1/4)	Mechanism
(9)	Physics 6a
(50)	

Eighth Semester

(22)	Indus. Chem. & Tech. Anal. 10
(6)	Elec. Lab. 3
(3)	Engineering Lab. 1
(2)	Testing Materials 1
(4)	Thesis
(5)	Trans. Power
(42)	

* The figure in parenthesis indicates the number of points assigned to each course. One hour a week in a subject which does not require of the student outside time for preparation counts one point; one hour a week in a subject which requires outside time counts two and one-half points.

Appendix D

Plan of Study of 1912-1913

Freshman Year

First Semester

(9)	General Chemistry 1
(7 1/2)	English 1
(7 1/2)	German 7 or 7a
(12 1/2)	Trigonometry 11
(8)	Mechanical Drawing 11
(3)	Military Drill 1
(6)	Shop Work 22, 24, or 25
(53 1/2)	

Second Semester

(9)	General Chemistry 2
(4)	Desc. Geom. 13
(7 1/2)	English 2
(7 1/2)	German 8 or 8a
(12 1/2)	College Algebra 2
(4)	Mechanical Drawing 12
(3)	Military Drill 2
(6)	Shop Work 22, 24 or 25
(1)	Engineering Assembly
(54 1/2)	

Sophomore Year

Third Semester

(11)	Chem. Metals & Qual. Anal.
(3)	Desc. Geom. 13a
(7 1/2)	German 15 or 15a
(7 1/2)	History 1
(10)	Anal. Geom. & Calculus 3
(3)	Military Drill 3
(10)	Physics 1
(52)	

Fourth Semester

(11)	Chem. Metals & Qual. Anal. 4
(3)	Desc. Geom. 14a
(7 1/2)	English 7
(7 1/2)	German 16 or 16a
(10)	Anal. Geom. & Calculus 4
(3)	Military Drill 4
(7 1/2)	Physics 2
(2)	Surveying 4
(51 1/2)	

Junior Year

Fifth Semester

(7 1/2)	Appl. Elec. 1
(10)	Appl. Mech. 1
(11)	Quan. Anal. 5
(11)	Organic Chemistry 7
(7 1/2)	German 13
(5)	Calculus 5
(52)	

Sixth Semester

(7 1/2)	Appl. Elec. 2
(10)	Appl. Mech. 2
(11)	Quan. Anal. 6
(11)	Organic Chemistry 8
(7 1/2)	German 14
(5)	Calculus 6
(7 1/2)	Physics 10a
(52)	

Senior Year

Seventh Semester

(4)	Biology 5
(5)	Chem. Tech. I
(5)	Principles of Metallurgy 3
(17)	Industrial Analysis 9a
(7 1/2)	Engines & Boilers 32
(7 1/2)	Mechanism 11
(9)	Physics 6a
(50)	

Eighth Semester

(5)	Chem. Tech. 2
(5)	Principles of Metallurgy 4
(11)	Industrial Analysis 10b
(7 1/2)	Economics 1
(6)	Elec. Lab. 2
(3)	Eng. Lab. 78
(2)	Testing Materials 31
(5)	Power Plants 21
(4)	Thesis
(48 1/2)	

* The figure in parenthesis indicates the number of points assigned to each course. One hour a week in a subject which does not require of the student outside time for preparation counts one point; one hour a week in a subject which requires outside time counts two and one-half points.

Appendix E

Plan of Study of 1923-1924

Freshman Year

First Semester		Second Semester	
(3 1/3)	General Chemistry Ia	(3 1/3)	General Chemistry 2a
(3)	English Composition 1	(3)	Argumentation 7a
(3)	Elem. German for Engr. 51 or Int. German for Engr. 51a	(3)	Elem. German for Engr. 52 or Int. German for Engr. 52a
(5)	Coll. Alg., Trig., Anal. Geom. 1	(5)	Coll. Alg., Trig., Anal. Geom. 2
(2)	Mechanical Drawing 11	(2)	Mechanical Drawing 12
(1 2/3)	Military Training 1	(1 2/3)	Military Training 2
(2)	Shop Work 22a, 24 or 25	(2)	Shop Work 22a, 24 or 25
(20)		(20)	

Sophomore Year

Third Semester		Fourth Semester	
4)	Qualitative Analysis 103	(2)	Sanitary Biol. Of Water & Sewage 5
(3)	Expository Writing 31	(4)	Qualitative Analysis 104
(3)	Int. German for Chem. Engr. 55 or Adv. Germ. for Chem. Engr. 155a	(3)	Int. German for Chem. Engr. 56 or Adv. Germ. for Chem. Engr. 156a
(1 2/3)	Military Training 3	(3)	Hist. of Eur. Since 1870
(4)	General Physics 1	(5)	Diff. & Int. Calculus 4
(2/3)	Surveying 4	(1 2/3)	Military Training 4
(5)	Diff. & Int. Calculus 3	(4)	General Physics 2
(21 1/3)		(22 2/3)	

Junior Year

Fifth Semester		Sixth Semester	
(4)	Applied Mechanics 1	(4)	Applied Mechanics 2
(4)	Quantitative Analysis 105	(4)	Quantitative Analysis 106
(5)	Organic Chemistry 107	(5)	Organic Chemistry 108
(3)	Power Plants & Transmissions 21	(3)	Thermodynamics 38
(1)	Technical Literature 123	(1)	Mech. Laboratory 78
(2/3)	Testing Materials 31	(17)	
(17 2/3)			

Options

Choice must be made of one of the following groups:

Military

(3 2/3)	Military Training 5	(3 2/3)	Military Training 6

General

(3)	Adv. Germ. For Chem. Eng. 157	(3)	Elementary Economics 1
(3)	Mineralogy 107		

Senior Year

Seventh Semester		Eighth Semester	
(2)	Elements of Chem. Engr. 101	(2)	Elem. Of Chem. Engr. 102
(2)	Appl. Thermochem. & Thermophys. 103	(2)	Appl. Thermochem. & Thermophys 104
(3)	Theor. Physical Chem. 117	(3)	Theor. Physical Chem. 118
(4)	Electrical Engineering 9	(4)	Elec. Engineering 10
(3)	Elec. Meas. 6a or Radiation & Pyrometry 112	(2 2/3)	Radiation & Pyrometry 112 or Electrical Measurement 6a
(14)		(13 2/3)	

Options

Choice must be made of one of the following groups:

	Military		
(3 2/3)	Military Training 7	(3 2/3)	Military Training 8
	Engineering		
(2)	Machine Design 61	(3)	Engineering Administration 3
(3)	Principles of Metallurgy 105	(3)	Principles of Metallurgy 106
	Chemical		
(5)	Applied Analysis 109	(5)	Applied Analysis 110

Appendix F

Plan of Study of 1936-1937

Freshman Year

First Semester		Second Semester	
(4)	General Chemistry 1 or Synth. Inorganic Chem. 1a	(4 or 3)	Chem. Engr. Met. 30 or Gen Chem. 2 or Syn. Inorganic Chem. 2a
(3)	English Composition 1	(3)	English Essay 10 or Prin. of Speech 14 or Intr. Drama 19
(2)	Engineering Drawing 11	(2)	Engineering Drawing 12
(0)	Engineering Lectures 1	(0)	Engineering Lectures 2
(5)	Trig, Coll. Alg, Anal. Geom. 1	(5)	Trig, Coll. Alg., Anal. Geom. 2
(1 2/3)	Military Training 1	(1 2/3)	Military Training 2
(2)	Founding, Pattern Making 32-33 or Forging, Welding & Heat Treating 34, or Surveying 6	(2)	Founding, Pattern Making 32-33, or Forging, Welding & Heat Treating 34, or Surveying
(17 2/3)		(17 2/3 or 16 2/3)	

Sophomore Year

Third Semester		Fourth Semester	
(4)	Differential & Int. Calc. 3	(4)	Differential & Int. Calc. 4
(4)	General Physics 1	(4)	General Physics 2
(4)	Qualitative Analysis 3 or 3a	(3 or 4)	Chemical Equlibrium 4 or Quantitative Analysis 105
(3)	Elementary German 41	(3)	Elementary German 42
(3)	English Essay 10, or Prin. of Speech. 14 or Expository Writing 31	(4)	Applied Mechanics 1
(1 2/3)	Military Training 3	(1 2/3)	Military Training 4
(19 2/3)		(19 2/3 or 20 2/3)	

Junior Year

Fifth Semester		Sixth Semester	
	Required		
(4)	Applied Mechanics 1	(3)	Thermodynamics 30
(4)	Theor. Physical Chem. 117	(4)	Theor. Physical Chem. 118
(4)	Quantitative Analysis 105	(4)	Applied Mechanics 2

TO THESE BASIC COURSES MUST BE ADDED THE FOLLOWING FOR THE RESPECTIVE OPTIONS:

	Gas Technology		
(4)	Organic Chemistry 107	(4)	Organic Chemistry 108
(4)	Fuel & Gas Engineering 120	(4)	Gas Engineering
(20)		(2)	Elementary Unit Operations134
		(21)	

	General		
(4)	Organic Chemistry 107	(2)	Elementary Unit Operations134
(3)	Elementary Economics 1	(4)	Organic Chemistry 108
(2/3)	Testing Materials 31	(3)	Mineralogy 107
(18 2/3 or 19 2/3)		(20)	

Metallurgy

(3)	Non-Ferrous Metallurgy 110	(3)	Metallurgy of Iron & Steels 123
(2)	Mineralogy of Ores 107a	(2)	Gas, Fuels, & Lubricants 109a
(2)	Ore Dressing 119	(1)	Metals & Alloys 109c
(2)	Elem. Unit Operations 134	(3)	Metallurgical Laboratory 131
(20 or 21)		(20)	

Military

(4)	Organic Chemistry 107	(4)	Organic Chemistry 108
(2/3)	Testing Materials 31	(2)	Elementary Unit Operations134
(3 2/3)	Military Training 5	(3 2/3)	Military Training 6
(20 1/3)		(20 2/3)	

Organic Technology

(4)	Organic Chemistry 107	(4)	Organic Chemistry 108
(3)	Inorganic & Organic Tech. & Stoichiometry 128	(3)	Inorganic and Organic Technology& Stoichiometry
(1)	Chemical Literature 123	(2)	Elementary Unit Operations134
(19 or 20)		(20)	

Senior Year

Seventh Semester **Eighth Semester**

Required

(3)	Unit Operations 137	(3 2/3)	Electrical Engineering 20
(3 2/3)	Electrical Engineering 19	(3)	Physical Chemistry 118
(3)	Physical Chemistry 117		
(2)	Elem. Unit Operations 134		

TO THESE BASIC COURSES MUST BE ADDED THE FOLLOWING FOR THE RESPECTIVE OPTIONS:

Gas Technology

(3)	Non-Ferrous Metallurgy 105	(3)	Metallurgy of Iron & Steel
(4)	Fuel & Gas Engineering 120	(2)	Pyrometry 112
(2)	Gas, Fuels, & Lubricants 109a	(4)	Fuel & Gas Engineering 121
(20 2/3)		(3)	Engineering Administration 103
		(18 2/3)	

General

(3)	Non-Ferrous Metallurgy 105	(3)	Metallurgy of Iron & Steel 106
(2)	Plant Design & Layout 116	(3)	Unit Operations 138
(2)	Pyrometry 112	(3)	Inorganic & Organic Technol. Stoichiometry 128
(1)	Chemical Engineering Problems 111	(1)	ChE Problems 111
(19 2/3)		(3)	Elementary Accounting 104
		(19 2/3)	

Metallurgy

(3)	Metallography & Heat Treating 131	(2)	Metallography/Heat Treat 132
(2)	Gas & Fuel Analysis 109a	(3)	X-ray Technology 146
(1)	Metals & Alloys 109c	(3)	Elementary Accounting 104
(2)	Pyrometry 112	(2)	Plant Design & Layout 116
(1)	Chemical Engineering Problems 111	(2)	Electrometallurgy 117
(20 2/3)		(18 2/3)	

Military

(3 2/3)	Military Training 7	(2)	Pyrometry
(3)	Elementary Economics 1	(3 2/3)	Military Training 8
(1)	Chemical Engineering Problems 111	(3)	Elementary Accounting 104
(19 1/3)		(3)	Unit Operations 138
		(18 1/3)	

Organic Technology

(3)	Unit Processes in Organic Technology 126	(3)	Unit Processes in Organic Technology 127
(2)	Plant Design & Layout 116	(3)	Unit Operations 138
(3)	Elementary Economics 1	(2)	Pyrometry 112
(1)	Chemical Engineering Problems 111	(1)	Chemical Engineering Problems 111
(20 2/3)		(3)	Metallography 133
		(18 2/3)	

Appendix G

Plan of Study of 1950-1951

Freshman Year

First Semester

(4)	General Chemistry I or 17
(3)	English Composition 1 or 32
(2)	Engineering Drawing 11
(0)	Engineering Lectures 1
(5)	Algebra & Trigonometry 1 or Elem. Engr. Math. 31
(2-3)	Military Training
(2/3)	Personal Living
(2)	Welding & Heat Treating 34 or Casting 36 or Plane Surveying 6
(18 2/3-19)	

Second Semester

(4)	General Chemistry 2 or 18
(3)	Gr. American Books 4, Reading in Informal Essay 10, Intr. to Poetry 20, Intr. to Fiction 27 or Principles of Speech 14
(2)	Engineering Drawing 12
(5)	Analytical Geometry 2 or Elem. Engineering Math. 32
(2 1/3-3)	Military Training
(2)	Plane Surveying 6 or Welding & Heat Treating 34 or Casting 36
(18 1/3-19)	

Sophomore Year

Third Semester

(2 or 3)	Chem. Eng. Calculations 40 or Principles of Economics 1
(4)	Qualitative Analysis 26
(4)	Calculus 3
(4 1/3)	General Physics 1
(3)	Principles of Speech 14, or Great American Books 4, or Readings in Informal Essay 10, or Intr. to Poetry 20 or Intr. to Fiction 27
(2 1/3-3)	Military Training
(19 2/3-21 1/3)	

Fourth Semester

(3 or 2)	Principles of Economics 1 or Chem. Eng. Calculations 40
(4)	Quantitative Analysis 27
(4)	Calculus 4
(4 1/3)	General Physics 2
(3)	Expository Writing 31
(2/3)	Professional Problems 9
(2 1/3-3)	Military Training
(22-to-20 1/3)	

Junior Year

Fifth Semester

(5)	Statics & Kinetics 21
(4)	Organic Chemistry 151
(4)	Physical Chemistry 173
(3)	Unit Operations 137
(3)	Elements of Democracy 30 or International Relations 109
(19)	

Sixth Semester

(3)	Mech. of Materials 23
(4)	Organic Chemistry 152
(4)	Physical Chemistry 174
(3)	Unit Operations 138
(4)	Elementary Metallurgy 2
(18)	

Summer Sessions

(2)	Unit Operations 139
(2)	Unit Operations 140
(3)	Europe Since 1914 (1) or U.S. in World Affairs (5)
(3)	Psychology 74
(10)	

Senior Year

Seventh Semester

(3 2/3)	Direct Currents 19
(3)	Engineering Instrumentation 155 or Technical Elective
(3)	Elementary Heat Power 29
(3)	Chem. Process Industries 128
(3)	Technical Elective
(3)	Non-Technical Elective
(18 2/3)	

Eighth Semester

(3 2/3)	Alternating Currents 20
(1)	Chemical Literature 113
(3)	Chem. Eng. Thermodynamics 10
(3)	Chemical Process Industries 129
(3)	Technical Elective or Engineering Instrumentation 155
(3)	Non-Technical Elective
(16 2/3)	

Appendix H

Plan of Study of 1965-1966

Freshman Year
(Freshman Engineering Program)

Sophomore Year

Third Semester

(3)	CHE 205 (Chemical Engineering Calculations)
(3)	CHM 261 (Organic Chemistry)
(1)	CHM 263L (Organic Chemistry Laboratory)
(5)	PHYS 251 (Heat, Electricity, and Optics)
(4)	MA 261 (Mathematics for Engineering and the Physical Sciences III)
(2)	Military Training or Elective
(18)	

Fourth Semester

(2)	CHE 206 (Introduction to the Chemical Process Industries)
(3)	CHM 262 (Organic Chemistry
(1)	CHM 264L (Organic Chemistry Laboratory)
(3)	CHM 373 (Physical Chemistry)
(4)	MA 262 (Mathematics for Engineering and the Physical Sciences IV)
(3)	ESC 203 (Statics and Mechanics of Materials
(2)	Military Training or Elective
(18)	

Junior Year

Fifth Semester

(3)	CHE 311 (Introductory Chemical Engineering Thermodynamics)
(4)	CHE 337 (Fluid Mechanics and Heat Transfer Operations)
(3)	CHM 374 (Physical Chemistry)
(2)	CHM 374L (Physical Chemistry Laboratory)
(3)	Technical Elective
(3)	General Education Program I
(18)	

Sixth Semester

(4)	CHE 338 (Mass Transfer Operations)
(2)	CHE 344 (Chemical Engineering Laboratory I)
(3)	PHYS 342 (Modern Physics)
(3)	EE 317 (Electrical Engineering)
(3)	Technical Elective
(3)	General Education Program I
(18)	

Senior Year

Seventh Semester

(3)	CHE 439 (Reaction Kinetics and Chemical Equilibrium)
(2)	CHE 445 (Chemical Engineering Laboratory II)
(1)	CHE 491 (Professional Guidance and Inspection Trips)
(3)	EE 318 (Electrical Engineering)
(4)	Technical Elective
(3)	General Education Program I
(3)	General Education Program II
(19)	

Eighth Semester

(3)	CHE 450 (Chemical Process Design and Economics)
(3)	CHE 456 (Process Dynamics and Control
(3)	MSE 411 (Engineering Materials)
(4)	Technical Elective
(3)	General Education Program I
(3)	General Education Program II
(19)	

Appendix I

Plan of Study of 1984-1985

Freshman Year
(Freshman Engineering Program)

Sophomore Year

Third Semester

(0)	CHE 200 (Chemical Engr. Seminar)
(3)	CHE 205 (Chemical Engr. Calculations
(3)	CHM 261 (Organic Chemistry)
(1)	CHM 263 (Organic Chemistry Lab.)
(4)	MA 261 (Multivariate Calculus)
(5)	PHYS 251 (Heat, Electricity and Optics)
(16)	

Fourth Semester

(2)	CHE 244 (Data Analysis and Statistical Modeling)
(3)	CHE 311 (Intro Chemical Engr. Thermodynamics)
(3)	CHM 262 (Organic Chemistry)
(1)	CHM 264 (Organic Chemistry Lab)
(3)	CHM 373 (Physical Chemistry)
(4)	MA 262 (Linear Algebra & Differential Equations)
(16)	

Junior Year

Fifth Semester

(0)	CHE 300 (Chemical Engr. Seminar)
(3)	CHE 306 (Design of Staged Separation Processes)
(3)	CHE 377 (Momentum Transfer)
(3)	CHM 374 (Physical Chemistry)
(2)	CHM 376 (Physical Chemistry Lab.)
(6)	Electives
(17)	

Sixth Semester

(3)	CHE 348 (Chemical Reaction Engr.)
(3)	CHE 378 (Heat and Mass Transfer)
(12)	Electives
(18)	

Senior Year

Seventh Semester

(0)	CHE 400 (Chemical Engr. Seminar
(3)	CHE 344 (Chemical Engr. Lab. I)
(3)	CHE 456 (Process Dynamics & Control)
(11)	Electives
(17)	

Eighth Semester

(2)	CHE 445 (Chemical Engr. Lab. II)
(3)	CHE 450 (Design and Analysis of Processing Systems)
(10)	Electives
(15)	

Appendix J

1996 ChE Plan of Study

Freshman Year

First Semester

(4)	CHM	123 or 115 Gen. Chemistry
(3)	ENGL	101 or 103 English Comp I
(1)	ENGR	100 Freshman Engr. Lecture
(2)	ENGR	106 Intro to Computers
(4)	MA	165 or 161 Geom & Calc I
(3)	Elective	
(17)		

Second Semester

(4)	CHM	124 or 116 Gen. Chemistry
(3)	COM	114 Fund. of Commun
(4)	MA	166 or 162 Geom & Calc II
(2)	CS	156 C Programming
(4)	PHYS	152 Mechanics
(17)		

Sophomore Year

Third Semester

(0)	CHE	200 Chem Engr Seminar I
(3)	CHE	205 Chemical Engr Calc
(3)	CHM	26100 Organic Chemistry I
(1)	CHM	26300 Organic Chem Lab I
(4)	MA	261 Multivar Calculus
(3)	MA	265 Linear Algebra
(3)	Elective	
(17)		

Fourth Semester

(3)	CHE	211Chem Engr Thermo
(3)	CHE	320 Statistical Modeling
(3)	CHM	262 Organic Chemistry II
(1)	CHM	264 Organic Chem Lab II
(3)	PHYS	241 Electricity & Optics
(3)	MA	266 Differential Eq.
(16)		

Junior Year

Fifth Semester

(3)	CHE	306 Staged Separations
(3)	CHE	377 Momentum Transfer
(3)	CHM	370 Physical Chemistry
(2)	CHM	376 Physical Chem. Lab
(6)	Electives	
(17)		

Sixth Semester

(0)	CHE	300 Chem Engr Seminar II
(3)	CHE	348 Chem Reaction Engr
(3)	CHE	378 Heat & Mass Transfer
(3)	IE	343 Engr. Cost Analysis
(8)	Electives	
(17)		

Senior Year

Seventh Semester

(0)	CHE	400 Professional Guidance
(3)	CHE	434 Chem Engr Lab I
(3)	CHE	456 Process Dyn & Control
(9)	Electives	
(15)		

Eighth Semester

(3)	CHE	450 Design Process Systems
(3)	CHE	430 Principles Molecular Engr
(3)	CHE	435 Chem Engr Lab II
(6)	Electives	
(15)		

Total: 131

Appendix K

2011 ChE Plan of Study

(Effective for Seniors Graduating in May 2012)

Freshman Year

(First Year Engineering Program)

First Semester

(4) CHM 12300 or 11500 Gen. Chemistry
(4) ENGL 10600 or 10800 (3) English Comp
(2) ENGR 13100 Transforming Ideas To Innovation I
(4) MA 16500 or 16100 Geom & Calc I
(14)

Second Semester

(4) CHM 12400 or 11600 Gen. Chemistry
(3) COM 11400 Fund. of Commun
(4) MA 16600 or 16200 Geom & Calc II
(2) ENGR 13200 Transforming Ideas To Innovation II
(4) PHYS 17200 Mechanics
(17)

Sophomore Year

Third Semester

(0) CHE 20000 Chem Engr Seminar I
(4) CHE 20500 Chemical Engr Calc
(3) CHM 26100 Organic Chemistry I
(1) CHM 26300 Organic Chem Lab I
(4) MA 26100 Multivar Calculus
(3) PHYS 24100 Electricity & Optics
(3) Gen-Ed Elective
(18)

Fourth Semester

(4) CHE 21100 Chem Engr Thermo
(3) CHE 32000 Statistical Modeling
(3) CHM 26200 Organic Chemistry II
(1) CHM 26400 Organic Chem Lab II
(4) MA 26200 Linear Algebra & Diff Eq.
(15)

Junior Year

First Semester

(3) CHE 30600 Staged Separations
(4) CHE 37700 Momentum Transfer
(3) CHM 37000 Physical Chemistry
(3) BIOL 23000 Biology of the Living Cell
(3) MA 30300 Diff Eqs for Engr
(16)

Second Semester

(0) CHE 30000 Chem Engr Seminar II
(4) CHE 34800 Chem Reaction Engr
(4) CHE 37800 Heat & Mass Transfer
(3) Gen-Ed Elective
(3) Engineering Elective
(3) Engineering Elective
(17)

Senior Year

First Semester

(1) CHE 40000 Professional Guidance
(4) CHE 43500 Chem Engr Lab
(3) CHE 45600 Process Dyn & Control
(3) Gen-Ed Elective
(3) Gen-Ed Elective
(3) CHE Elective
(17)

Second Semester

(4) CHE 45000 Design Process Systems
(3) CHE Elective
(3) Technical Elective
(3) Gen-Ed Elective
(3) Gen-Ed Elective
(16)

Total: 130

Appendix L

2011 ChE-Chem Dual Degree

(Effective for Seniors Graduating in May 2012. Total Credits = 147)

Freshman Year

First Semester

(4)	CHM	12500 (5) or 11500 Gen. Chemistry
(4)	ENGL	10600 or 10800 (3) English Comp
(2)	ENGR	13100 Transforming Ideas To Innovation I
(4)	MA	16500 or 16100 Geom & Calc I
(14)		

Second Semester

(4)	CHM	12600 (5) or 11600 Gen. Chem.
(2)	ENGR	13200 Transforming Ideas To Innovation II
(4)	MA	16600 or 16200 Geom & Calc II
(4)	PHYS	17200 Mechanics
(3)	CS	15800 (C Programming) or CS 17700 (4) Program multimedia objects
(17)		

Sophomore Year

Third Semester

(0)	CHE	20000 Chem Engr Seminar I
(4)	CHE	20500Chemical Engr Calc
(3)	CHM	26100 Organic Chemistry
(2)	CHM	26500 Organic Chem Lab I
(3)	PHYS	24100 Electricity & Optics or PHYS 27200 (4) Electricity & Magnetism
(4)	MA	26100 Multivar Calculus
(16)		

Fourth Semester

(4)	CHE	21100 Chem Engr Thermo
(3)	COM	21700 Science Writing/Presentat.
(3)	CHM	26200 Organic Chemistry II
(2)	CHM	26600 Organic Chem Lab II
(4)	MA	26200 Linear Algebra & Diff Eq.
(16)		(Students who took PHYS 241 add PHYS 25200 (1) E&M lab

Junior Year

Fifth Semester

(4)	CHE	37700 Momentum Transfer
(4)	CHM	53300 Biochemistry
(3)		Foreign Language 10100
(3)		Great Issues Class
(3)	MA	30300 Diff Eqs for Engr
(16)		

Sixth Semester

(0)	CHM	37400 Physical Chemistry II
(4)	CHE	32000 Statistical Modeling
(4)	CHM	37600 Phys Chem Lab
(3)		Foreign Language 10200
(3)		Engineering Elective
(14)		

Senior Year

Seventh Semester

(3)	CHE	30600 Separations
(4)	CHE	34800 Chem Rxn Engr.
(4)	CHM	32100 Analytical Chem I
(3)		Foreign Language 20100
(14)		

Eighth Semester

(4)	CHE	37800 Heat & Mass Transfer
(3)	CHE	Elective
(3)	CHM	24100 Intro Inorganic Chem.
(1)	CHM	51300 Chem. Literature
(3)		Gen-Ed Elective
(14)		

Fifth Year

Ninth Semester

(1)	ChE	40000 ChE Seminar
(4)	ChE	43500 ChE Laboratory
(3)	ChE	45600 Process Dynamics & Control
(3)	CHM	42400 Analytical Chem II
(3)		General Education Elective
(14)		

Tenth Semester

(4)	ChE	45000 Design & Analysis of Processing Systems
(3)	CHM	34200 Inorganic Chemistry II
(1)	CHM	34201 Inorg. CHM Lab
(1)	CHM	49400 Chemistry Seminar
(3)		General Education Elective
(12)		

Appendix M

Enrollment and Graduates of the School of Chemical Engineering

The list of undergraduate enrollments and B.S., M.S., Professional ChE., and Ph.D. degrees through 1985 was compiled by R.S. Harland (BS '83, MS '85, PhD '88), using the official records of the registrar's office, the library theses cards and the School's theses cards. The enrollments after 1985 were compiled by Cristina Farmus. The data have been carefully checked and cross listed and may be considered accurate. Only the numbers in parentheses are according to J.L. *Bray's History of the School of Chemical and Metallurgical Engineering*, and could not be completely verified.

Undergraduate enrollments are reported on September 1 of each year. The number of graduates is presented for the period January - December of a specific year. Beginning in 1936, the undergraduate enrollment does not include the freshman class, which became part of the General (later Freshman) Engineering program.

The records for Metallurgical Engineering are given only up to 1959, when the School of Metallurgical Engineering became totally independent.

A total of 9,157 B.S., 1,140 M.S., 32 professional Ch.E. and 762 Ph.D. degrees have been awarded by the School.

The first Ph.D. degree was awarded in 1935 to William N. Pritchard, Jr. The 100th Ph.D. degree was awarded to Raymond W. Fahien in 1954. Richard F. Henry (1971) and Ivan G. Gilbert (1982) were the 200th and 300th Ph.D. graduates, respectively.

The first M.S. degree was awarded to Ernest H. Hartwig in 1921. The 250th M.S. degree was awarded to Thomas R. Miffin in 1955. Craig M. McLaughlin (1970) and Kathleen M. Keville (1984) were the 500th and 750th M.S. graduates, respectively.

The first B.S. graduate was Benjamin M. Ferguson. Charles D. Smith (1937), John M. Fisher (1947), Linda P. Huff (1970), and Kurt M. Bretthauer (1984) were the 1000th, 2500th, 5000th and 6500th B.S. graduates, respectively.

Chemical Engineering					
Year	Undergraduate Enrollment	B.S.	M.S.	Professional Ch.E.	Ph.D.
1909	(51)	(1)			
1910	(67)	(1)			
1911	(79)	(9)			
1912	(74)	(10)			
1913	(105)	(14)			
1914	(130)	(13)			
1915	(138)	(13)			
1916	(171)	(18)		1	
1917	(198)	(24)			
1918	(189)	(16)			
1919	(270)	(19)			
1920	(296)	(31)			
1921	(266)	39	1	1	
1922	(193)	46		2	
1923	(176)	57	1		
1924	(174)	30	1	1	
1925	(172)	40		4	
1926	(218)	(20)		1	
1927	(237)	34	1	2	
1928	(272)	17	1	4	
1929	(301)	30		1	
1930	(392)	49	1	4	
1931	(468)	40	1		
1932	(441)	53	6		
1933	(397)	58	7	5	
1934	(482)	86	1		
1935	(302)	89	6		2
1936	(356)	74	2		1
1937	(374)	80	3		
1938	(382)	91	2		1
1939	(349)	102	8		2
1940	(351)	114	6	1	5
1941	(354)	78	13		3
1942	(401)	195	7	1	8
1943	(418)	88	4		2
1944	(312)	64	1		2
1945	(127)	63	3		2
1946	473	33	4		
1947	635	127	14	1	
1948	635	158	17		9
1949	573	197	27		8
1950	434	200	15		11
1951	307	182	16		8
1952	297	111	7	1	12
1953	323	91	14		7
1954	379	71	10		3

1955	410	96	9		3
1956	390	123	23		8
1957	316	130	15		3
1958	260	100	10		5
1959	240	101	16		4
1960	262	62	14		2
1961	291	66	25		7
1962	344	71	18		4
1963	323	79	18		9
1964	336	91	14		6
1965	266	119	25		6
1966	287	101	24		6
1967	285	78	18		8
1968	285	81	20		2
1969	297	73	17		7
1970	270	94	25		6
1971	294	75	19		12
1972	249	105	25		16
1973	226	67	13		5
1974	243	85	22		5
1975	324	60	14		8
1976	432	68	26		4
1977	546	82	22		7
1978	528	140	20		6
1979	514	159	18		12
1980	494	176	21		15
1981	558	137	14		10
1982	565	120	24		9
1983	530	147	13		10
1984	457	179	12		12
1985	384	141	19		11
1986	353	115	16		10
1987	328	116	12		9
1988	346	75	16		17
1989	400	94	8		14
1990	421	91	13		21
1991	483	110	11		20
1992	557	133	10		17
1993	664	111	16		21
1994	676	170	16		21
1995	610	184	17		23
1996	500	185	15		22
1997	430	170	18		20
1998	397	144	14		9
1999	402	124	9		13
2000	405	108	8		8
2001	382	124	15		19
2002	347	117	17		18
2003	334	102	5		15
2004	311	107	10		12

2005	294	83	7		19
2006	307	84	8		13
2007	390	92	5		22
2008	460	79	8		25
2009	551	110	15		19
2010	499	147	13		17
Total		**9157**	**1077**	**30**	**738**

Metallurgical Engineering					
Year	**Undergraduate Enrollment**	**B.S.**	**M.S.**	**Professional Ch.E.**	**Ph.D.**
1930			1		
1931					
1932					
1933					
1934			2		
1935			1		
1936			2		
1937			3		
1938	(31)				
1939	(65)		3		
1940	(85)		2		
1941	(95)	18	1		
1942	(88)	53	1		
1943	(92)	22			
1944	(63)	17			1
1945	(12)	7			1
1946	109	9			
1947	159	25	5	1	1
1948	212	34	6		
1949	192	57	6	1	1
1950	142	67	2		4
1951	98	66	5		2
1952	97	35	1		3
1953	100	28	3		3
1954	118	30	1		
1955	112	27	3		
1956	116	28	4		3
1957	89	42	4		2
1958	83	22	1		2
1959	67	35	8		1
Total		**622**	**65**	**2**	**24**

Appendix N

Graduate Students Supervised by Faculty

This table presents the number of M.S., professional Ch.E. and Ph.D. theses supervised by Purdue ChE faculty members, including the faculty members of the Metallurgical Engineering section until 1959. Identification of theses advisors has been done according to the definitive data of Appendices N, O, and P. Non-thesis M.S. degrees are not included. For faculty members who became professors of the School of Metallurgical Engineering after 1959 only the students supervised up to 1959 are included.

Overall, Albright (107) eclipsed Shreve's record (106) for the largest number of theses advised and co-advised, although Shreve advised more theses by himself. Reklaitis is 3rd with 97. The most Ph.D. theses advised and co-advised is G. T. Tsao with 52 followed by Reklaitis (47), W. N. Delgass (47), and Shreve (44). Albright advised and co-advised the most M.S. theses (76), followed by Shreve (59), Reklaitis (50) and Delgass (43). The record of D.E. Holcomb, who supervised 12 graduate students in the two years he was at Purdue, will probably remain unbroken in the history of the School.

Faculty	MS	MS Coadvised	Professional ChE	PhD	PhD Coadvised
Agrawal, R. (2004-)	-	4	-	2	5
Albright, L.F. (1955-91)	64	12	-	28	3
Andres, R.P. (1981-2004)	19	3	-	19	5
Ash, S.	-	2	-	-	-
Baertsch, C. D. (2003-10)	2	-	-	3	2
Barile, R.G. (1966-80)	13	3	-	2	1
Basaran, O.A. (2002-)	5	-	-	11	4
Beaudoin, S.P. (2003-)	2	-	-	8	1
Bennett, C.O. (1949-59)	5	-	-	5	-
Bloodgood	1	-	-	-	-
Bray, J.L. (1923-52)	26	-	9	13	-
Briggs, S.W. (1956-66)	4	-	-	1	-
Brink, J. (1953-54)	1	-	-	-	-
Campbell, J.W. (1930-35)	4	-	-	-	-
Caruthers, J.M. (1977-)	18	15	-	16	17
Case, L.C. (1956-62)	12	-	-	-	-
Chao, K.C. (1968-93)	17	12	-	10	17
Chenea	-	-	-	1	-

Comings, E.W. (1951-59)	7	-	-	6	1
Corti, D. S. (1998-)	4	1	-	5	-
Coughanowr, D.R. (1956-67)	5	4	-	3	2
Curtis, J S. (1997-2004)	2	-	-	2	3
Cushman	-	-	-	-	2
Degering	-	-	-	1	-
Delgass, W.N. (1974-)	28	11	-	31	16
Doody, T.C. (1947-70)	18	-	-	6	-
Doyle, F. (1992-97)	7	1	-	6	2
Eckel, J.F. (1939-45)	1	-	-	1	-
Eckert, R.E. (1964-2003)	18	5	-	5	6
Emery, A.H., Jr. (1954-95)	28	11	-	13	2
Enos, G.M. (1946-52)	6	-	2	3	-
Evers, D. (1948-56)	3	1	-	3	-
Farabee	2	-	-	-	-
Franses, E.I. (1979-)	12	3	-	16	6
Golding, B. (1959-66)	9	-	-	-	-
Grace, R.E. (1954-59)	3	-	-	1	-
Grady, L.	-	2	-	-	1
Greenkorn, R.A. (1965-2001)	23	19	-	5	21
Grosh, R.	-	-	-	1	-
Guy, A.G. (1952-60)	1	-	-	2	-
Hancock, J. C.	-	-	-	1	-
Harris, M. T. (2002-)	-	-	-	5	2
Hass	-	-	-	2	-
Hawkins, G.	-	1	-	1	-
Heyer	1	-	-	-	-
Hillhouse, H. W. (2002-10)	2	3	-	3	4
Hite, S.C. (1951-57)	7	-	-	-	-
Hoelscher	2	-	-	-	-
Holcomb, D.E. (1946-48)	9	-	-	3	-
Houze, R.N. (1969-)	1	5	-	-	2
Hughel, T.J. (1951-55)	3	-	-	1	-
Jacko, R.	-	1	-	-	-
Kessler, D.P. (1964-2002)	14	11	-	3	3
Kim	-	-	-	1	2
Konopka	-	1	-	-	-
Koppel, L.B. (1961-85)	9	11	-	12	12
Lackritz, H. H. (1991-97)	7	1	-	5	-
Ladisch, M.	-	6	-	-	4
Lahti, L.E. (1963-67)	6	-	-	-	-
Laurendeau, N.	-	3	-	-	1
Lauterbach, A. J. (1996-2002)	6	2	-	3	3
Leckie, R.B. (1928-36)	3	-	1	-	-
Lee, G. (2000-06)	2	-	-	2	-
Lee, J. H. (1988-2000)	2	-	-	-	2
Lim, H.C. (1966-87)	9	26	-	14	16
Lindley	-	1	-	-	-
Litster, J. D. (2007-)	1	-	-	-	-
Liu, J. C. (2008-)	-	-	-	-	-
Lottes, J.C. (1949-51)	1	-	-	-	-
Lovell, C.L. (1934-48)	33	-	-	5	-
Lu	-	-	-	-	1
Mahin	1	-	-	-	-
Maier	-	1	-	-	-
Marek, C.T. (1951-59)	1	-	-	-	-
Maxwell, H.L. (1926-30)	2	-	1	-	-
McBee	-	-	-	-	1
McCormack, J.T. (1950-54)	5	-	-	1	-
Morgan, J. (2000-)	4	1	-	5	-

Morgen, R.A. (1954-59)	2	-	-	2	-
Myers, J.E. (1950-66)	22	-	-	7	-
Narsimhan, G.	-	1	-	-	1
Okos, M.	-	4	-	-	8
Park, K.	-	-	-	-	2
Parlee, N.A. (1953-59)	8	-	-	1	-
Peffer, H.C.(1911-34)	4	1	14	-	-
Pekny, J. (1990-)	-	7	-	6	15
Peppas, N.A. (1976-2002)	39	2	-	36	6
Pinal	-	1	-	-	-
Pipes, R. P. (2004-)	1	-	-	1	-
Ramkrishna, D. (1976-)	14	4	-	22	8
Rautala, P. (1955-60)	3	-	-	-	-
Reklaitis, G.V. (1970-)	30	15	-	24	23
Ribeiro, F. (2003-)	3	1	-	2	6
Robinson	-	2	-	-	-
Rushton, J.H. (1955-71)	21	-	-	3	1
Schneider, D.R. (1970-76)	-	3	-	-	1
Schuhmann, R. (1953-59)	1	-	-	2	-
Seo, J.H. (1986-89)	1	-	-	4	-
Sesonske, A. (1954-70)	12	3	-	4	-
Sevick-Muraca, E. (1994-99)	7	-	-	3	1
Shannon, P.T.(1958-63)	9	1	-	1	-
Shreve, R.N. (1930-55)	58	-	3	43	1
Smith, B.D. (1958-65)	4	-	-	3	-
Smith, J.M. (1945-57)	36	1	-	21	2
Solberg, J.	-	1	-	-	-
Squires, R.G. (1962-2004)	17	12	-	6	3
Szleifer	-	-	-	-	1
Takoudis, C.G. (1981-96)	10	3	-	9	1
Talbot, J. (1989-96)	-	1	-	2	4
Theofanous, T.G. (1969-75)	5	6	-	-	2
Thomson, K. (2000-)	1	-	-	4	3
Tierney, J.W. (1954-56)	1	2	-	-	-
Tsao, G.T. (1974-2005)	29	11	-	44	8
Tucker, W.H. (1953-69)	15	-	-	-	-
Van Ness, H.C. (1952-56)	4	-	-	1	1
Varma, A. (2004-)	1	-	-	4	-
Vaughn, R.D. (1960-64)	8	-	-	-	-
Venemann	-	1	-	-	-
Venkatasubramanian (1988-)	3	12	-	18	13
Wang, N.H.L. (1980-)	22	2	-	16	5
Wankat, P.C. (1970-)	25	5	-	14	8
Weigand, W.A. (1967-81)	5	9	-	2	4
Wiest, J. (1988-95)	4	2	-	1	1
Williams, T.J. (1965-70)	2	1	-	-	-
Won, Y. Y. (2003-)	-	1	-	4	1
Woods, J.M. (1952-77)	18	6	-	6	3
Wyly	1	-	-	-	-

Appendix O

PhD Theses, Chemical Engineering, Purdue University

The following Ph.D. theses have been issued by the School of Chemical Engineering between May 21, 1935 and May 2011. The name of the thesis supervisor appears to the right of the thesis title. Professors in charge of Ph.D. theses have been established according to the official documents of the libraries and the School, and according to the designations chairman or professor in charge of the Graduate School forms. Ph.D. theses issued by the School of Chemical Engineering with the title Ph.D. in Metallurgical Engineering are listed in Appendix Y-2.

William N. Pritchard, Jr.	The decomposition of barium sulfate by calcium chloride i n aqueous solution at temperatures between 100 ° and 175 ° C.	Shreve	1935
Miller W. Swaney	Antiseptic and germicidal compounds containing the pyridine nucleus.	Shreve	1935
Robert B. Bennett	Azo dyes from 8-quinolinol (8-bydroxy-quinoline).	Shreve	1936
Maxwell J. Skeeters	Mercuration in the heterocyclic series, with special attention to pyridine.	Shreve	1938
Richard K. Toner	The determination of the factors affecting the commercial production of barium chloride from barite and calcium chloride.	Shreve	1939
Charles H. Watkins	The determination of the optimum conditions for the decomposition of strontium sulfate by calcium chloride and by calcium nitrate in aqueous media.	Shreve	1939
David R. Burtsfield	Studies of amination in liquid ammonia.	Shreve	1940
Richard P. Carter	Aminoguanidine and derived azo dyes.	Shreve	1940

Henry J. Hibshman	Vapor phase nitration of ethane.	Hass	1940
Facundo R. Morral	The electro deposition of zinc on wire.	Bray	1940
George Perkins	The effect of various factors upon the structure and appearance of electrodeposited zinc.	Bray	1940
George C. Gross	A study of the industrial preparation of sulfamide.	Degering	1941
Darrel E. Mack	Preparation and properties of starch propionate.	Shreve	1941
Herbert F. Wiegandt	Double decompositions conducted in saturated aqueous media and the isolation of the reaction products.	Shreve	1941
Lloyd Berg	The amination of heteroclyclic compounds	Shreve	1942
William J. Burich	A photographic study of the influence of free convection currents near critical values of Reynolds number.	Lovell	1942
Robert E. Howard	The hydrogenation of coal at high temperatures	Bray	1942
John H. Lux	The sulfonation of beta-methyl-naphthalene.	Shreve	1942
Wilmer L. Sibbitt	The determination of the dynamic viscosity of nitrogen gas.	Hawkins	1942
Charles E. Stoops, Jr.	Power consumption of propeller-type mixers.	Lovell	1942
Russell W. Welborn	The catalytic vapor-phase oxidation of some naphthalene derivatives.	Shreve	1942
James M. Willis	Dyes from aminoguanidine.	Shreve	1942
George T. Austin	The high temperature hydrogenation of coal-II.	Lovell	1943
Charles Slesser	Migration and effect of frost heave of calcium chloride and sodium chloride in soil.	Shreve	1943
Lawrence W. Frost	The preparation of dichlorodifluoromethane.	Shreve	1944
Alfred J. Strohmaier	The clarification of acid-hydrolyzed mash and beer for the production of 2,3-butanediol from corn.	Lovell	1944
Earl R. Hafslund	Vapor liquid equilibrium of active amyl alcohol iso-amyl alcohol at 760 mm pressure.	Lovell	1945
Charles J. Marsel	The preparation of cresols from non-strategic war materials.	Shreve	1945
Lloyd G. Alexander	A study of the vapor phase nitration of paraffins.	Hass	1948
Brage Golding	Oil soluble phenolic resins and their varnishes.	Shreve	1948

Robert E. Hall	Radial temperature gradients in gas-solid catalytic converters.	J.M. Smith	1948
Alfred W. Hubert	Dyes from 5-aminotetrazole.	Shreve	1948
Kenneth N. Kettenring	Heat and mass transfer in fluidized gas-solid systems.	Shreve	1948
George A. Kruder	The sulfonation of 2-methylnaphthalene.	Shreve	1948
George E. McCullough	Preparation of certain prefluorinated methyl-substituted bicyclohexyls.	McBee, Shreve	1948
Charles H. Prien	Distribution characteristics of the ethylene dibromide and tetraethyl lead in aviation fuels.	Shreve	1948
Alan Rhodes	Dyes from aminoguanidine.	Shreve	1948
Clark L. Dorsey, Jr.	Some thermodynamic properties of the nitroparaflins.	Holcomb	1949
James B. Henderson	Heat transfer from gases at high temperatures.	J.M. Smith	1949
Howard B. Irvin	Design of gas-solid catalytic converters.	J.M. Smith	1949
Ganesh S. Laddha	Individual mass transfer resistances in liquid-liquid extraction.	J.M. Smith	1949
Fredric R. Lloyd	The caustic fusion of 6-methyl-2-sodium naphthalene sulfonate	Shreve	1949
John C. Lottes	The alkylation of 2-methyl naphthalene.	Shreve	1949
John F. Roorda, Jr.	Flooding velocities in liquid-liquid extraction towers.	Holcomb	1949
Gerard N. Vriens	The preparation of dimethylaniline.	Shreve	1949
Robert M. Currie	Heats of combustion of some nitro-alcohols.	Bennett	1950
Robert A. Fisher	Kinetics of the reaction between methane and sulfur vapor.	J.M. Smith	1950
Robert C. Forney	Kinetics of the catalytic sulfurization of methane.	J.M. Smith	1950
John F. Horner	The vapor phase hydration of ethylene oxide.	J.M. Smith	1950
Harold E. Marsh, Jr.	The liquid phase alkylation of benzene with 1-octene in the presence of hydrogen fluoride.	Shreve	1950
Joseph M. Nelson	Thermodynamic properties of ternary hydrocarbon mixtures.	Holcomb	1950
Robert W. Olson	The design of fixed-bed catalytic reactors.	J.M. Smith	1950

Zafer A. Sawwaf	Reaction of 5-aminotetrazole and dyes derived thereof with metallic salts.	Shreve	1950
Charles H. Stockman	The high temperature hydrogenation of coal.	Bray	1950
S. Margaret C. Willoughby	The effect of surface texture and other factors on the specular gloss of flattened lacquer films.	Shreve	1950
Stanley E. Zager	Separation of glycerol from dilute aqueous solutions by solid adsorbents.	Doody	1950
Robert K. Charlesworth	Azo dyes from heterocyclic nitrogenous compounds.	Shreve	1951
Albert A. Gunkler	Azo dyes from 6-methyl-2-naphthol.	Shreve	1951
Samuel C. Hite	A study of the factors affecting home humidity control and the venting of gas appliances.	Bray	1951
Norris L. Sample	Liquid-liquid equilibrium relations in systems involving oleic acids.	Bennett	1951
Rudolph W. Schuler	The design of fixed bed catalytic reactors.	J.M. Smith	1951
Vincent P. Stallings	The effect of packing size on fixed-bed reactors.	J.M. Smith	1951
Charles J. Walters	Volumetric behavior and thermodynamic properties of ethylene oxide.	J.M. Smith	1951
Andrew H. Younger	Heat transfer coefficients for liquid mercury and dilute solutions of sodium in mercury.	Doody	1951
Earl L. Alexander, Jr.	A new method for studying channeling in a packed gas adsorption tower.	Shreve	1952
Wesley B. Argo	Reaction kinetics and heat transfer in packed beds.	J.M. Smith	1952
S. George Bankoff	Development of a vinyl chloride polymerization procedure.	Shreve	1952
William J. Boyne	Vapor-liquid equilibrium in the binary systems in n-butane-methanol and 1-butene methanol.	Doody	1952
Surendraray C. Dholakia	Alkylation of 2-methyl-naphthalene with long chain 1-olefins and anhydrous hydrofluoric acid as a catalyst.	Shreve	1952
Cyrus C. Highlander	Sulfonation of 2-methyl-naphthalene using isotope dilution technique for the determination of 6-methyl-2-naphthalene sulfonic acid.	Shreve	1952
C. Robert Hiles	A study of alkyd-silicone coatings.	Shreve	1952
Walter S. Kaghan	A study of the suspension polymerization of styrene.	Shreve	1952

Clinton L. Parker	Thermal degradation and stabilization of polyvinyl chloride.	Shreve	1952
Henry J. Ramey, Jr.	Radiant heat transfer from superheated steam.	J.M. Smith	1952
Clarence E. Schwartz	Flow distribution in packed columns.	J.M. Smith	1952
Lawrence A. Wilson, Jr.	Dyes from the sym-bis-(5-amino-1,2,4-triazoyl) alkanes.	Shreve	1952
Joseph A. Brink, Jr.	The nitration of 2-methyl-naphthalene.	Shreve	1953
Tai S. Chao	A kinetic study of the continuous hydrolysis of fatty esters.	Doody	1953
George W. Nabor	Rate and mechanism of the catalyzed methane-sulfur vapor reaction.	J.M. Smith	1953
John K. Patterson	An investigation of the power requirements for mechanical pigment dispersion.	Shreve	1953
Leonard B. Petty	Volumetric behavior of the methanol-n-butane system.	Comings	1953
Victor B. Thegze	Studies in the extraction of sulfur compounds from high-sulfur content residual fuel oil.	Doody	1953
Ching C. Tsao	Heats of mixing of liquids.	J.M. Smith	1953
Frank J. Batug	Mixed 2-methyl naphthols as dye intermediates.	Shreve	1954
Raymond W. Fahien	Mass transfer in packed beds.	J.M. Smith	1954
Marlin G. Geiger, Jr.	The production of vinyl chloride in a fluidized catalyst bed.	Shreve	1954
Shou S. Kwong	Radial heat transfer in fixed beds.	J.M. Smith	1955
Nanalal G. Mehta	Effect of solids flow rate and particle diameter on pressure drop in pneumatic transport systems.	J.M. Smith, Comings	1955
Harold W. Schnaible	Heat of mixing of liquids.	J.M. Smith, VanNess	1955
Aziz F. Abdul-Karim	A study of alkyd-silicone coatings.	Morgen	1956
Ernest B. Baumeister	Fluid-particle heat transfer in packed beds.	Bennett	1956
Robert P. Bringer	Heat transfer to fluids with variable fluid properties: Carbon dioxide in the critical region.	J.M. Smith	1956
Joseph F. Gross	Heat transfer in laminar flow.	VanNess	1956
Hiroo M. Kurihara	Fundamental factors affecting boiling coefficients.	Myers	1956
Douglas E. Leng	Thermal conductivity of propane.	Comings	1956

Philip G. McCracken	Enthalpies of mixtures of methanol, benzene and n-hexane.	J.M. Smith	1956
Howard A. McLain	Development of a high velocity spray dryer.	Comings	1956
William H. Abraham	The density mixtures of carbon dioxide and argon at 50 • C and 50 to 1000 atmospheres.	Bennett	1957
David R. Miller	Static pressure gradients in turbulent jet mixing.	Comings	1957
William C. Ragsdale	Heat transfer in a deLaval nozzle.	J.M. Smith	1957
Daniel E. Collins	Co-current gas adsorption.	Briggs	1958
Doyle Geiselman	Effect of nitrogen on the deformation of magnesium single crystals.	Guy	1958
Ronald H. Harding	An investigation into the optical properties of pigment films.	Morgen	1958
Allen C. Pauls	A kinetic study of the hydrogenation of ethylene over a nickel-alumina catalyst.	Comings	1958
Robert D. Wesselhoft	The rate of hydrochlorination of acetylene in a fixed catalyst bed.	Woods	1958
David T. Hoffman, Jr.	Thermal diffusion in liquids.	Emery	1959
Francis R. Kramer	Thermal conductivity of butane at high pressure.	Comings	1959
Thomas R. Mifflin	Self diffusion in argon to 300 atmospheres.	Bennett	1959
Truman S. Storvick	Enthalpy of alcohol-hydrocarbon systems.	Emery	1959
Maurice G. Lorens	Thermal diffusion in a packed column.	Emery	1960
M. Jaime Wisniak	High pressure hydrogenation of cotton seed oil: Effect variables and kinetics of the reaction.	Albright	1960
Robert D. Bradshaw	Heat and mass transfer in fixed and fluidized beds of large particles.	Myers	1961
Robert R. Buntin	A kinetic study of the oxidation of ethylene on a silver catalyst.	Woods	1961
Edgar H. Buyco	Heat and momentum transfer in liquid metals.	Sesonske	1961
Owen T. Hanna	Heat and momentum transfer in the incompressible boundary layer on a flat plate.	Myers	1961
C. Bruce McCarty	The use of a vacuum beam microbalance for adsorption studies of oxygen, ethylene, and ethylene oxide on a silver catalyst.	Woods	1961

David W. Savage	The effect of surface roughness on heat and momentum transfer.	Myers	1961
Elmer M. Tory	Batch and continuous thickening of slurries.	Shannon	1961
Vincent J. Dardin, Jr.	The partial oxidation of propane. Part 1: Initiated by ozone; Part 2: Catalyzed by hydrogen bromide.	Albright	1962
Hans Haug	Reaction of nitric acid with potassium chloride in fused salt solution	Albright	1962
Anantha K.S. Raman	A study of mass transfer rates in mixed tanks.	Rushton	1962
John B. Roll	The effect of surface tension on boiling heat transfer.	Myers	1962
John R. Friday	An analysis of the equilibrium stage separations problem- Classification and convergence.	B.D. Smith	1963
John R. Griffin	An analysis of phase boundary motion in diffusion-controlled processes.	Coughanowr	1963
Robert G. Peet	A study of mass transfer coefficients as a function of concentrations and heats of mixing and investigation of the effect of simultaneous sensible heat transfer on mass transfer, in the liquid-liquid system ethyl alcohol-carbon tetrachloride-water.	Doody	1963
Clayton S. Smith	Reactions of ethylene with aluminum triethyl: Effect of variables and kinetics of the system.	Albright	1963
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Robert V. Wargin	Theoretical studies of elastomer behavior.	Emery	1963
Vern W. Weekman, Jr.	Heat transfer and fluid flow for concurrent, gas-liquid flow in packed beds.	Myers	1963
Edward M. Winter	Surface effects in the particle oxidation of propane.	Albright	1963
Tsoung-yuan Yan	Hydrogenolysis of esters, particularly perfluorinated esters.	Albright	1963
Roberto Lee	Vapor phase nitration of cyclohexane using nitrogen dioxide.	Albright	1964
Richard M. McKinley	Physical laws for a heterogeneous continuum.	Chenea	1964
Duncan A. Mellichamp, Jr.	Identification and control of a grain-varying flow system.	Coughanowr	1964
James F. Mosby	The alkylation of isoparaffins at high agitation rates.	Albright	1964

Steven L. Schrock	Eddy diffusivity ratios in liquid metals.	Sesonske	1964
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Perry D. Bergman	Laminar flow of a gas with constant wall heat flux.	Koppel	1965
Warren W. Bowden	A study of the phase behavior of the normal pentane-sulfur dioxide-benzene system at 0 ° F.	B.D. Smith	1965
Jerry G. Hillestad	A study of coalescence rates in mixing tanks.	Rushton	1965
Walter J. Korchinsky	Thermal diffusion in liquids: The forgotten effect.	Emery	1965
Herbert H. Orent	Optimal control of complex chemical processes with limited information.	Koppel	1965
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Haim Eldor	A stochastic approach to one dimensional optimization in engineering.	Koppel	1966
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Noel E. Moore	Dynamics of a gas adsorption column.	Coughanowr	1967
Rutton D. Patel	Surface renewal models for wall to fluidized bed heat transfer.	Koppel	1967
Yen-Ping Shih	Optimal feedback control of tubular processes.	Koppel	1967

Richard J. Shlegeris	Alkylation of isobutane with various olefins.	Albright	1967
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Billy L. Crynes	Surface effects during propane pyrolysis in tubular flow reactors.	Albright	1968
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Leonard S. Bernstein	The thermal chlorination of hydrogen in metallic tubular flow reactors.	Albright	1969
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Ronald H. Kahney	The kinetics of the catalytic hydrogenation of 1,3-butadiene and cis-2-butene.	Woods, Squires	1969
Che-I Kao	Partial oxidation of propane in metal and pyrex reactors.	Albright	1969
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George E. Herriott, Jr.	Kinetics of the pyrolysis of propane at 700 • to 850 ° C.	Albright, Eckert	1970
Ashok K. Kudva	Structure of turbulent velocity and temperature fields in ethylene glycol flowing in a pipe at low Reynolds number.	Sesonske	1970
Ching-tsan Lo	Optimal control of countercurrent distributed-parameter systems.	Koppel, Lim	1970
Robert J. Salloum	Quantitative detection of free radicals on mechanically formed polymer surfaces.	Eckert	1970
David G.R. Short	Hydrogenation of alpha methyl styrene over palladium catalyst in a packed bed with cocurrent downflowing liquid and gas phases.	Woods	1970
James H. Clinton	Time optimal control of linear multivariable systems by the method of functional analysis.	Weigand	1971
Richard L. Davison	Hydrodynamics of horizontal cocurrent annular	Kessler	1971

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Richard F. Henry	Interfacial area formed by perpendicular injection of one liquid into another immiscible liquid flowing in a pipe.	Rushton	1971
Richard E. Kloubec	Direct digital control of systems subject to stochastic disturbances and control effort constraints.	Lim, Koppel	1971
Hong H. Lee	Design and control for a class of counter-current processes.	Koppel, Lim	1971
Tsung-Wen Lee	Statistical thermodynamics of group interaction in liquids.	Chao, Greenkorn	1971
Michael P. Ramage	Product selectivity in the liquid phase chlorination of n-dodecane: A study of the mass transfer-chemical kinetic interaction.	Eckert	1971
Krishnan Ramanadham	Comparison of digital and hybrid computer techniques for solving parabolic equations.	Kessler	1971
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Ching T. Liou	Liapunov functional method for stability analysis of classes of distributed parameter systems and their applications to tubular reactors and catalyst particles.	Lim, Weigand	1972
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Michael B. Moranville	Dispersion in non-uniform and anisotropic porous media.	Greenkorn, Kessler	1974

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Robert G. Kneile	Solution of material balance problems for process design.	Koppel, Greenkom	1975
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Dennis M. Johns	Co-current, stratified channel flow: Macroscopic and microscopic phenomena.	House, Theofanous	1976
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Young H. Lee	Microprobe method for studying gas-liquid oxygen transfer in various surfactant systems.	Wankat, Tsao	1977
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S. Raghavan	Heat exchanger network synthesis: A thermodynamic approach.	Koppel, Greenkom	1977
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David W. Arnold	A group contribution model or liquids and their mixtures with experimental determination of infinite dilution activity coefficients.	Chao, Greenkorn	1980
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Ray A. Mentser	Thermodynamic properties of fluids - Experimental determination and prediction using principle of corresponding states.	Chao, Greenkorn	1980
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Norman B. Jansen	Application of bioenergetic principles to modelling the batch fermentation of d-xylose to 2,3-butanediol by klebsiella pneumoniae.	Tsao	1982
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Shirish Kishor Sankhe	Kinetics, Bioenergetics and Optimization of Extra-Cellular Polysaccharide Production by methylomonas mucosa in Batch and Fed Batch-Fermentations	Tsao	1989
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Madeline Torres-Lugo	Physicochemical Behavior and Cellular Interactions of Novel Oral Calcitonin Delivery Systems	Peppas	2001
William Edward Walters	A Study of the Effects of Cesium and Rhenium on the Epoxidation of Ethylene	Delgass	2001

Xinyun Wen	Dynamic Adsorption, Surface Tension, and Direct Probing of Surfactants, Lipids, and Proteins at the Air/Water Interface	Franses	2001
Yi Xie	Design, Modeling, and Analysis of a Continuous Separation Process for Purification of Adipoyl-7-ADCA from Fermentation Broth	Wang	2001
Ozgur Emek Yildirim	Dynamics of Newtonian and Non- Newtonian Drops and Bridges	Basaran	2001
George Einar Applequist	Economic Risk Management for Chemical Manufacturing Supply Chain Planning	Reklaitis, Pekny	2002
Jingyi Bai	Synthesizing Thin and Ultrathin Polymer Films by a Two-step Deposition/Polymerization Process	Lauterbach, Delgass	2002
Alvin Un-Teh Chen	Computational and Experimental Analysis of Drop Formation for MEMS Applications	Basaran	2002
Paul Timothy Fanson	FTIR Analysis of Supported Catalyst Systems Related to the Reduction of Automotive Exhaust Emissions	Lauterbach	2002
Chad Austin Farrenburg	Novel Simulated Moving Bed Processes for Antibiotics Purification	Wang	2002
Aaron Cooper Foss	Poly(ethylene glycol)-grafted Acrylic-based Copolymers for Oral Insulin Delivery	Peppas	2002
Prasenjeet Ghosh	A Systematic Framework for Computer- Aided Design of Engineering Rubber Formulations	Caruthers, Venkatasubramanian	2002
He Huang	A Biological Process for the Production of 1,3-propanediol by Klebsiella pneumoniae	Tsao	2002
Wei-Cho Huang	Oxygen Supply and Glycerol Fermentation	Tsao	2002
Yuanjie Huang	Towards a Model-based Fault Accommodation System	Reklaitis, Venkatasubramanian	2002
Bumsang Kim	Molecular Design of Environmentally Sensitive Complexation Hydrogels for Oral Protein Delivery	Peppas	2002
Tanmay Lele	An Experimental Theoretical Investi- gation into Non-linear Phenomena during CO Oxidation on Pt(1 0 0)	Lauterbach, Ramkrishna	2002
Sungyong Mun	Robust Tandem Simulated Moving Bed for Insulin Purification	Wang	2002
Alissa Jennifer Prosser	Thermodynamics of Equilibrium Adsorption and Surface Tension of Single and Binary Ionic Surfactant Systems	Franses	2002

Venugopal Santhanam	Fabrication of Nanoelectronic Devices Using Self-Assembled 2D Arrays of Monolayer Protected Clusters	Andres	2002
Dharmashankar Subramanian	A Computational Architecture to Address Combinatorial and Stochastic Aspects of Process Management Problems	Pekny, Reklaitis	2002
Xiaomin Yang	Scale-up Design of Packed-Bed Bioreactors with Pressure Pulsation and On-line Control for Solid-State Fermentation	Tsao	2002
Chunhua Zhao	Knowledge Engineering Framework for Automated HAZOP Analysis	Venkatasubramanian	2002
Stephanus Gunawan Budilarto	An Experimental Study on Effects of Fluid Aerodynamics and Particle Size Distribution in Particle-Laden Jet Flows	Curtis	2003
Mark Edward Byrne	Biomimetic Materials for Recognition of Biomolecules: Recognitive Networks for Drug Delivery and Bionanotechnology	Peppas, Wankat	2003
Pankaj Doshi	Deformation and Breakup of Liquid- Liquid Threads, Jets, and Drops	Basaran, Ramkrishna	2003
Santhoji Rao R.R. Katare	A Rational, Automated Knowledge Framework for Reaction Kinetic Modeling and Catalyst Design.	Caruthers, Venkatasubramanian	2003
Gozdem Kilaz	Applicability of a Recycle Reactor Scheme to the Conversion of Methane to Aromatics	Lauterbach	2003
Jeffrey William Kloosterman	The Chemical Role of Rhenium in the Epoxidation of Ethylene and Butadiene	Delgass	2003
Mano Ram Maurya	Integrating Causal Models and Trend Analysis for Process Fault Diagnosis	Venkatasubramanian	2003
Fangping Mu	Multivariate Statistical Process Monitoring and its Integration with HAZOP Analysis for Abnormal Event Management.	Venkatasubramanian	2003
Abhijit Anand Namjoshi	A Mathematical Investigation of the Consequences of Metabolic Regulation in Complex Pathways: The Cybernetic Approach.	Ramkrishna	2003
Ebru Oral	Recognitive Polymer Networks for Therapeutic and Diagnostic Devices	Peppas	2003
Gudbjorg Hronn Oskarsdottir	High Throughput Screening of Supported Catalysts Using FTIR Imaging	Lauterbach	2003
Yangdong Pan	Subspace-based Identification Tools for Chemical	J. Lee, Reklaitis	2003

	Process Control		
Jayanta Chandana Panditaratne	Deflection of Microjets Induced by Asymmetric Heating and Related Free Surface Flows with Moving Contact	Basaran	2003
Sudeep Punnathanam	Toward a Molecular Theory of Homogeneous Bubble Nucleation in Superheated Liquids.	Corti	2003
Yifei Zang	New Flow Rate Strategies for Simulated Moving Bed Systems.	Wankat	2003
Rajan Agrawal	Self-Assembled Thin-Films of Gold Nanoparticles for the Fabrication of Electronic Devices	Andres	2004
Ritwik Bhatia	A Meso-scale Description of the Dynamics of Glass Forming Material	Caruthers	2004
Kunn Hadinoto	Experimental Investigation and CFD Modeling of Interstitial Fluid Effect in Fluid-Particle Flow with Particle-Particle Collisions	Curtis	2004
Kimberly Hayden Henthorn	Measurement and Prediction of Particle Entrainment and Conveying: Effect of Particle Characteristics, Mass Loading, and Reynolds Number	Curtis, Park	2004
David Brian Henthorn	Simulation of the Formation of Densely Crosslinked Polymeric Networks for use as Biomaterials	Peppas, Park, Thomson	2004
Tom Tao Huang	Engineering and Modeling of Microfluidic Flow using Press-Fit Microdevices	Tsao, Ladisch	2004
June Young Jung	Chains under Production Capacity Constraints	Pekny, Reklaitis	2004
Michael Laskinski	Investigation of Particle Clustering in Discrete Element Method Simulations	Pekny, Curtis	2004
Ying-Chih Liao	Adsorption Dynamics and Fluid Mechanics of Surfactant Solutions	Basaran, Franses	2004
Vijayanand Subramanian	A Computational Framework for Studying Decentralized Supply Chain Dynamics	Pekny, Reklaitis	2004
Xiaotao Wan	Simulation-based Optimization with Surrogate Models	Pekny, Reklaitis	2004
David H. Wells Jr.	Density Functional Theory Investigation Into The Expoxidation of Propylene Over TS-1 Catalysts	Delgass	2004
Nadia Abunasser	One Column Chromatographs with Recycle Analogous To a Simulated Moving Bed	Wankat	2005
Aditya Bhan	Propane Aromatization over HZSM-5 and Ga/HZSM-	Delgass, Lauterbach	2005

	5 Catalyst Design Perspective		
Chim Yong Chin	Versatile Simulated Moving Bed Equipment and Applications	Wang	2005
Nicole Dingle	A Finite Element Based Algorithm for Determining Interfacial Tension and Contact Angle from Pendant And Sessile Drop Profiles	Harris	2005
Delal Dink	Approaches to 4-D Intensity Modulated Radiation Therapy Planning With Fraction Constrainsts	Pekny, Reklaitis	2005
Andrew Worth Dorsey	An Advanced Model Based Framework for Improved Monitoring And Quality Control of Batch and Semi-Batch Processes	J. Lee, Reklaitis	2005
Michael Heying	Phase Behavior of Entropically Controlled Colloidal Dispersions	Corti	2005
Hanxiao Jiang	Metabolic Engineering of the Phenylpropanoid Pathway in Saccharomyces cerevisiae	Morgan	2005
Ki Bong Lee	Optimal Design of Simulated Moving Bed Chromatography for Chiral Separations	Wang	2005
Sang-Yup Lee	Preparation of Nanoscaled Bio-Inorganic Hybrid Materials from Tobacco Mosaic Virus	Harris	2005
Scott Jason McClellan	Adsorption of Proteins and Surfactants Air/Water and Solid/Water Interfaces	Franses	2005
Jin-Won Park	Development of Biotechnologies for Membrane Protein Study	G. Lee	2005
Priyan Ramesh Patkar	An Integrated Framework for the Computer-Aided Formulation and Part Design of Engineering Rubbers Using Advanced Knowledge Engineering and Artificial Intelligence	Caruthers, Venkatasubramanian	2005
Qiang Qin	To Improve Performance of Fischer Tropsch Synthesis, Model Studies on Catalysts, Reactors and Processes	Ramkrishna	2005
Arnab Sarkar	A Micro-Mechanical Model for Predicting the Stress Response of Particulate Filled Elastomers	Caruthers	2005
Bradley Martin Taylor	Gas-Phase Expoxidation of Propylene over Au/TS-1 Catalysis	Delgass	2005
Varma A. Vishal	Development of Computational Models for Strategic And Tactical Management of Pharmaceutical R & D Pipelines	Pekny	2005

Jamey D. Young	A System-Level Mathematical Description of Metabolic Regulation Combining Aspects of Elementary Mode Analysis with Cybernetic Control Laws	Ramkrishna	2005
Chi-Ming Yu	Methods to Reduce Fronting and Increase Yield in Batch Size	Wang	2005
Selen Aydogan	A Simulation Based Optimization Approach to Model and Design Life Support Systems for Manned Space Missions	Pekny, Reklaitis, Blau	2006
Hao Chen	Protein Engineering of Cinnamate 4-hydroxylase for Production of Non-Natural Phenylpropanoids	Morgan	2006
Lasitha Cumaranatunge	Synthesis and Kinetics of Supported Catalysts for Green Chemistry	Delgass	2006
Nathanial Aaron Deskins	Understanding Ceria/Noble Metal Interactions for Water-Gas-Shift Catalysts Using Density Functional Theory	Thomson	2006
Shuo-Huan Hsu	Bayesian Model Building Strategy and Chemistry Knowledge Compilation for Kinetic Behaviors of Catalytic Systems	Caruthers, Venkatasubramanian	2006
Jin Seok Hur	Simulated Moving Bed and Chromatography Processes for Multicomponent Separation	Wankat	2006
Yogesh Joshi	Light Alkane Aromatization using ZSM-5 based Catalysts: Application of Density Functional	Thomson	2006
William Ketterhagen	Modeling Granular Segregation During Hopper Discharge	Curtis, Basaran	2006
Tze Lee Phang	Adsorption of Lecithin Lipids and Proteins at Air/Aqueous and Aqueous/Solid Interfaces	Franses	2006
Abhijit A. Phatak	Kinetic Modeling and First Principles Study of the Water-Gas Shift and Methanation Reaction on Group VIII Metal Catalysts	Ribeiro	2006
Hao Shang	Preparation of Paramagnetic Microparticles and their Applications In the Study of Ligand-Receptor Binding Characteristics	G. Lee	2006
Ronald Suryo	Breakup of Simple and Compound Drops and Bubbles	Basaran	2006
Ta-Chen Wei	Electrode Accessibility and Mass Transport through Nanoporous Silica Films Determined by Electrochemical Methods	Hillhouse	2006

Timothy Andrzejak	Experimental Studies on the Ignition of Single Ni/Al, Fe/Al, and Ti Particles	Varma	2007
Peter Erri	Solution Combustion Synthesis for Catalytic and Power Generation Applications	Varma	2007
Ankur Jain	An Ontological Framework for Knowledge Modeling and Decision Support for Pharmaceutical Product Development	Reklaitis, Venkatasubramanian	2007
Hariprasad Janakiram Subramani	Dynamics of Formation and Deposition of Drops for MEMS Applications	Basaran	2007
Weihua Jin	Development and Applications of Two-Zone SMB Processes for Binary Separations	Wankat	2007
Ajay Joshi	Density Functional Theory (DFT) Study of Reaction Pathways On Gold and Gold-Alloy Nanoclusters	Delgass, Thomson	2007
Sook Heun Kim	Adsorption and Interactions of Lung Surfactant Lipids and Proteins at Air/Aqueous Interfaces and in Aqueous Solution	Franses	2007
Gautam Kumar	A Theoretical and Experimental Investigation of the Adhesion and Removal of Particles from Surfaces	Beaudoin	2007
Sridhar V.V.S. Maddipati	Advanced Computational and Machine Learning Tools in Pharmaceutical Informatics	Kim, Venkatasubramanian	2007
Shadab Sharif Mulla	Kinetic Measurement on Lean NOx Traps	Delgass, Ribeiro	2007
Ravi K. Nandigam	Advanced Informatics Based Approaches for Data Driven Drug Discovery	Kim	2007
Elizabeth S. Royston	Assembling Inorganic Nanomaterials using Tobacco Mosaic Virus Templates	Harris	2007
Charles Schaffer	Investigations into the Reactivity and Catalytic Activity of Nanoporous Aluminosilicates and their Synthesis Precursors	Thomson	2007
Eric A. Sherer	Age-Structured Cell Models in the Treatment of Leukemia: Identification, Inversion, and Stochastic Methods for the Evaluation and Design of Chemotherapy Protocols	Ramkrishna	2007
Daniel W. Siderius	Statistical Geometric Models of Hard-Sphere Colloidal Dispersions: Application to Interfacial Thermodynamics and the Calculations of Depletion Forces	Corti	2007
Shivani Syal	The Prediction of Glass Transition Temperature of Polycarbonates Using Physical Descriptors and	Caruthers, Venkatasubramanian	2007

	Neural Networks		
Vikrant N. Urade	Self-Assembly of Photovoltaic Nanomaterials	Hillhouse	2007
Hsiang-Y Wang	Microfluidic Electroporation and Cell Arrays	Wang, Lu	2007
Ervina Widjaja	Deposition of Colloidal Particles During Sessile Drop Evaporation	Harris	2007
Qi Xu	Computational and Theoretical Analysis of Ink-Jets Drop Formation and Breakup	Basaran	2007
Hak Koon Yeoh	Instabilities and Pattern Formation Under an Applied Non-Uniform Electric Field	Basaran	2007
Luis Zalamea	On the Cohesion of Carbon Nanotubes in Nanostructures	Pipes	2007
Jennifer G. Bugayong	Model-Based Design and Optimization of Reversed-Phase Chromatographic Processes for Proinsulin Purification	Wang	2008
Lei Cao	Kinetic Modeling of NOx Storage-Reduction on Monolith Catalysts	Caruthers, Delgass	2008
Pei-Lun Chung	Design, Modeling, and Optimization of a Multicomponent Separation Process for Insulin Purification Using Reversed Phase Chromatography	Wang	2008
Robert T. Collins	Electrohydrodynamics of Free Surface Flows	Basaran, Harris	2008
Arun Gridhar	Synthesis of Multicomponent Distillation Configuration	Agrawal, Venkatasubramanian	2008
Leaelaf M. Hailemariam	The Purdue Ontology for Pharmaceutical Engineering	Venkatasubramanian	2008
Jaehyun Hur	Self and Guided Assembly of Colloids at Air-Water and Substrate-Water Interfaces	Won	2008
Ravi Jaiswal	Adhesion between Particles and Nanostructured Films	Beaudoin	2008
Kyung Jae Jeong	Mechanical Characterization of ECM-mimetic Hydrogel Based on Heparin-Peptide Interactions	Beaudoin, Panitch	2008
Rahul B. Kasat	Elucidation of Chiral Recognition Mechanisms for Separations of Enantiomers using Polysaccharide-Based Sorbents	Franses, Wang	2008
Bum Soo Kim	Characterization and Analysis on Chemical and Mechanical Interactions during Chemical Mechanical Planarization (CMP) of Copper	Beaudoin	2008

Jin Il Kim	A Hybrid Cybernetic Modeling for the Growth of Escherichia coli in Glucose-Pyruvate Mixtures	Ramkrishna	2008
Kyle Kostroski	Development of New Pressure-Swing Adsorption Processes: Combination Cycles, CZPSA, and SMB/PSA Hybrids	Wankat	2008
Balachandra B. Krishnamurthy	Information Retrieval and Knowledge Management in Catalyst Chemistry Discovery Environments	Caruthers, Venkatasubramanian	2008
Gowri Krishnamurthy	Propane Aromatization over ZSM-5 Based Catalysts	Delgass	2008
Brian Kromer	Theoretical and Experimental Investigation of Heterogeneous Catalytic Reactions: Two Case Studies	Thomson	2008
Joshua L. Ratts	Reaction Steps for the Water-Gas Shift Reaction and NOx	Ribeiro	2008
Rahul Sharma	An ABC Triblock Copolymer Based Approach for Non-Viral Gene Delivery	Won	2008
Avantika Shastri	Metabolic Flux Analysis of Photosynthetic Systems	Morgan	2008
Shanna J. Smith	A Theoretical and Experimental Study on the Detection of Proteins in Solution with Electrochemical Impedance Spectroscopy	Beaudoin	2008
Pradeep Suresh Babu	An Ontological Informatics Approach to Mechanistic Mathematical Model Management in Pharmaceutical Product Development	Reklaitis, Venkatasubramanian	2008
Michael P. Tate	Nanomaterials for Thermoelectric Energy Conversion	Hillhouse	2008
Mark J. Uline	Toward a Molecular-Level Understanding of Bubble and Droplet Nucleation in Simple Fluids	Corti	2008
J. Camilo Zapata	New Product Portfolio Management under Uncertainty	Reklaitis	2008
Yinyan Zhao	Polysaccharide Gel Microspheres for Peptide and Protein Drug Delivery	Harris	2008
Venkata Sai Pavan Akkisetty	Ontological Informatics based Decision Support for Pharmaceutical Product Development: Milling as a Case Study	Venkatasubramanian, Reklaitis	2009
Luis Bollmann	Design of Improved Noble Metal Catalyst for the Water-Gas Shift Reaction	Ribeiro, Hillhouse	2009
Nanette Boyle	Stoichiometric Modeling of Photoautotrophic Metabolism	Morgan	2009

Moiz Diwan	Hydrogen Generation for Fuel Cell Applications	Varma	2009
Joseph E. Gatt	Development of Metal Oxide Catalysts for use in Target Specific Organic Compound (VOC) Gas Sensors	Baertsch	2009
Qijie Guo	Development of Multinary Chalcogenide Nanocrystal Inks for Low Cost Solar Cells	Agrawal, Hillhouse	2009
Joonhyung Lee	Development of Fluorescence and Radio Label-Free Detection Methods with Enhanced Sensitivity	Savran, Won, Lee	2009
Megan Farrell Kelchner	Surface Forces Affecting the Biocompatibility of Modified Polydimethylsiloxane Films	Beaudoin	2009
Caitlin M. Kilroy	Particle Adhesion with Microelectronics Applications	Beaudoin	2009
Kyung Min Lee	The Effects of Relative Humidity on Lactose Particle Adhesion	Beaudoin	2009
Thomas A. Manz	Quantitative Structure Activity Relationships for Olefin Polymerization Catalyzed by Ti and Zr Complexes with Mixed Cyclopentadienyl/Aryloxide Ligation	Caruthers, Thomson	2009
Hari Nair	Fundamentals of Metal Oxide Catalysis	Baertsch, Kim	2009
Krista A. Novstrup	Development of Fundamental Kinetic Models of Single-Site Olefin Polymerization with a Focus on [rac-(C2H4(1-indenyl)2)Zr (Me)][MeB(C6F5)3] Catalyzed Polymerization of 1-Hexene	Caruthers, Delgass	2009
Bich Van Pham	Characterization of Interaction Forces Between Bovine Serum Albumin and Self-Assembled Monolayers Relating to Protein Adhesion	Beaudoin	2009
Christopher S. Polster	Design and Development of a Catalytic Microsystem for the Detection Of CO in H2 Fuels	Baertsch	2009
Navneet Singh	High Liquid Fuel Yielding Biofuel Processes and a Roadmap for the future transportation	Agrawal, Ribeiro	2009
Andrew D. Smeltz	Structure Activity Relationships in Catalysis Studied using Model Catalysts	Ribeiro, Delgass	2009
Chung Kwang Christopher Tan	Catalytic Studies Utilizing Microfabricated Reactors: Applications to Improving Diesel Emissions Reduction Catalysts	Baertsch, Delgass	2009
Kevin Witte	On the Structure and Thermodynamics of Polymer Brushes	Won	2009

Aparajita Bhattacharya	Experimental Investigation and Constitutive Modeling of the Large Deformation Mechanical Behavior of Unfilled and Carbon Black Elastomers	Caruthers, Venkatasubramanian	2010
Saurabh S. Chaugule	NOx Storage and Regeneration on Pt/BaO/γ-Al2O3 Lean NOx Traps	Ribeiro, Delgass	2010
Shuang Chen	In Vitro Folding of Methionine-Arginine Human Lyspro-Proinsulin: Pathways and Kinetics	Wang	2010
Bradley R. Fingland	Novel Approaches to Catalyst Characterization in Planar and Porous Systems	Ribeiro, Delgass	2010
Dana J. Gary	A-B-C Triblock Copolymer Micelles for Intracellular Delivery of Cancer-Targeted siRNA	Won	2010
Intan M. Hamdan	Exceptional Events Management Applied to Pharmaceutical Manufacturing	Venkatasubramanian, Reklaitis	2010
Bri-Mathias Hodge	A Multi-Paradigm Modeling Approach for Energy Systems Analysis	Pekny, Reklaitis	2010
Mahaprasad Kar	Formation Pathway of CuInSe2 Nanocrystals and Solution Deposition of CuInSe2 Films for Photovoltaic Applications	Agrawal, Hillhouse	2010
Jung-Sun Lim	Preparation of Uniform Sized Metal-Organic Nanocomposites Using Tobacco Mosaic Virus	Harris	2010
Yoonjee Park	Developing Aqueous Lipid Formulations with Low Surface Tension Behavior at Physiological Conditions and Stability Against Aggregation	Franses	2010
Rugved P. Pathare	Design and Optimization of Binary Membrane-Based Separations	Agrawal	2010
Santhosh K. Ramalingam	Fluid Mechanics of Coupled Interfacial Systems	Basaran	2010
Vishesh H. Shah	Energy Savings in Distillation Via Identification of Useful Configurations	Agrawal	2010
Pradeep K. Sharma	Adsorption Based Novel Purification Processes	Wankat	2010
Aviral Shukla	Evaluating Trade-Offs for Profitable Design of Network Infrastructure Using Multi-Criteria Optimization	Venkatasubramanian	2010
Bryce D. Sturtevant	Computational Studies of Model Colloidal Dispersions	Corti	2010
Sean R. Werner	Engineering Saccharomyces cerevisiae for Production of Non-Natural and Glycosylated Flavonoids	Morgan	2010

Grayson M. Ford	Solar Cells from Multinary Nanocrystal Links	Agrawal, Hillhouse	2011
Wenbin Hu	Catalytic Oxidation of Glycerol to High-Value Chemical Dihydroxyacetone Over Pt-Bi/C Catalyst	Varma	2011
Stephen D. Stamatis	Bayesian Microkinetic Modeling of Epoxy Resin Curing and Water Gas Shift Catalysis	Caruthers, Delgass	2011
Rong Zhang	Catalyst and Microsystem Investigations for the Selective Detection Of CO in Concentrated H2 Fuels Using Mixed Copper Cerium Oxide Catalysts	Baertsch	2011

Appendix P

MS Graduates, Chemical Engineering, Purdue University

The following alumni and alumnae have been awarded M.S. degrees between May 1921 and December 2010. The name of the thesis supervisor appears to the right of the thesis title. For non-thesis M.S. degrees the name of the professor advising the student's Ph.D. research is listed. Professors in charge of M.S. theses have been established according to the official documents of the libraries and the School, and according to the designations chairman or professor in charge of the Graduate School forms. M.S. theses issued by the School of Chemical Engineering with the title M.S. in Metallurgical Engineering are listed in Appendix Y-1.

Ernest H. Hartwig	Effect of segregation of impurities upon carbon distribution in steel.	Mahin	1921
Ralph H. Williams	A survey of industrial furnace development.	Peffer	1923
Cheater S. Cutshall	Some aspects of refractories.	Peffer	1924
Raymond H. Hobrock	A study of high silicon cast irons.	Bray	1927
Louis J. Haga	Metallographic studies on the graphitization of white cast iron test bars.	Maxwell	1928
Robert C. Daniels	Comparative costs of softening water.	Peffer	1930
John M. Hodge	A microscopic study of the system lead-zinc'.	Bray	1931
Howard P. DeVoe	The development of a substitute for water in gas calorimeters.	Leckie	1932
Carroll P. Kemp	A study of the naphthalene problems in a mixed gas plant.	Leckie	1932
Si-Tung Kuo	Conditions of calcination of sodium bicarbonate.	Shreve	1932

Harold H. Lurie	Welding with city gas, 800 B.T.U. (mixed) gas and natural gas.	Peffer	1932
John W. Olson	Properties of asphalts with special reference to their weather resistance.	Shreve	1932
Arthur J. Still	Preparation of barium chloride from powdered barytes.	Shreve	1932
Robert B. Bennett	I. 2-aminoquinoline. II. Aso dyes from 8-hydroxy-quinoline.	Shreve	1933
Abraham H. Goodman	The manufacture and by-products of 2-6 diamino-pyridine.	Shreve	1933
Daniel B. MacLaren	A study of test methods used on domestic steam boilers with particular reference to intermittent operation and the setting up of typical operating cycles.	Leckie	1933
Walter J. Resinar	Recrystallination by annealing under critical point of cold worked pure iron.	Campbell	1933
Harry L. Rubenkoenig	Properties and some derivatives of 2-amino-pyridine.	Shreve	1933
Forrest D. Stoops	Entrainment velocity limits in fractionation, Part II. Study of distillation rates at atmosphere pressure.	Shreve	1933
James W. Wiggs	Water treatment as a factor in the production of clear raw water ice.	Peffer, Venemann	1933
Frederic H. Craven	Strength of beryllium-copper alloys at elevated temperatures.	Campbell	1934
Robert B. Black	The reversion caused by the presence of water in methanol in the extraction of barium chloride from the reaction product of barium sulfate and calcium chloride.	Shreve	1935
Stephen C. Brull	Aso dyes from 2,6-diaminopyridine and 4-alkoxy-aminobenzenes.	Shreve	1935
Meyer A. Efroymson	Aso dyes from 8-quinolonol (8-hydroxyquinoline) and 1-amino-4-alkoxybenzenes.	Shreve	1935
Westcott C. Kenyon	Aso dyes from coupling 2,6-diamino-pyridine and 8-hydroxy-quinoline with a urinary constituent.	Shreve	1935
Charles R. Lillie	Carburising charateristics of a new low allow steel.	Bray	1935
Edgar L. McKinney	A new method of testing thin sheets.	Bray	1935

Cheng L. Chang	The solubility of washed clay in sodium hydroxide solutions.	Shreve	1936
Richard K. Toner	A study of the equilibrium BaSO4+CaCl2=BaCl2+CaSO4 under varying conditions of temperature and concentation; reversal at 150' and 175' with high concentrations of CaCl2.	Shreve	1936
Jacob C. Browning	Decomposition of strontium sulfate by inorganic salts in connection with organic solvents.	Shreve	1937
Raymond F. Hine	A comparison of the hot quench method and the standard method of heat treatment for low carbon and alloy steels.	Bray	1937
Lyle W. Rothenberger	Studies of amination in liquid ammonia.	Shreve	1937
Ernest F. Bryant	Development of methods for testing automatic gas-fired storage type water heaters.	Bray	1938
Paul A. Wangerin, Jr.	A comparison of thermocouple installations.	Lovell	1938
James H. Cronk	(A) Pyridyl mercuration equipment. (B) Mercuration of pyridine-3-sulfonic acid with mercuric acetate.	Shreve	1939
Clark Langworthy	Operating characteristics of mixing equipment under varying loads.	Lovell	1939
Harold E. Lewis	A study of the effect of agitation on heat transmission and a comparison of various types of agitators.	Lovell	1939
Jerome H. Ottenweller	Recovery of barium chloride from barite and calcium chloride.	Shreve	1939
Glen F. Roquemore	The use of methanol in the causticization of sodium sulfate.	Shreve	1939
Dexter A. Smith	The recovery of glycerol from distillery slops.	Lovell	1939
Herbert F. Wiegandt	A comparison of thermocouple installations used in heat transfer.	Lovell	1939
Max G. Wirick	The sulfonation of beta-methylnaphthalene.	Shreve	1939
Panos T. Frangos	Investigations of solubilities of sodium salts in molten sulfur.	Lovell	1940
Burton A. Gerpheide	The effect of glass containers on alcoholic beverages.	Lovell	1940
Julius C. Sanders	Reaction of sulfur with oxides and hydroxides.	Lovell	1940

Robert J. Schrader	Purification of hydrogen for fat hydrogenation.	Lovell	1940
Charles Slesser	Field study of migration of calcium chloride and sodium chloride in soil.	Shreve	1940
Charles D. Smith	Equilibrium coefficients and absorption rates of carbon dioxide in organic amines.	Lovell	1940
Harold H. Bonewits	Structure study of bituminous materials.	Lovell	1941
James O. Davis	Dyes from aminoquanidine.	Shreve	1941
Paul H. Egli	Crystal growth and crystal habit in continuous evaporators.	Lovell	1941
Paul S. Forsyth	Regeneration of spent Fuller's earth.	Lovell	1941
Fred C. Goldsmith	Extraction of oil from spent Fuller's earth.	Lovell	1941
Homer V. Grubb	The effect of agitation on overall heat transfer coefficients of tank heating coils.	Lovell	1941
Alan R. Lennox	A pilot plant study of the mercuration of pyridine.	Shreve	1941
John O. Ludlow	Development of aminoguanidine.	Shreve	1941
Frederick A. Prange	Recovery of pyrite from coal wastes.	Lovell	1941
Wilmer L. Sibbitt	Adsorption of carbon dioxide by amine solutions in a packed tower.	Lovell	1941
John C. VanHorn	Adsorption of carbon dioxide by amine solutions in a packed tower.	Lovell	1941
Darwin C. Wamsley	Recovery of sulfur from pyrite.	Lovell	1941
John W. Whitson	The effect of agitation on heat transfer.	Lovell	1941
Orlen E. Baker, Jr.	Pilot plant regeneration of spent Fuller's earth.	Lovell	1942
James D. Charlton	Improved liners for plastic bottle closures.	Lovell	1942
William H. Goetz	Field and laboratory investigation of traffic paints.	Shreve	1942
George Karnofsky	The design of solid-fluid continuous heat exchangers.	Lovell	1942
Thomas J.R. Stephens	Purification of hydrogen for fat hydrogenation.	Lovell	1942
Alfred J. Strohmaier	Systematic lubrication.	Lovell	1942
Samuel R. Wells, Jr.	Design calculations for a petroleum pipe still.	Lovell	1942
David A. Frost	War gases.	Shreve	1943

Leonard Kurland	Methods for continuous quantitative determination of oxygen in low concentrations in industrial fuel gases.	Lovell	1943
Ramon I. Lindberg	Liquid-liquid extraction of 2,3-butanediol from fermented grain mesh.	Lovell	1943
Lewis A. McDonald	War gases.	Shreve	1943
Joaquin Vargas	The evaporation of distillery by-products.	Lovell	1944
Francis A. Hilinski	The clarification of malt converted degerminated corn mash prior to fermentation.	Lovell	1945
Benjamin L. Moulthrop	Selective adsorption of hydrocarbons on silica gel.	Shreve	1945
John L. Wooling	The effect of agitation on heat transmission in jacketed kettles.	Lovell	1945
Reid M. Bennett	Heat transmission with agitation.	Shreve	1946
Vincent B. Diebold	Humidity measurement and control in homes.	Smith	1946
Ardath M. Prantner	The inhibiting action of corrosion inhibitors in waters of pH 8 to 11.	Lovell	1946
James R. McMillen	A pilot plant for dimethylaniline.	Shreve	1946
Albert J. Barnes, Jr.	Phase relations for the two-component system: stearic acid and water.	Holcomb	1947
James P. Bowen, Jr.	The calculation of multicomponent fractionating towers having side-cut product streams.	Holcomb	1947
Robert R. Cartmell	Vapor phase hydration of ethylene oxide.	Smith	1947
John R. Day	The effect of time on the methylation of aniline to dimethylaniline.	Shreve	1947
William J. Frink	Design and construction of equipment for determining the contribution of radiation in the transfer of heat from gases at high temperature.	Smith	1947
John R. Galloway	Vapor phase hydration of ethylene oxide.	Smith	1947
Vaughan C. Hill	Continuous evaporation of crust-forming materials.	Holcomb	1947
Robert A. Kunts	The development of a gas fired boiler.	Bray	1947
Ganesh S. Laddha	(Non thesis)	Smith	1947
John M. MacDonald	Reaction mechanism of the oxidation of sulfur dioxide.	Smith	1947

William L. Mason	Pressure drop in packed tubes.	Smith	1947
Eugene Nurmi	Calculation of an absorber-stripper column.	Holcomb	1947
Robert P. Schaaf	Dyes from m-aminophenol and Aminoguanidine.	Shreve	1947
Norman F. Schlamersdorf	Surface-active agents derived from methylnaphthalenes.	Shreve	1947
Donald G. Bunnell	Temperature distribution in catalytic reactors.	Smith	1948
Edward L. Czenkusch	The effect of acid concentration and excess in the sulfonation of 2-methyl-naphthalene.	Shreve	1948
Gerhard Langer	A study of the vapor phase hydration of ethylene oxide.	Smith	1948
Richard K. Major	Alkylation of barium 2-methylnaphthalene 8-sulfonate.	Shreve	1948
Norman E. Marosick	The development of flame characteristic burner.	Bray	1948
Robert M. Mendelson	Interchangeability of mixed fuel gases with natural gas.	Bray	1948
John R. Miller	Sulfonation of 2-methylnaphthalene.	Shreve	1948
Robert W. Olson	Study of the vapor phase hydration of ethylene oxide.	Smith	1948
Charles R. Rohn	Fluidization studies in gas-solid systems.	Smith	1948
Waldemar B. Seefeldt	Pressure drop in packed columns.	Doody	1948
Donald A. Stoltenberg	Preparation of 6-methyl-2-naphthol from 2-methylnaphthalene.	Shreve	1948
Virgil G. Trice, Jr.	A study of the vapor phase hydration of ethylene oxide.	Smith	1948
Max A. Tuttle, Jr.	Development of an accelerated incrustation unit.	Bray	1948
David A. Vogel	Reaction rate studies of the N-methylation of aniline.	Shreve	1948
John J. Wahl	Alkylation of beta-methyl-naphthalene:	Shreve	1948
Eric Y. Wang	Preparation of aminoguanidine and lakes from dyes derived from 5-amino-tetrasole.	Shreve	1949
Paul J. White	Capacity and draft characteristics of domestic gas heaters.	Bray	1948

Joseph M. Behrle	The relationship of gloss to concentration and particle size of stearate flatting agents in lacquers.	Shreve	1949
Shih-Chuan Chang	The influence of certain salts on some oil-soluble phenolic resins.	Shreve	1949
Tai-Siang Chao	A study of the preparation of lauryl phosphates and their effectiveness as surface=active agents.	Doody	1949
Wen N. Cheng	The preparation of dyes from 2,6-dinitro-4-amino-tolnene and comparison of their properties with those of dyes made from picramic acid using the same intermediates.	Shreve	1949
Leonard R. Cohn	Absorption rates of ethylene oxide in aqueous media.	Smith	1949
Robert F. Drees	Feed tray location in multicomponent distillation columns.	Holcomb	1949
Harold W. Earhart	Thermodynamic properties of ternary hydrocarbon systems.	Doody	1949
Keith H. Edmondson	Relationship of gloss to quantity and particle size in inorganic flatting agents.	Shreve	1949
Louis H. Going	Some physical properties of the nitroparaffins.	Holcomb	1949
William J. Greer	The molten sodium reduction of anhydrous lanolin.	Shreve	1949
Cyrus C. Highlander	An investigation of the effect of temperature upon the interfacial surface tension of various systems.	Doody	1949
Milton Kaplan	The effect of pressure on the azeotrope.	Doody	1949
George W. Lyon	Convection heat-transfer coefficients at high temperatures.	Smith	1949
Stuart G. McGriff	Mechanism of fluidization of solid-gas systems.	Smith	1949
Edward L. Manderfield	Heat and mass transfer coefficients in a fluidized system.	Smith	1949
Francis T. Micklich	The effect of ozone on the air-oxidation of linseed oil.	Doody	1949
George E. Palmer	The reaction between sulfur vapor and methane.	Smith	1949
Clyde E. Parish, Jr.	A comparison of pressure drops through free and cemented ring packing.	Doody	1949
Richard S. Reed	Differential reaction rates for oxidation of sulfur dioxide.	Smith	1949

Richard M. Sibley	A study of the performance of commercial vent caps.	Bray	1949
Gerard C. Smith	Gas-solid catalytic reactor design.	Smith	1949
Milton D. Sprinkel	Some physical properties of the system hydrazine-water.	Holcomb	1949
Chi-Shang Sun	The preparations of lauryl phosphites and tests of their surface-active properties.	Doody	1949
Wen P. Sung	The effect of non-condensable gases in the condensation of steam.	Holcomb	1949
James E. Thomson	Mass transfer coefficients in a liquid-vapor system.	Holcomb	1949
William D. Wagers, Jr.	The influence of oil length on the properties of pure phenolic varnishes.	Shreve	1949
Harold E. Whitlock	Catalytic isomerization of ethylene oxide.	Smith	1949
Lelad D. Christensen	Some thermodynamic properties of acetaldehyde.	Smith	1950
John B. Crenshaw	Effective thermal conductivities in fixed bed reactors.	Smith	1950
Edward L. Eagan	Oil-soluble modified phenolic resins.	Shreve	1950
Ralph G. Fox, Jr.	Determination of the thermal diffusivity of Indiana limestones.	Smith	1950
John F. Gumpper	Investigation of additives for increasing rate of dispersion in enamels.	Shreve	1950
John Isler, Jr.	Kinetics of the reaction of methane and sulfur vapor to produce carbon disulfide.	Lottes	1950
Walter J. Lutz	The preparation of sodium 6-methyl-2-naphthalene sulfonate.	Shreve	1950
John E. Mock	Some thermodynamic properties of ethylene oxide.	Smith	1950
Maximo Morales-Watson	Flow distribution in a packed tube.	Smith	1950
Nuthakki B. Prasad	Studies on the hydrolysis of peanut oil.	Doody	1950
Samuel Salem	Catalytic dehydrogenation of linseed oil.	Doody	1950
Charles W. Spinn	Air velocity distribution in packed columns.	Smith	1950
Clifford M. Weil	A preliminary study of sulfonation of some naphthalene derivatives with sulfuric anhydride.	Shreve	1950

Harry B. West	The absorption of ethylene oxide from air in aqueous solutions.	Smith	1950
Frank C. Wise	Convection coefficients with large temperature gradients.	Smith	1950
John W. Begley	Effective thermal conductivities in fixed-bed catalytic reactor.	Smith	1951
George Chaille	Vapor pressure measurements of ethylene oxide and water.	Smith	1951
Shih Chang	Comparison of dyes from 6-methyl-2-naphthol and 2-naphthol.	Shreve	1951
John W. Cox	Bending stress occurring in the hangers of an aluminum model floorbeam and hanger frame.	Wyly	1951
Laurence T. Dailey	(Non-thesis)	Shreve	1951
Harold E. Deen	An equation of state for mixture of hydrogen and nitrogen.	Bennett	1951
Adrian De la Paz	Study of a direct method to produce cellulose esters containing lanroyl group.	Doody	1951
Herschel J. Fivel	Study of factors affecting the discharge of fluids from horizontal orifices	Doody	1951
Kenneth D. Henderson	Mass transfer resistances in liquid-liquid extraction.	Bennett	1951
Elbert G. Jackson	Kinetics of the reaction between methane and sulfur at 650 ' centigrade.	Smith	1951
Clyde M. Marr, Jr.	Mutual destruction of cyanide and chromate electroplating wastes.	Doody	1951
Charles C. Oldenburg	Heat transfer coefficients of superheated steam.	Smith	1951
Robert C. Ragsdale	Friction losses of fluids flowing in annular spaces.	Doody	1951
Robert C. Reid	The thermodynamic properties of ethyl alcohol.	Smith	1951
Thomas H. Rhodes	Effect of an electric charge on the heat transfer coefficient of liquids.	Doody	1951
Kenneth A. Scott	A device for the accurate measurement of very high pressures.	Bennett	1951
Raymond J. Boyle	Formulation and evaluation of ally) starch lacquers.	Shreve	1952
Thomas M. Darby	Vent capacity.	Bray	1952
Thomas C. Gregson	Preparation of alkyl-styrenes.	Shreve	1952

Reigh C. Gunderson	A study of certain amino resins and their varnishes.	Shreve	1952
David E. Larkin	Equipment for the making of napthols from the sodium sulfonates of naphthalene and 2-methyl-naphthalene.	Shreve	1952
James R. Pickering	An evaluation of styrenated compounds in surface coating compositions.	Shreve	1952
Roger A. Riehl	The preparation of choline phosphate.	Myers	1952
Robert Benzing	Fundamental factors affecting bubble formation at circular orifices.	Myers	1953
Vernon A. Fauver	The oxidation of ferrous chloride.	Comings	1953
Harry Hassmann	The vapor phase oxidation of 2-methyl 5-ethyl pyridine.	Myers	1953
John H. Hassmann	Heat transfer rates to bubbles rising in liquids.	Myers	1953
Chih M. Hwa	The preparation of niacin from 2-methyl 5-ethyl pyridine.	Myers	1953
William F. Krudewig	The effect of hollow packing on the velocity profile in a packed bed.	Smith	1953
Hiroo H. Kurihara	Mass transfer in packed beds.	Myers	1953
Myron M. Levoy	The effect of ultrasonic vibrations on heat transfer coefficients.	Myers	1953
Carl E. Pruiss	Maximum rates of clarification.	Comings	1953
Arni V.R. Sahib	The effect of internal roughness on pressure drop characteristics of integral finned tubes.	Myers	1953
Harold W. Schnaible	The thermodynamic properties of ethyl ether.	Smith	1953
Michael R. Shaffer	Radial variation of void space in packed beds.	Smith	1953
Besagarahalli Shivalingiah	Manufacture of choline chloride from ethylene oxide.	Smith	1953
Wei M. Sum	Measurements of gas flow under low heads.	Bray	1953
Donald H. Ashmus	Momentum transport in coaxial jets in a high velocity spray dryer.	Myers	1954
Robert S. Bailey	A study of certain styrenated epoxy resin ester compositions and their applications in the surface coatings industry.	Shreve	1954
Franklin R. Baker	The recovery of sulfur from iron-sulfur compounds.	Comings	1954

James A. Bottorff	Solid carbon formation in gas generators using WFNA and JP-4.	Comings	1954
Lionel E. Dotson	The volumetric properties of the butane-methanol system at 240 ° F.	Comings	1954
Merrill E. Evans	A study of certain triazine resins.	Brink	1954
Leopoldo Gomez	The effect of vapor blanketing on heat transfer coefficients.	Myers	1954
Robert C. Hamilton	The effect of temperature upon the vent capacity of gas fired appliances.	Myers	1954
Robert F. Hill	Heat transfer in a radical spray chamber.	Myers	1954
James E. Marberry	An investigation of epoxy resins.	Shreve	1954
Daniel E. Collins	A study of isophthalic alkyd resins.	Shreve	1955
James L. Fisher	Local-heat-transfer coefficients in laminar and transition flow.	VanNess	1955
Vincent L. Gelezunas	Pressure-volume-temperature behavior of n-butane and methanol.	VanNess	1955
Richard V. McDowell	Heat transfer to liquid drops.	Myers	1955
Thomas R. Mifflin	Heat transfer coefficients in internal integral finned tubes.	Myers	1955
John E. Perry	A study of the factors affecting proper venting of gas fired appliances.	Hite	1955
William C. Ragsdale	Operating characteristics of a high-velocity spray dryer.	Comings	1955
Garland J. Tartaron	An evaluation of shell mold materials (Phenol-formaldehyde binder and sodium silicate binder)	Hite	1955
Forest B. Wortman	The rate of catalytic production of vinyl chloride in a fluidised bed.	Woods	1955
Richard L. Angerer	Preparation of aminotriazole intermediates.	Hite	1956
Robert M. Baird	A study of radial variation of void space in packed beds.	Tierney, Woods	1956
Floyd E. Benner, Jr.	The modification of alkyds with methyl methacrylate.	Morgen	1956
Eugene C. Brouillette	Heat transfer and pressure drop characteristics of internal finned tubes.	Myers	1956

Outten J. Clinard, Jr.	Physical properties of polyurethane resins.	Hite	1956
Jack L. Farell	A generalized P-V-T correlation for gases.	VanNess	1956
Stanley H. Fishtine	Highly filled polyester laminates.	Hite	1956
Richard A. Frohreich	Effect of mixing in continuous flow stirred tank reactors.	Woods	1956
Edwin H. Gygi	High velocity spray drying of milk.	Myers	1956
Donald W. Humphrey	The effect of agitation on the rate of dissolution of salts in water.	VanNess	1956
Boonya S. Jaijongkit	Catalytic decomposition of a vegetable oil at high temperatures.	Woods	1956
Philip D. Jontz	The effect of dynamic surface tension on boiling coefficients.	Myers	1956
John W. Klar	Mixing of coaxial jets in a high velocity spray dryer.	Myers	1956
Ronald P. Lance	Local boiling coefficients on a horizontal tube.	Myers	1956
Robert E. Lawrence	Thermal diffusion in liquids.	Emery	1956
Warner Lee	A new apparatus for measurement of thermal conductivity of gases at high pressure.	Comings	1956
James E. Matush	Nitration of 2-aminopyridine-N-oxide.	Hite	1956
Robert McFedries, Jr.	The modification of alkyds with specific epoxy resins.	Morgen	1956
Irving F. Miller	The determination of pressure distribution in gas reservoirs using relaxation techniques.	Tierney	1956
Alberto M. Pinto	Kinetics of the catalyzed esterification of n-bntanol by stearic acid.	Woods	1956
Leland H.S. Roblee, Jr.	A study of radial variation of void space in packed beds.	Smith, Tierney	1956
Rodrigo R. Saes	Heat transfer to stagnant and circulating liquid drops.	Myers	1956
Bert R. Wheeler	The study of the liquid film mass transfer coefficient on a spinning disk.	Tucker	1956
Louis J. Anastasia	The rate of esterification in a multi-compartment continuous flow stirred tank reactor.	Woods	1957
Robert L. Berger	Polyesterification of trimethlolethane with phthalic anhydride.	Woods	1957

Don E. Childress	Thermal diffusion in liquids..	Emery	1957
James A. Collins	An investigation of unsaturated polyesters..	Hite	1957
Robert C. Elliott	Heat transfer from air bubbles to various liquids.	Albright	1957
Donald E. Hannemann	The modification of alkyd resins with styrene and acrylonitrile.	Albright	1957
Lawrence J. Harrison	The effect of gamma radiation on hydrogenation.	Albright, Sesonske	1957
Donald A. Huber	Heat transfer from sodium-potassium flowing through equilateral triangular and circular ducts.	Sesonske	1957
William F. Kenney	Heat release in flames stabilized by cyclonic flow.	Albright	1957
Donald R. MacFarlane	The effect of several metal surfaces on the vapor phase nitration of propane.	Albright, Sesonske	1957
Isaac E. Randall	Free convection heat transfer to a horizontal cylinder from an ordinary fluid containing a colume heat cource.	Sesonske	1957
Herman Reerink	The rate of catalytic hydrochlorination of acetylene product analysis and reactor temperature distribution.	Woods	1957
James J. Scharf	Rates of esterification of ethylene glycol with fatty acids.	Woods	1957
Clarence Y.C. Tom	Liquid distribution in a packed column.	Tucker	1957
Herbert Weinstein	Mass transfer in packed beds.	Bennett	1957
Iychetira S. Biddapa	Vapor-liquid equilibrium of binary solutions: 1,1,2,2-tetrachloroethane and 1,1,2, 2-tetrabromoethane.	Emery	1958
Robley E. George	An analysis of a boiling water nuclear reactor power plant using an analog simulator.	Sesonske	1958
Jose P. De Guzman	Free convection heat transfer to horizontal cylinders from an ordinary fluid containing a volume heat source.	Sesonske	1958
Harold E. Kyle	High energy release combustors.	Albright	1958
John L. Liebenthal	The effect of gamma radiation on the partial oxidation of propane.	Sesonske, Albright	1958
Arthur L. Reitemeier	Analysis of a gas distribution network using a digital computer.	Emery	1958
Pa-Houng Sheng	The rate of hydrochlorination of acetylene in a fluidized catalyst bed.	Woods	1958

Donald W. Simroth	Physical properties of high polymers.	Emery	1958
Chin-Hsuan Wei	Hydrogenation of cottonseed oil in solvents.	Woods, Albright	1958
John M. Wets	The application and measurement of thin organic films.	L.C. Case	1958
Arthur L. Altman	Measurement of conditions in a high velocity spray dryer.	Briggs	1959
Louis F. Baumeister	Thermal diffusion of liquids in packed columns.	Emery	1959
Jean-Jacques Bimbenet	Air-liquid contacting in mixing vessels holdup and flooding.	Rushton	1959
Robert D. Bradshaw	Mass transfer in packed beds.	Bennett	1959
Paul C. Bucles	The solubility of some easily liquefiable gases in high boiling point solvents.	Albright	1959
Stanley N. Glasbrenner	The evaluation of polyurethanes as film forming materials.	L.C. Case	1950
Fred E. Krause	The reaction of sulfur dioxide and oxygen in aqueous solution containing manganous sulfate as a catalyst.	Coughanowr	1959
Robert R. Krulisch	Rates of esterification of phthalic anhydride with normal and secondary butanols.	Woods	1959
Stephen A. Locke	The partial oxidation of propane in a molten salt reactor.	Albright	1959
John Maniotes	Thermal diffusion in liquids.	Emery	1959
Leonard G. Marianowski	The rate of hydrochlorination of acetylene in a fixed catalyst bed.	Woods	1959
Gordon D. Mounts	Forced convection heat transfer from sodium-potassium eutectic.	Sesonske	1959
Claude R. Pluche	Solubility of various "freons° in esters and alcohols.	Albright	1959
Warren P. Scarrah	Physical properties of high polymers.	Emery	1959
Laurence F. Schmoyer	Preparation and reactions of four-membered heterocyclic compounds.	L.C. Case	1959
John W. Sheldon	(Non-thesis)	Sesonske	1959
Jerrold D. Atlas	A study of polymer crystallinity - polypropylene.	L.C. Case	1960
Richard A. Baker	Turbulent-flow heat transfer in a sodium-potassium alloy.	Sesonske	1960

Jerome Farber	A study of polyurethane elastomers.	L.C. Case	1960
Dale L. Fridley	Solid suspension in mixing vessels.	Rushton	1960
James G. Graham	Effect of ionizing radiation on polymer films.	L.C. Case	1960
Charles R. Jackson	Sampling solid-liquid flow in pipes.	Rushton	1960
Roberto Lee	The effect of gamma radiation on vapor phase nitration of propane.	Albright	1960
Frederick H. Pfarrer, III	Forced convection heat transfer from sodium-potassium eutectic.	Sesonske	1960
Anantha K.S. Raman	Ammoniation of phosphate fertilizers fluidized bed reactor.	Albright	1960
John C. Staton	Experimental apparatus for the measurement of activity coefficients in SO2 - aromatic- paraffin systems at -20 ° F.	B.D. Smith	1960
Allen A. Thieme	Solubility of halogenated methanes in nitrogen-containing organic solvents and mixtures of solvents.	Albright	1960
William G. Tope	Non-isothermal diffusion coefficients.	Emery	1960
Ronald E. Wales	The use of the flow calorimeter in the study of heats of mixing.	Doody	1960
Fred V. Wolford	The application of vapor phase chromatography to catalytic reforming studies.	Woods	1960
David L. Black	Investigation of heat transfer anomalies for carbon dioxide in the critical region.	Tucker	1961
Harold D. Brown, Jr.	Recovery of potable water from satire water by high compression filtration of ice-brine mixture.	B.D. Smith	1961
Ping-Lin Chueh	Phase equilibrium study of triolein and trilinolein with selective solvents.	Briggs	1961
Tae H. Chung	Vapor phase nitration of propane under the influence of gamma radiation.	Albright	1961
Olivier de Vitry d'Avaucourt	Measurement of interfacial area of liquid-liquid dispersions in mixing vessels.	Rushton	1961
Charles G. Gustafson	Development of static equilibrium cell for liquid-liquid extraction systems.	B.D. Smith	1961
David B. Gustafson	Enthalpy of non-ideal solutions n-butanol-benzene.	Shannon	1961

Hans Haug	Effect of operating variables on the ammoniation of triple superphosphate.	Albright	1961
Jerry R. Holt	Heat transfer to flowing solids in a heated annulus.	Shannon	1961
Daniel M. Kaufer	Analysis of multicomponent aromatic-paraffin 0 - SO2 systems on a gas chromatography unit.	B.D. Smith	1961
Robert E. Kucinski	Thermal degradation of model esters.	L.C. Case	1961
Martin L. Kyle	Effect of operating variables on stage efficiency of a mixer-settler apparatus.	Sesonske	1961
Alfred P. Lorenzo	(Non-thesis)	Shannon	1961
Louis B. Nobbe	Transient response of a bubble-cap plate absorber.	Coughanowr	1961
William H. O'Keefe	Mass transfer in a high velocity spray dryer.	Briggs	1961
Patrick S. O'Neill	Enthalpy of non-ideal binary solutions t-butanol-benzene, water.	Shannon	1961
Augustus C. Ouano	Sampling of cracking catalyst in liquid flowing in pipes.	Rushton	1961
Edgar G. Shook	Ammoniation of triple superphosphate fertilizers in a fluidized-bed reactor.	Albright	1961
Verne W. Smith, Jr.	Suspension of solids in mixing vessels, fan turbine impellers.	Rua hton	1961
Francois Terrier	Solubility of halogenated methanes in non-volatile solvents: correlation of data.	Albright	1961
Charles C. Todd	Study of fluorinated polymers.	L.C. Case	1961
Robert V. Wargin	Theoretical studies of elastomer behavior.	L.C. Case	1961
Richard L. Watts	Sampling solid-liquid flow in a 4-inch pipe.	Rushton	1961
Robert S. Weis	Sampling solid-liquid flow in 4-inch pipe.	Rushton	1961
Sun-Nien Yu	The solubility of sulfur dioxide in some low-volatile polar organic solvents.	Albright, Shannon	1961
George M. Baczynski	A methane-air fuel cell.	Albright	1962
Perry D. Bergman	Laminar flow of non-Newtonian fluids in annuli.	Vaughn	1962
Anthony M. Fazzari	Study of fluorinated polymers.	L.C. Case	1962
David A. Gibbs	Phase behavior of polymer solutions.	L.C. Case	1962
Walter R.A. Gooses	Flow properties of concentrated suspensions.	Vaughn	1962

Jerry G. Hillestad	Sampling of liquid and solid suspensions in liquid flow in a pipe.	Rushton	1962
Donald R. Klang	The effect of pulsation on fuel cell performance.	Briggs	1962
Wayne E. Luetzelschwab	An analog computer simulation of a steam-jacketed kettle and control system.	Coughanowr	1962
Jaydee W. Miller	Production of hydrogen by reduction of steam with liquid cadmium.	Vaughn	1962
James W. Morrone	Solubility of ammonia in low-volatile organic solvents.	Shannon	1962
Terrence B. Rooney	Methods for the measurement of mass transfer coefficients in mixing vessels.	Rushton	1962
Steven L. Schrock	Heat and momentum transfer in mercury in turbulent flow.	Sesonske	1962
John R. Semancik	A study of the kinetics of the chlorination of ethylene with hydrogen chloride-oxygen mixtures	Woods	1962
William R. Sigler	Mechanisms of adhesion I.	Golding	1962
Sundaresa I. Srinivasan	Ammoniation of triple superphosphate fertilizers in a rotary drum reactor.	Albright	1962
Elwood P. Stroupe	Batch sedimentation of rigid spheres in a Newtonian liquid.	Shannon	1962
Lakehmanan Subbaiyan	Residence time studies in a co-current wetted-wall column.	Tucker	1962
Tsoung-Yuan Yan	Catalytic hydrogenations of dibasic esters at high pressures.	L. C. Case	1962
Daniel B. Andia	Rheology of pigment dispersions II.	Vaughn	1963
James T. Cobb, Jr.	A hydrogen-air fuel cell.	Albright	1963
Robert D. De Haas	Calculation of complete batch settling behavior for rigid spheres in a Newtonian liquid.	Shannon	1963
Martin R. Feinberg	The thermodynamics of the steady-state from an information theory viewpoint.	Shannon	1963
Alice O.Lee	Fractionation of high polymers by counter-current liquid-liquid equilibration.	Emery	1963
Ke W. Li	A kinetic study of certain diisocyanate reactions.	Golding	1963
Cary H. Lourie	(Non-thesis)	Vaughn	1963

Ramamurthi Mahalingam	Solubility of gases in solvents of low volatility.	Koppel	1963
Sava Marcikic	Automatic control of PH.	Coughanow r	1963
Lee A. Nield	The effect of gamma radiation on the partial oxidation of hydrogen and methane.	Albright	1963
Ronald F. Nunn	The ammoniation of triple superphosphate fertilizers with nitrogen solutions.	Albright	1963
Gary W. Poehlein	A study of bi-monomer batch copolymerization.	Vaughn	1963
Warren E. Rice	An evaluation of a series of continuous tank reactors for kinetic studie	Woods	1963
Ted R. Slack	Reactor optimization with uncertain data.	Shannon	1963
Robert C. Smart, Jr.	Mechanisms of adhesion H.	Golding	1969
Erling O. Stensholt	Application of the analog computer to chemical engineering problems.	Coughanowr	1963
Robert N. Tanksley	The effect of particle shape in solid-liquid mixing.	Rushton	1963
Edward J. Zuscik	A study of process conditions in the synthesis of oxetanes from 1,3-diols.	Albright	1963
James E. Aker	An evaluation of alcohol-salt mixtures as absorption refrigeration solutions.	Squires	1964
Max Friedman	Laminar flow of non-Newtonian fluids in annuli.	Vaughn	1964
Gary Grulich	Laminar flow of non-Newtonian fluids in large annuli.	Vaughn	1964
Joseph C. Hatcher	Rheology of pigment dispersions.	Vaughn	1964
Carl H. Hendricks	Heats of mixing of non-ideal liquids.	Doody	1964
John F. Hesselberth	Solubility of mixtures of refrigerants in organic solvents of low volatility.	Albright	1964
Walter J. Korchinsky	Thermal diffusion in liquids: The forgotten effect and concentration reversal.	Emery	1964
Pierre R. Latour	Application of Pontryagin's maximum principle to time optimum control of a second order overdamped system with transportation lag.	Koppel	1964
Henry A. Mosler	PACER-A digital computer executive program for process simulation and design.	Shannon	1964

David A. Petkus	Mathematical development of operating equations for particular types of thermal diffusion columns.	Emery	1964
Richard W. Pfeiffer	Reactions of nitric acid with lithium and potassium chloride in fused salt solution from 150 to 250 ° C.	Albright	1964
Yogesh R. Trivedi	Effect of gas velocity and liquid surface tension on interfacial velocity and pressure drop for two-phase downward flow in wetted-wall columns.	Tucker	1964
Charles L. Wilsbacher	Diffusion coefficients determined by thermal and isothermal methods.	Emery	1964
Maung M. Win	Hydrogenation of cottonseed oil with re-used catalyst.	Albright, Woods	1964
Gregory L. Bolt	Catalytic decomposition of isopropanol over cobalt ferrite.	Squires	1965
William F. Bracht	Adsorption of binary liquid mixtures on Molecular Sieves.	Doody	1965
Yu-Ren Chin	Reactions of melts of potassium salts with potassium chloride and strong acids.	Albright	1965
Stephen J. Cinnamon	Investigation of a method for reducing vapor losses in storage of volatile liquids.	Myers	1965
Robert L. Cottrell	Nucleation phenomena in urea - n-octane adduct solutions.	Lahti	1965
Vito J. DiFranco	Chlorine production from reactions of nitric acid with fused sodium and potassium chloride salts.	Albright	1965
Peter M. Dow	Mechanisms of adhesion III.	Golding	1965
Robert Ennis	A hydrogen-air fuel cell with movable, partially immersed platinum electrodes.	Albright	1965
William J. Faasse	Thermosetting resins derived from acrylamide-containing interpolymers.	Golding	1965
H.A. Juraifani	(Non-thesis)	Golding	1965
Daniel T. Kamman	Dynamic response of a flow forced heat exchanger to step changes in velocity.	Koppel	1965
Daniel W. Kollin	Effect of gas shear on liquid film coefficients - galvanic oxygen cell permits rapid mass transfer analyses.	Tucker	1965

Chien-Yung Lee	An evaluation of ammonia-salt mixtures as absorption refrigeration solutions.	Albright	1965
Gideon Levin	Stabilization of polycaprolactam (nylon 6) against degradation by heat.	Golding	1965
James R. Love	Drop sizes in liquid-liquid dispersions in mixing tanks.	Rushton	1965
Cary S. Marshall	Characterization of multiple particle settling.	Rushton	1965
Gordon S. Maxim	Sampling of dilute suspensions of solids in liquid flow in a pipe.	Rushton	1965
Thomas R. Maykrantz	The formation of free radicals in polystyrene by milling.	Eckert	1965
Rudolph M. Phillips	The alkylation of isoparaffins at high agitation rates.	Albright	1965
John P. Roberson	Solubility of ammonia in solvent mixtures of low volatility.	Squires	1965
Abraham Rodriguez-Ramirez	Characteristics of turbulent temperature fluctuations in air.	Sesonske	1965
Rajendra N. Sharma	Effect of withdrawal flow velocity on the composition of a two phase system in a mixing tank.	Rushton	1965
Andre' A. Simone	Solubility of n-paraffin urea adducts in alcohol.	Lahti	1965
Robert D. Soule	A study of the variables affecting particle size distribution in suspension polymerization of styrene.	Golding	1965
Michael L. White	Flow properties of polyisobutylene-decalin solutions.	Emery	1965
Philip M. Aiken	A general experiment in automatic process control.	Koppel, Coughanowr	1966
Leonard S. Bernstein	The effect of temperature on the dynamic properties of two sulfur vulcanizates of styrene butadiene copolymer.	Emery	1966
Raymond D. Burk	Determination of parameters in a modified molecular corresponding states theory.	Kessler	1966
Evan H. Church	Molecular weight factors affecting polypropylene flow.	Eckert	1966
Gerald R. Cohen	Mass transfer and entrainment in a flooded sieve tray gas absorber.	Tucker	1966
Billy L. Crynes	Propane pyrolysis in oxygen-treated flow reactors.	Albright	1966

Harry J. Davitt, Jr.	Fuel cell oxidation of hydrogen on movable, partially submerged platinum anodes.	Albright	1966
Henry L. Epstein	Characteristics of turbulent temperature fluctuations in ethylene glycol.	Sesonske	1966
David E. Freas	Simulated solid propellant of polyether urethane and alumina, preparation and tensile behavior	Lahti	1966
Roy D. Gatherers	Correlation of parameters in the modified molecular corresponding states theory.	Kessler	1966
George R. Harper	Dynamic response of a flow-forced shell-and-tube heat exchanger to a step-change in flow rate	Koppel	1966
Richard A. Hazleton	Nucleation fundamentals in urea-solvent systems.	Lahti	1966
Richard H. Howard	The polymerization of N-hydroxyethyl-4-propanolpiperidine.	Golding	1966
Ronald H. Kahney	Scale-up of tubular chemical reactors.	Squires	1966
Che-I Kao	Use of molten salts for obtaining organic reactions.	Albright	1966
Gwan Kim	Catalytic decomposition of nitrous oxide over cobalt ferrite.	Squires	1966
Norman P. Lieberman	Production of hydrogen by use of a palladium-silver barrier.	Tucker	1966
Rutton D. Patel	Effect of surfactants on mass transfer in two-phase annular downward concurrent flow with high interfacial shear.	Tucker	1966
Solomon Peltz	Fluid residence times between rectangular extended surfaces.	Myers	1966
Robert J. Salloum	The polymerization of N-(3-Aminopropyl)-isonipecotic acid.	Golding	1966
James R. Schomer	Determination of thermal diffusion constants by a continuous method.	Emery	1966
Robert B. Tanner	Pulsatile flow through an elastic geometry.	Eckert	1966
Phillip L. Towsend	The breakup of a turbulent water jet into stagnant air.	Kessler	1966
Thomas J. Warren	The fuel cycle and fuel cycle costs for a high temperature gas-cooled nuclear reactor.	Sesonske	1966
Raymond J. Baytala	Solubility measurements of urea-n-paraffin adducts in ethanol using a dilatometric technique.	Lahti	1967

Ashok K. Bhandari	Design of an experimental system to study stirred tank reactor dynamics and control.	Coughanowr, Koppel	1967
Thomas R. Doughty, Jr.	The yield of phenylurea: An experimental optimization.	Eckert	1967
Toby C. Gerhold	Entrainment in a flooded, sieve-plate gas absorption column.	Tucker	1967
Richard F. Henry	Interfacial area in pipes under continuous, turbulent flow conditions.	Rushton	1967
Xavier Y. Jacob	Effect of non-ideality on efficiency of absorption-refrigeration systems.	Tucker	1967
Ashutosh R. Majmudar	Catalytic decomposition of nitrous oxide over pyrolyzed polyacrylonitrile.	Squires	1967
Wilfred R. Merton	Effect of thereto-mechanical treatments on the cryogenic properties of polyethylene terephthlate).	Eckert	1967
Regnier Pot	A dual mode control of second order systems with transportation lag.	Koppel, Coughanowr	1967
Paul E. Reed	Two fluid miscible radial flow in heterogeneous Hele-Shaw models.	Greenkorn	1967
Fred D. Schwab	Dynamic response of optimal control of heated stirred tanks.	Koppel, Coughanowr	1967
David G.R. Short	Pretreatment of cobalt ferrite catalyst for the catalytic decomposition of isopropyl alcohol.	Squires	1967
George Sperling	(Non-thesis)	Squires	1967
Thomas D. Storm	Factors affecting nucleation phenomena in urea-solvent systems.	Lahti	1967
John E. Swartz	Single drop breakup in developing turbulent pipe flow.	Kessler	1967
James E. Varnon	Gravity and viscous induced instabilities in porous media displacements.	Greenkorn	1967
Jack A. Wiesethal	A computer simulation of a reaction-separation system.	Kessler	1967
John D. Zimmerman	Thermodynamic correlation of the speed of sound.	Greenkorn	1967
Charles R. Anderson	Time-optimal control of third order systems with real time constants.	Koppel	1968
Peter G. Ayers	Drop sizes in mixing tanks.	Rushton	1968

Allen R. Broyles	Maximization of the yield of meta-toluenesulfonic acid in the sulfuric acid aulfonation of toluene.	Eckert	1968
David A. Culver	Preliminary reaction rate studies in a packed bed with cocurrent downflowing liquid and gas phases. 1968	Woods	1968
Joseph O. DeVet	Unsteady-state current effects at the cathode of a hydrogen-oxygen fuel cell.	Bartle, Albright	1968
Benjamin J. Gikis	Hydrogen sulfide treatment of rusted steel to prevent natural gas odor fading.	Albright, Barile	1968
Edward G. Lenth	A study of permeability and dispersion phenomena in an anisotropic porous medium.	Greenkorn	1968
Sanford D. Levine	A study of the effect of pretreatment and operating conditions upon the activity level and rate of activity change in the catalytic vapor phase hydrogenation of 1-3 butadiene.	Woods	1968
David R. Livingston	Axial dispersion and mass transfer in submerged (bubble-flow) packed absorber.	Tucker	1968
Craig G. Mandernach	Pulsatile flow through an elastic tube.	Eckert	1968
Christakis A. Michaelides	A model for settling of multiple particles.	Rushton	1968
Evert H. Mol	Kinetics of urea n-decane adduct formation.	Kessler	1968
Ronald J. Pakula	An experimental investigation of a porous medium model with non-uniform pores.	Greenkorn	1968
Richard C. Pleshek	Dispersion during flow in linear heterogeneous porous media.	Greenkorn	1968
James A. Shaevel	Evaluation of silica gelation as a method for predicting surface effects on blood clotting.	Eckert	1968
Robert D. Snook	Air holdup in water in a compartment of a mixing column.	Rushton	1968
James M. Stanley	The sequential simplex optimization technique and its application to the phenylurea reaction.	Eckert	1968
Sava Stefanovic	Catalyst studies for hydrogenation of vegetable oils.	Albright	1968
George R. Trisler	Improvements in batch operated solvent recovery.	Tucker	1968
Richard E. Winsor	An executive program for material balance calculations.	Kessler	1968

Kenneth F. Abel	Surface phenomena of a free turbulent liquid jet in air.	Kessler	1969
Ralph J. Andermann, Jr.	A study of the structure of the optimal control.	Weigand, Koppel	1969
Michael P. Beltz	Drop dispersion in liquid liquid, two phase, turbulent, pipeline flow.	Rushton	1969
Pervaje V. Bhat	Approximate mathematical models for distillation columns.	Williams	1969
Richard L. Davison	Mass transfer in horizontal cocurrent annular flow.	Kessler	1969
Lawrence L. Day	Optimal feedback control of distributed processes with axial conduction.	Koppel	1969
John B. Hommer	Operating characteristics of a commercial, Goodloe packed, batch fractionation column.	Tucker	1969
Richard E. Kloubec	Design of digital controllers for systems subject to stochastic disturbances and control effort constraints.	Lim, Koppel	1969
George Lampadarios	Dispersion of sound and the compressibility factor.	Greenkorn	1969
Edwin H. Niemann	Dispersion during flow in non-uniform, heterogeneous porous media.	Greenkorn, Eckert	1969
Slavoljub G. Panich	Pressure drop, operating holdup, and visual tracer studies of two-phase, counter-current l fow in packed towers.	Tucker	1969
Michael P. Ramage	Isomer selectivity in the heterogeneous chlorination of n-dodecane.	Eckert	1969
David A. Scholes	Odor fading in mixtures of ethyl mercaptan and natural gas.	Albright	1969
Harish K. Seth	Bubble heat transfer in fluidized beds.	Barile	1969
James F. Steadman	Design of a learning system for bang-bang control of a second order process with variable process parameters.	Koppel	1969
Kenneth J. Wulfert, Jr.	Flow characteristics of two-phase cocurrent flow in packed beads.	Kessler	1969
Leo Weitzman	Criteria for equations of state.	Greenkorn	1969
Wayne E. Beimesch	Liquid-gas distribution measurements in the pulsing regime of two-phase cocurrent flow in packed beds.	Kessler	1970

John B. Cavender, III	Unsteady state phenomena at the anode of a hydrogen-oxygen fuel cell.	Albright	1970
Rong J. Fang	Optimal output control of a class of distributed-parameter systems.	Lim, Koppel	1970
Wayne G. Fischer	Nonlinear compensation of a pH control system.	Koppel	1970
William C. Flewelling	Rational performance of the human operator under favorable conditions.	Koppel, Lim	1970
Thomas L. Goad	Permeability and dispersion during flow in linear heterogeneous anisotropic porous media.	Greenkorn	1970
Surendra P. Gupta	An experimental study of the uniqueness of unstable flow in porous media.	Greenkorn	1970
Frederic P. Hayos	Effects of molecular weight and polydispersity on the melt flow properties of polypropylene.	Eckert	1970
Lawrence L. Houle	Effect of feed acid composition on alkylation of isobutane with 2-butene.	Albright, Eckert	1970
James E. Kegerreis	A comparison of seven controller setting techniques as applied to first and second order systems.	Weigand	1970
Benjamin Klein	Determination of pore size distribution and surface area of catalysts by a continuous desorption flow technique.	Squires	1970
Daniel J. Kubek	Kinetics of urea adduction.	Kessler	1970
Ronald F. Lech	Design of continuous controllers for systems subject to stochastic disturbances and control effort constraints.	Koppel, Lim	1970
Tsu-Yum R. Lee	Molten salt reaction of alkali metal chlorides with sulfuric and phosphoric acids.	Albright	1970
Rudolph E. Lisa	Gas fluidization of a dispersed electrode system.	Barile	1970
Jerry L. McAfee	Study of combustion difficulty with high moisture, low oxygen content air.	Barite	1970
Craig M. McLaughlin	Calculation of interfacial areas of dispersions from simulated light transmission measurements.	Rushton	1970
Gregory L. McPike	Normal and shear stress measurement in couette flow.	Emery	1970
Edward J. Novotny, Jr.	Normal and shear stress measurement in flow between parallel flat plates.	Eckert	1970

Pradeep P. Sane	Reaction and diffusion in a catalyst pellet - inverse power law models.	Eckert, Woods	1970
Daniel F. Schiefferle	Organic phase aromatic nitration	Albright	1970
Peter G. Smith	Frequency-dependent flow regimes in porous media.	Greenkorn	1970
Charles M. Snyder	The theoretical evaluation of four integral-type constitutive equations.	Emery	1970
Kent A. Williams	Bubble to dense phase heat transfer in fluidized beds.	Barite	1970
Tayu Woo	Pang-bang control for a second order system	Lim	1970
Larry K. Brumfield	On predicting mass transfer at turbulent, free interfaces with a large eddy model.	Theofanous, Houze	1971
Howard W. Collins, Jr.	Dynamic model for multicomponent fixed bed adsorption.	Chao	1971
Jon F. Coursen	Drag reduction for polymeric two-phase liquid systems in smooth and rough pipes.	Greenkorn, Kessler	1971
David S. Dickey	A study of a parabolic partial differential equation for a pulse-flow catalytic reactor.	Woods	1971
Ching T. Liou	Optimal control of linear system with some inaccesible state variables.	Lim, Weigand	1971
Joseph T. Lonsdale	Drug reduction for oil-water mixtures in pipes	Greenkorn, Kessler	1971
Steven L. Mayes	Optical measurement of diffusion coefficients under isothermal and non-isothermal conditions.	Emery	1971
William R. Menzies, III	Surface effects on the partial oxidation of methane in tubular reactors.	Albright	1971
Donald W. Meyer	Transport characteristics of a turbulent bed contactor.	Barile	1971
Michael B. Moranville	Permeability and dispersion in heterogeneous anisotropic consolidated porous media.	Greenkorn, Kessler	1971
Jerry K. Okeson	Transient normal stress measurements in corvette flow.	Emery	1971
Timothy R. Osag	Bubble to dense phase heat transfer in fluidized beds.	Barite	1971
Vilas S. Patwardhan	Maximization of the yield of meta-toluene-sulfonic acid in the liquid phase sulfonation of toluene.	Eckert	1971

James E. Salamony	An electron paramagnetic resonance study of silica supported chromia catalyst.	Squires	1971
Ronald C. Schwabel	Modifications of MIMIC and its application to hybrid programming techniques.	Woods	1971
Jim S. Sineath	Experimental studies of vapor bubble growth in highly superheated liquids.	Theofanous	1971
Joe C. Sorenson	Preparation and use of insoluble glucoamylase in a packed tubular reactor.	Emery, Lim	1971
Andrew M. Sumutka	Effect of feed acid composition on the sulfuric acid alkylation of isobutane with C4 olefins.	Albright, Eckert	1971
Arthur R. Tarrer	Computerized optimal design of shell-and-tube heat exchangers with no change in phase.	Lim, Koppel	1971
Arthur S. Abriss	Optimal feed policy for an activated sludge aeration system of three completely mixed reactors.	Lim, Grady	1972
Steven T. Augsburger	Diffusion limitations in the chemisorption of nitric oxide on supported chromia.	Squires	1972
Frank J.M. Battaglia	Carbon monoxide oxidation on chromia-silica in a gradientless reactor.	Squires	1972
Paul R. Bienkowski	An augmented virial equation of state.	Chao	1972
James V. Coleman, III	Statistical thermodynamics of group action in alkane liquids.	Chao, Greenkorn	1972
Jeffrey L. Dengler	Heat and mass transfer in a turbulent bed cooling tower.	Barile	1972
Bharat M. Doshi	The mechanism of low temperature sulfuric acid catalyzed alkylation of isobutane with C4 olefins.	Albright	1972
Thomas J. Dziubakowski	An apparatus for the study of mass transfer and fluid mechanics in two phase co-current stratified turbulent flow.	Houze, Theofanous	1972
Martin A. Ferman	The mechanism of low temperature sulfuric acid catalyzed alkylation of isobutane with C4 olefins.	Albright	1972
William M. Fruit	Simulation of combined discrete and continuous processes.	Reklaitis, Woods	1972
William P. Garten	A study of liquid-liquid flow in pipes.	Greenkorn, Kessler	1972
Barry L. Hudson	Two dimensional cross-flow extraction.	Wankat	1972

Ashok K. Jhawar	Approximate mathematical models for distillation columns.	Williams, Weigand	1972
Jeffrey L. Kaufman	Parametric studies on immobilization of glucoamylase to non-porous glass beads.	Emery, Lim	1972
Michael J. Kolarik	Concentration versus time behavior for the hydrolysis of maltose catalyzed by soluble enzyme.	Lim, Emery	1972
Gary R. Kuchcinski	A steady state analysis of chromia-silica catalyst in a gradientless reactor.	Squires	1972
Alexander H. McPhee	A process simulator using a generalized closed-loop, underdamped, second-order model.	Koppel	1972
David M. Nicholas	Surface phenomena occurring during partial oxidation of methane and its intermediate oxidation products.	Albright	1972
Nestor A. Rodriguez	Mist deposition in a bifurcation.	Barile	1972
Robert W. Salnick	A study of unsteady-state phenomena occurring at the anode of a hydrogen-oxygen fuel cell with basic electrolyte.	Albright	1972
Jerome J. Schmitz	Unsteady-state phenomena at the movable cathode of a hydrogen-oxygen fuel cell in basic solution.	Albright	1972
John F. Sherwood	The partial oxidation of methane in tubular reactors.	Albright	1972
Thomas T. Stocksdale, III	Flow in a pair of stenokes an in vitro study of atherosclerosis.	Barile	1972
Steven J. Swanson	A study of the attachment parameters for the immobilization of glucoamylase by the cyanogen bromide technique.	Emery, Lim	1972
Douglas C. Witt	Study of active sites of titanium dioxide and alumina by the temperature programmed desorption technique.	Squires	1972
Timothy H. Bohrer	Bubble growth in highly superheated liquids.	Theofanous	1973
Dennis L. Davis	Affinity chromatography for the purification of glucoamylase.	Emery, Wankat	1973
Steven L. Dolan	Development and evaluation of an in-vitro drug product bioavailability test.	Weigand	1973
John J. Dunkleman	Kinetics and surface effects of the pyrolysis of ethane at 750' to 830' C.	Albright	1973

Kenneth F. Emigholz	The calculation of interaction indicies.	Lim, Koppel	1973
Clyde R. Galles	Multistage contacting in a packed co-current absorption column.	Wankat	1973
Alfred R. Middleton	Continuously regenerated two dimensional adsorption and chromatography.	Wankat	1973
Richard A. Reich	Pressure pulse emission from vapor bubble collapse.	Theofanous	1973
Alvin G. Rohrer	Boundary layer replenishment and unsteady-state phenomena at the cathode of a hydrogen-oxygen fuel cell in basic solution.	Albright, Theofanous	1973
Chung-Hu Tsai	Reduction of oxidized stainless steel surfaces by carbon monoxide, hydrogen and hydrogen sulfide.	Albright	1973
Bruce D. Turrie	The time optimal control of linear multivariabie systems by the method. of functional analysis.	Weigand	1973
Mark G. White	Principle of corresponding states for liquid mixtures.	Chao	1973
Ronald R. Wright	Optimization of the ammonia synthesis loop using geometric programming.	Reklaitia	1973
Mark E. Busbice	Separation of glucose and fructose by cycling zone adsorption.	Wankat	1974
Miguel C. Chang	A study of bubble growth in superheated trichlorotrifluoroethane.	Theofanous	1974
Bill J. Chen	Immobilization of whole cells containing glucose isomerase.	Emery, Lim	1974
Christopher K.C. Chu	Deconvolution methods for drug bioavailability analysis.	Weigand	1974
Thomas D. Duncavage	A GASP IV simulation of inventory control and production scheduling for a multi-product plant.	Reklaitis, Woods	1974
Francois Faure	A study of the efficiency of an electrostatic precipitator at Inland Steel Company, with respect to various emitted trace metals.	Squires, Jacko	1974
James H. Flood	Further studies into the effects of molecular weight and polydispersity on the viscosity properties of polypropylene.	Eckert	1974
Thomas A. Friermood	Automatic feedback control of blood pressure.	Barile, Weigand	1974

James M. Fortuna	Study of the techniques for analyzing thermal desorption spectra obtained by the method of temperature programmed desorption.	Squires, Schneider	1974
Daniel K. Foster	Mucociliary transport in mammalian respiratory tracts.	Theofanous	1974
Arthur E. Garavaglia	A study of glucose isomerase retained in a continuous reactor by hollow fiber ultrafiltration.	Emery, Lim	1974
Thomas A. Hertwig	Pressure drop in a three-phase fluidized bed suitable for use as & turbulent bed cooling tower.	Barile	1974
Mohammad T. Irani	A dispersion study of silica supported chromia catalyst.	Squires	1974
Michael R. Ladisch	Effect of glucose isomerase purity on immobilization economics.	Emery	1974
Young H. Lee	Affinity chromatography for the purification of glucose isomerase.	Wankat, Emery	1974
James L. Meyer	Index of cardiac performance.	Kessler	1974
Robert D. Mohler	Evaluation and modification of an in-vitro drug dosage bioavailability test.	Weigand	1974
Robert D. Sproull	Modeling the enzymatic conversion of D-glucose to D-fructose.	Lim, Schneider	1974
Michael H. Stein	A study of annular two-phase oil-water flow in conduits.	Greenkorn, Kessler	1974
Johannes Tramper	The immobilization of glucose isomerase in a gluteraldehyde crosslinked gelatine matrix.	Emery, Lim	1974
Anthony Vandenberg, Jr.	Computer simulation and analysis of the temperature programmed desorption technique.	Squires, Schneider	1974
John H. Woods	The effect of crystallinity on the mechanical formation of free radicals in polypropylene.	Eckert	1974
David J. Adler	A study of methods to improve the stability of glucose isomerase both free and entrapped in cellulose acetate fiber.	Emery, Lim	1975
Michael J. Bugyis	Predicting mass transfer at turbulent, free interfaces with a model of the turbulence structure obtained by the linear superposition of roll cells.	Theofanous, Houze	1975
James R. Burton	Phenomena in the meniscus of the cathode of a hydrogen-oxygen fuel cell in potassium hydroxide electrolyte.	Albright	1975

Virgil J. Comanita	Infinite dilution activity coefficients and the group interaction theory of liquids.	Greenkorn, Chao	1975
Jeffrey C. Dore	Multicomponent cycling zone adsorption.	Wankat	1975
Erek J. Erekson	Hydrogen chemisorption studies of silica supported ruthenium catalysts.	Delgass, Squires	1975
William A. Every	Particle size distributions in artificial blood made from perfluorinated hydrocarbons.	Kessler	1975
Charles J. Foerster	Scheduling of parallel processors with changeover restrictions.	Reklaitis	1975
Charles D. Moseman	Surface diffusivities on activated carbon of molecules adsorbing from solution.	Chao	1975
William C. Nelson	Applications of cycling zone adsorption to preparative high-pressure liquid chromatography.	Wankat	1975
Frank C. Sapienza	Computer simulation of species competition in the activated sludge process.	Lim, Grady	1975
Michael A. Schaper	Start-up phenomena for the cathode of an electrolysis cell.	Albright	1975
David A. Sirotti	Methods of immobilization of glucoamylase and glucose isomerase onto cellulose.	Emery	1975
Kenneth L. Young	Principle of corresponding states for liquid mixtures.	Chao	1975
Charles G. Bild	Steady-state and unsteady-state phenomena at the anode and cathode of a hydrogen-oxygen fuel cell in both basic and acidic electrolytes.	Albright	1976
Elizabeth M. Bild	Characterization of silica supported iron-nickel catalysts.	Delgass	1976
Steven M. Brown	The role of the reactor surface for pyrolysis of light paraffins and light olefins.	Albright	1976
Paul A. Dickensheets	A study of the properties of free and immobilized invertase.	Tsao	1976
Thomas G. Eckel	Development of statistical techniques for model discrimination and precise parameter estimation-hydrogenation of 1,3 butadiene.	Eckert	1976
Ada I. Ewo	A mechanistic and kinetic study of low-temperature sulfuric-acid-catalyzed alkylation of isobutane with isobutylene.	Albright	1976

Fred A. Fortunato	Chemical characterization of silica supported iron-ruthenium catalysts using the Moasbauer effect in iron-57.	Delgass, Squires	1976
David E. Guinnup	Immobilized glucoamylase: An investigation of the diffusional limitations.	Emery	1976
Kuang-Tsan Hsu	A comparison of commercial glucoamylases immobilized on cellulose beads.	Tsao	1976
Teh-An Hsu	A preliminary study on the effect of density difference in liquid-liquid dispersion and extraction.	Tsao	1976
David L. Koeberlein	Surface characterization of ruthenium methanation catalysts.	Delgass, Squires	1976
Calvin C. Lawson	Solubility of hydrogen in tetralin at coal liquefaction conditions.	Chao	1976
Ki D. Liu	Solubility of hydrogen in diphenylmethane at coal liquefaction conditions.	Chao	1976
Abraham Matthews	Exploratory study of the flow characteristics and the movement of trace metals in the East Chicago cadmium-project teat site.	Greenkorn	1976
Christopher F. McConnell	Catalytic carbon deposition and gasification during ethane pyrolysis in tubular flow reactors.	Albright	1976
William H. McNeese	Magnetic separations.	Wankat	1976
Ray A. Mentzer	Principle of corresponding states for liquid mixtures.	Greenkorn, Chao	1976
Richard C. Meyers	The application of frequency response techniques to a concentric-tube heat exchanger with a non-linear control valve.	Lim, Weigand	1976
Eleftherios Papoutsakis	A study in a methanol utilizing methylomonas species. Batch and continuous cultivation and a conceptual model for growth.	Lim, Tsao	1976
Anne V. Schwartz	Development of an online, real-time computer experiment for an undergraduate laboratory.	Weigand, Lim	1976
David F. Silarski	Application of multicomponent cycling zone adsorption to preparative high-pressure liquid chromatography.	Wankat	1976
Mark F. Smith	An experimental investigation of capillary pressure behavior as a function of pore-size distribution.	Greenkorn, Kessler	1976
George L. Ott	Applications of mass spectrometry to the study of CO methanation.	Delgass, Squires	1976

Philip G. Wilcox	The design and functional testing of the "blood treatment cell" for use as a hemodialyzer.	Ash, Kessler	1976
James Yao	Solubility of hydrogen in 1-methyl naphthalene and in tetralin at coal liquefaction conditions.	Chao	1976
Robert M. Ybarra	Normal stress measurements of polymer solutions in a slit rheometer.	Eckert	1976
Rosalind E. Amick	A qualitative and semi-quantitative study using electron microscopy and energy dispersive analysis of x-rays to evaluate pretreatments to cellulose hydrolysis in solid waste materials.	Tsao	1977
David P. Aschenbeck	The examination of some bimetallic catalysts via Mossbauer spectroscopy.	Delgass	1977
Kenneth H. Bergsman	Controlled thermal wave cycling zone adsorption.	Wankat	1977
Danny R. Connor	A study of the properties of free and immobilized lactase.	Tsao	1977
Christopher C. Creagan	An analysis of fed batch fermentation for the production of microbial biomass.	Lim, Tsao, Weigand	1977
David DiBiasio	Phase-plane analysis of feedback control of unstable steady states in a continuously-fed stirred tank biological reactor.	Lim, Weigand, Tsao	1977
Michael C. Embury	Scheduling and simulation of a staged semicontinuous multiproduct process.	Reklaitis	1977
Steven A. Fox	The effect of pore structure on the flow of fluids in a saturated porous medium.	Greenkorn, Kessler	1977
Aronson L. Huebner	A study of a cellulose component from Trichoderma viride active against crystalline cellulose.	Tsao	1977
Elizabeth L. Ryker Krug	An investigation into batch phenomena of a methanol-utilizing bacterial isolate.	Lim, Emery, Tsao	1977
Lee L. Lauderback	Fischer-Tropsch synthesis over SiO2 supported iron-ruthenium based bimetallic catalysts.	Delgaas, Squires	1977
Peter N. Lodal	A study of the diffusional limitations to reaction of an immobilized glucoamylase system Using maltose and maltotriose as substrates.	Emery	1977
Robert L. Mehlberg	Absorbed hydrochloric acid hydrolysis of corn cob xylan: Yields and effectiveness as a pretreatment for enzymatic hydrolysis.	Tsao	1977

Sanford J. Melville	Application of economic optimization to the chemical recovery system of a Kraft pulping process.	Williams	1977
Lee R. Partin	Activated carbon solvent recovery process.	Wankat	1977
Herbert M. Sebastian	Solubility of hydrogen in bicyclohexyl and in diphenylmethane at coal liquefaction conditions.	Chao	1977
Howard J. Slotman	Start-up and steady-state phenomena at the anode and cathode of a water electrolysis cell in acidic and basic electrolytes.	Albright	1977
Michael Tanzio	Computer models for entrained coal gasification and fluidized bed methanation.	Reklaitis	1977
Frank Taylor	Growth and lignin-degrading enzymes in submerged cultures of Pleurotus ostreatus, a white-rot fungus.	Tsao	1977
Mark L. Tiller	A study of Danckwerts' surface renewal using an oxygen microprobe.	Tsao	1977
John M.S. Tse	Isomerization of d-glucose, d-fructose, and d-mannose under alkaline condition.	Tsao	1977
Yuhong C. Yu	The effect of surface reactions on the pyrolysis of light hydrocarbons.	Albright	1977
Robert T. Beinor	A study of key enzyme activity profiles for a methanol-utilizing, obligate methylotroph.	Lim	1978
James P. Brancato	Steady-state phenomena of a water electrolysis cell on smooth platinum electrodes.	Albright	1978
William R. Bussing	Improved polystyrene through Friedel-Crafts polymerization and crosslinking methods.	Peppas	1978
David J. Carr	Automatic feedback control of blood pressure in dogs.	Barile	1978
J. Edward Fattlar	A study of the computational utility of geometric programming a gorithms.	Reklaitis	1978
Janette Faunce	Low temperature sulfuric-acid catalyzed alkylation of isobutane with CIS-2 butene and isobutylene: Product quality improvement.	Albright	1978
Gregory F. Fazzoni	Computer aided costing and applications to acid gas removal systems.	Reklaitis	1978
John R. Ford	Computer model for coal oil hydrotreating simulation.	Reklaitis	1978

Wayne S. Fort	Surface tension influence on gas-liquid mass transfer.	Houze, Theofanous	1978
Todd W.B. Gehr	Radiation-initiation copolymerization of N-vinyl-2-pyrrolidone and vinyl acetate.	Peppas	1978
James L. Hibbard	Population balance analysis of reactions in liquid-liquid dispersions: Phase transfer catalysis.	Ramkrishna	1978
Robert W. Johnson	A study soil and groundwater contamination by cadmium, zinc, copper, and lead in a highly industrialized area.	Greenkorn	1978
Denis J. Kavanaugh	Development toward a functional glucose fuel-cell censor for diabetic use.	Barile	1978
William D. Kostka	Fischer-Tropsch synthesis over Si02 supported iron-cobalt catalysts.	Delgass, Squires	1978
Richard J. Kurr	ESCA studies of unsupported ruthenium.	Delgass	1978
Joseph L. Oliphant	Solubility of hydrogen in mixed solvents.	Chao	1978
Ira B. Radovsky	Catalyst analogs.	Delgass	1978
Gregory B. Raupp	Mossbauer investigation of supported iron and iron-nickel Fischer-Tropsch synthesis catalysts.	Delgass	1978
James R. Ryland, III	Growth of a green alga, Chlorella pyrenoidosa, in mixed culture with selected bacterial species.	Emery	1978
David L. Wright	Optimization of the "blood treatment cell' as a hemodialyzer.	Kessler, Ash	1978
Elizabeth S. Berman	Kinetics of the hydrodesulfurization of theophene over molybdenuncon silica catalysts.	Squires	1979
Jon S. Boo	Computer model for a coal conversion hydrogen plant.	Reklaitis	1979
Daniel E. Buenger	A comparison of asymmetric single phase and two-phase turbulent flows.	Houze, Theofanous	1979
J. Philip Cagney	Determination of chromia surface area on supported and unsupported chromic catalysts.	Squires	1979
John C. Cochran	A study of the separation of sucrose from molasses by ultrafiltration.	Tsao	1979
Richard P. Dowling	Kinetics of the hydrodesulfurization of thiophene over Co-Mo on alumina catalysts.	Delgass	1979
Michael Durilla, Jr.	A kinetic study on an obligate methylotroph in batch and fed-batch cultures.	Linn, Weigand	1979

Michael J. Graff	Thermal decomposition of acetylene, butadiene, and benzene over various reactor materials.	Albright	1979
Timothy J. Hamilton	The effecta of FeTNa pretreatment on glucose yields from cellulosic materials.	Tsao	1979
Paul J. Hennigan	Development of a computerized fermentation system with applications to dissolved oxygen control.	Tsao, Lim	1979
Richard G. Mallinson	Hydrogen transfer reactions from tetralin to some condensed heteroaromatic model.	Chao, Greenkorn	1979
Michael A. McCabe	The transport of trace contaminants in the atmosphere.	Greenkorn	1979
Ronald R. Peterson	Diffusion limited gas adsorption and Fischer Tropsch synthesis over metal foils.	Delgass	1979
Erik D. Sall	Oxygen absorption in a water spray tower.	Tsao	1979
William G. Schlesing	Stability of immobilized glucoamylase in a packed bed reactor.	Emery	1979
David H. Wells	Metal/support interactions in titania based catalysts.	Delgass	1979
William Wiede, Jr.	Steady state simulation of water and oil quench vapor recovery systems in a coal conversion process.	Reklaitis	1979
Charles R. Wilkinson	Computer models for heat recovery and utilities systems in chemical process plants.	Reklaitis	1979
Pramod Agrawal	Theoretical investigations of dynamic behavior of isothermal continuous stirred tank biological reactors.	Lim	1980
Willis V. Bell, III	Optimization of coal desulfurization processes.	Reklaitis	1980
Michael A. Cala	A study of the desorption of cations from porous media.	Greenkorn	1980
Terry S. Cantu	Rheological propertiesof dospersions of spherical silica particles in polydimethylai lox ane.	Caruthers	1980
Sangduk Choi	Chemisorption study of iron-cobalt alloy catalysts.	Delgass	1980
Donald F. Criley, Jr.	The analysis of the surface of molybdena supported on gamma-alumina by secondary ion mass spectrometry (SIMS)	Delgass	1980

Robert G. Hyde	Effects on surface tension on gas-liquid mass transfer and turbulence.	Houze	1980
Leonard J. Kalfayan	The effect of catalyst pretreatment calcination temperature on the reduction of NO by CO over a silica supported chromium oxide catalyst.	Squires	1980
Richard W. Korsmeyer	Drug diffusion in swellable polymer systems.	Peppas	1980
Mark A. Kwoka	Thermorheological properties of a styrene-butadiene random copolymer filled with polystyrene beads.	Caruthers	1980
Stephen A. Leeper	The extraction of ethanol from water with gasoline in the production of gasohol.	Wankat	1980
James C. Marek	Formation and removal of coke deposits produced via thermal and metal-catalyzed decompositions of ethylene and acetylene on various reactor materials.	Albright	1980
Scott J. Napp	Preparation, characterization, and oxygen transport of glassy copolymers of methyl methacrylate and disiloxane derivatives.	Peppas	1980
Gregory S. Nowak	Foam as a membrane support for the blood treatment cell.	Barile	1980
Pedro M. Ortiz	A study of a moving feed point system for gel permeation chromatography.	Wankat	1980
Theodore S. Petroulas	Computer aided optimal design of :a plant utility system.	Reklaitis	1980
Catherine T. Reinhart	Characterization of and solute diffusion in water-swollen membranes.	Peppas	1980
Michael J. Rolf	Development of a direct digital controlled fermentor using a micro-minicomputer hierarchical system.	Lim	1980
Gary A. Thoe	Compartmental modeling of the environment.	Greenkorn	1980
Ronald S. Ziegelbaur	Viscometric properties of thixotropic dispersions of fumed silica particles in polydimethyl ailoxane.	Caruthers	1980
Kenneth F. Zieminski	Transport and relaxation phenomena in polymer-diluent systems exhibiting state transitions.	Peppas	1980
Judy Walker Cagney	Modelling of the fed-batch penicillin fermentation.	Lim	1981
Richard R. Emerson	A study of the kinetics of the dehydration of aqueous 2,3-butanediol to methylethyl ketone.	Tsao	1981

Mary E. Hill-Lievense	Macromolecular network structure of bituminous coals: Analysis of molecular weight distribution of coal extracts and coal-derived liquids.	Pepper	1981
Donald W. Hoellein	Characterization of modified ZSM-b catalysts.	Delgass	1981
Donald T. Hooker, II	Macromolecular network structure of bituminous coals: Analysis of coal-derived products.	Peppas	1981
Robert F. Kamrath	Thermodynamic models of mixed micellization.	Frances	1981
Grace C.G. Leung	A comparative study of coal conversion processes.	Reklaitis	1981
Alan M. Malakoff	Interconnection techniques for extraction processes.	Wankat	1981
Roger S. McGary	Moving feed chromatography in high performance liquid chromatography systems.	Wankat	1981
Barry J. Steinmetz	Characterization of hydrodesulfurization catalysts by kinetic, transient sulfiding and reduction studies.	Delgass	1981
Eva A. Swan	Mechanistic aspects of transport of water-soluble molecules through porous, hydrophobic polymers: A study of ethylene/vinyl acetate-based systems.	Peppas	1981
Ravindra S. Waghmare	Control theory and reaction engineering.	Lim	1981
Eric W. Wessinger	Growth of a blue-green alga, Anabaena cylindrica, in batch culture under intermittent illumination.	Emery	1981
Tad K. Williams	Optimal selection of coal desulfurization technology.	Reklaitis	1981
Donald G. Barar	Macromolecular structure of Friedel-Crafts crosslinked polystyrene particles.	Peppas	1982
Jeffrey R. Brown	The modeling and parameter estimation of the transient isothermal differential plug flow reactor.	Delgass	1982
Steven M. Clark	An evaluation of strategies for complex flowsheet simulation.	Reklaitis	1982
George Davidson, III	Hematological studies of heparinized and enzyme-immobilized polymeric surfaces.	Peppas	1982
Timothy J. Hart	Phase behavior and microstructure of aqueous systems of AOT and SDS surfactants.	Franses	1982
Iftekhar A. Karimi	Optimal selection of intermediate storage tank capacity in a periodic batch/semicontinous process.	Reklaitis	1982

Edwin J. Kolodziej	The experimental measurement of vapor-liquid equilibrium data in selected binary mixtures.	Chao, Greenkorn	1982
Dhinakar S. Kompala	Cybernetic modelling of microbial growth on multiple substrates.	Ramkrishna	1982
Leonard E. Kosinski	Transient rheological properties of a dispersion of fumed silica in polydimethylsiloxane.	Caruthers	1982
Alok K. Kulshreshtha	Unsteady state heat and momentum transport in composite media: Suspension of nonin eracting spherical particles.	Caruthers	1982
David L. Meadows	Non-equilibrium thermodynamic aspects of solute diffusion through highly swollen hydrophilic polymers.	Peppas	1982
Thomas E. Myers	Strong metal/support interactions in the rhodium-on-titania catalyst system.	Delgass	1982
Gregory M. Nejfelt	Steady state dropsize distributions in continuous flow mixing vessels for lean liquid-liquid dispersions.	Ramkrishna	1982
Robert W. O'Brien	Simulation modeling of batch/semicontinuous processes.	Reklaitis	1982
Daniel A. Pocius	Selective adsorption of water from ethanol on calcium sulfate.	Ladisch, Tsao	1982
William R. Priedeman, Jr.	Particle separations using high gradient magnetic separation.	Wankat	1982
Gary B. Semones	A quantitative study of the liquefaction behavior of Indiana VII coal and its vitrinite macerals.	Albright	1982
Earl M. Smith	Modelling of chlorine dioxide processes.	Albright	1982
Michael R. Smith	Mixed bed ion exchange and its applications in dialysate regeneration.	Wang	1982
Mark A. Spalding	The separation of trinitrotoluene isomers by crystallization and extraction using nitric acid as a solvent.	Albright	1982
Douglas C. Thomas	Developmet of a biomass concentration sensor, based on filtration properties, for use in mycelia) fermentations.	Lim	1982
Valorie L. Thompson	A study of the chemical transformations in dispersing atmospheric systems.	Greenkorn	1982
Brian G. Turner	Analysis of multicomponent diffusion and complex chemical reactions in isothermal tubular reactors.	Ramkrishna	1982

Gregory P. Wooding	Kinetics of etheric linkage decomposition in some coal related model compounds.	Chao, Greenkorn	1982
Paul R. Abel	Gas adsorption on uncatalyzed and catalyzed chars as a function of carbon burn-off.	Squires, Laurendean	1983
Pierre Bonte	A unidirectional method for singular control problems with application to the optimization of the optimization of the fed-batch penicillin fermentation.	Lim	1983
Diana H. Carlin	The liquefaction behavior of two Indiana coals and their vitrinite and exinite macerals.	Albright	1983
Stanley Huang	Multicomponent ion exchange in mixed beds for dialysate regeneration.	Wang	1983
James L. Kindinger	Rheological properties of polymeric solutions flowing through a thin alit rheometer.	Eckert	1983
Donald J. Knoechel	Preparation and Mossbaner spectroscopic characterization of 67Fe surface- enriched unsupported iron Fischer-Tropsch synthesis catalysts.	Delgass	1983
Philip C. Koenig	Kinetics of uncatalyzed and catalyzed char gasification by carbon dioxide.	Squires, Laurendeau	1983
William A. Leet	New density-dependent mixing rules for equations of state based upon the radial distribution function.	Chao	1983
Humphrey J. Moynihan	Molecular theories of solute diffusion in crosslinked polymeric membranes.	Peppas	1983
Peter J. Nowobilski	Oscillations in chemical reactor systems.	Takoudis	1983
Sanjeev S. Parasrampuria	Studies on ethanol to gasoline conversion on seolite catalyst HZSM-5.	Tsao	1983
Philip J. Schumacher	Secondary ion mass spectrometry of clean and hydrocarbon treated cracking catalysts.	Delgass	1983
Robert H. Sedath	Nonisothermal linear viscoelastic creep behavior of a styrene-butadiene random copolymer in the glass-to-rubber transition.	Caruthers	1983
Rajesh M. Agny	Catalytic synthesis of methanol from carbon monoxide and hydrogen over a copper-zinc oxide-alumina catalyst.	Takoudis	1984
Barbara D. Barr-Howell	Characteristics of diffusion in highly crosslinked macromolecular networks.	Peppas	1984

Sara D. Bean	Selective extraction of coal with supercritical solvents.	Chao, Greenkorn	1984
Patricia J. Buchanan	A comparative study of the economics of three methanantion processes in goal gasification.	Reklaitis	1984
Judy B. Chung	Preparation of a new packing material for amino acid separation.	Tsao	1985
Cuong M. Dinh	Vapor-liquid equilibria of ternary system of hydrogen + water + m-cresol at elevated temperatures and pressures.	Chao	1984
Gene M. Durrence	Ethylene glycol and other oxychemicals from cellulosic materials.	Tsao	1984
Dale E. Eckart	Implementation of a group contribution thermodynamic model.	Chao	1984
Kathleen M. Keville	Synthesis of monodispersed microspheroids.	Caruthers, Franses	1984
Mark P. Nowlan	Calcium in neutralized hemicellulose hydrolysates: Glucose isomerase deactivation, assay, and removal.	Tsao	1984
Susan R. Russell	A generalized correlation of thermodynamic properties of polar fluids.	Chao	1984
Alan P. Wilson	Characterization and stability of unsupported iron nitride catalysts by Mossbauer spectroscopy.	Delgass	1984
Sudhakar Yarlagadda	Microstructural characterization of despersiona of nonspherical particles by light scattering.	Caruthers, Franses	1984
Kent A. Franklin	Hydrogenation of bensyl ether, bensyl phenyl ether, and phenyl ether by a sulfided cobalt-molybdenum catalyst.	Chao, Greenkorn	1985
Ronald S. Harland	Solute diffusion through semicrystalline polymer membranes.	Peppas	1985
John S. Haselow	Supercritical extraction of coal with aromatic solvents.	Chao, Greenkorn	1985
Albert A. Hummel	A transient kinetic study of iron nitrides as Fischer-Tropsch synthesis catalysts.	Delgass	1985
Terry K.T. Ko	Dynamics of a multicomponent minimum reflux distillation column.	Andres	1985
Rong-Jwyn T. Lee	Local composition of square well molecules by Monte Carlo simulation.	Chao	1985

Steven R. Lustig	Scaling analysis and mathematical modeling of solute and penetrant transport in equilibrium swollen and dynamically swelling polymer.	Peppas	1985
Jonathan D. Maimon	Interactive graphics and computer animation in the simulation of batch processes.	Reklaitis	1985
J. Todd Maras	Modelling and simulation of a Kamyr digester.	Albright	1985
Antonios G. Mikos	Kinetic modeling of suspension copolymerization-crosslinking reactions.	Peppas, Takoudis	1985
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James A. Nowinski	The formation and solubility of sec-butyl sulfates produced during first-effect reactions between sulfuric acid and n-butenes.	Albright	1985
Stephen R. Penrod	A kinetic study of the epoxidation of ethylene over a supported silver catalyst.	Delgass	1985
John D. Pults	Supercritical chromatography of coal liquid compounds.	Chao, Greenkorn	1985
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Philip L. Ritger	Anomalous solvent transport in macromolecular coal networks.	Peppas	1985
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Peter Benedict Beronio	Analysis of the Distribution of Saccharomyces Cerevisiae Immobilized in Kappa-Carageenan	Tsao	1986
Mary Lisa Brannon	Preparation and Characterization of and Preliminary Studies of Solute Transport in Novel Asymmetric Poly(vinyl Alcohol) Membranes	Peppas	1986
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Roderick William Geldart	Analyzing Moving-Port Chromatography with Multicomonent Chromatography Theory	Wang, Wankat	1986

Kirk Edward Hummel	Characterization of Carbon-Supported Iron Fischer-Tropsch Catalysts	Delgass	1986
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John Klier	Equilibrium and Dynamic Transport Properties of Swellable Polymers	Peppas	1986
Scott Raymond Rudge	Effects of an Applied Electric Field on Size Exclusion Chromatography of Milk Proteins	Andres, Ladisch	1986
Lawrence Steven Schwartz	Plasmid Instability Kinetics of Saccharomyces Cerevisiae in Non-Selective and Selective Environments	Tsao	1986
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John Alex Wachter	Control of a Multicomonent Minimum Reflux Distillation Column	Andres	1987
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Helen Catherine-Stoyell Wellons	The Design of Multi-Product Batch Plants under Uncertainty	Reklaitis	1987
Ramachandra Achar	Group Contribution Method for Predication of Effective Molecular Volumes in Gel Permeation Chromatography	Tsao	1988
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Mark Matthew Kastelic	Experimental and Modeling Studies of the Selective Epitaxial Growth of Silicon from the Chemical Vapor Deposition of Dichlorosilane	Takoudis	1988
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Christopher Scott Buehler	Light Scattering Determination of Size, Shape, and Orientation of Spheroical Particles in the Rayleigh-Debye-Gansregime	Caruthers, Franses	1989
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Amarendra M. Ramachandra	Characterization of Gold Clusters and Cluster Based Thin Films	Andres	1989
Jennifer Joyce Sahlin	Characterization of Penetrant Transport into Epoxy Resins	Peppas	1989
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Bradley S. Barnhorst	A Method for Prediction of Liquid Thermal Conductivity	Venkatasubramanian, Caruthers	1996
Shantanu Bose	Distributed Computing Issues in Solving Large Optimization Problems	Reklaitis, Pekny	1996
Michael R. Buss	Gas Aggregation Synthesis of Nanometer Diameter Magnetic Clusters	Andres	1996
Shannon Chen	Fundamental Studies on Yield and Growth Rate During Low Temperature Silicon Selective Epitaxial Growth in a Reduced-Pressure Pancake Reactor	Takoudis	1996
Douglas George Heemstra	Practical Nonlinear Model Identification and Control Implementaion	Doyle	1996

Michael Hogan	Bioremediation of Naval Shipboard Effluent	Ramkrishna	1996
Jeffrey Yu-Chang Kao	Time-Correlated Single Photon Counting for Particle Sizing in Concentrated Suspensions	Sevick-Muraca	1996
Sabrina Hood Myrick	Effects of Chain Length and Dispersed Particles on Dynamic Surface Tension of Aqueous Dispersions of Higher Alcohols	Franses	1996
Lena Nelson-Larry	Frequency-Domain Photon Migration Imaging by Use of Contrast Agents	Sevick-Muraca	1996
Christopher B. Roth	Pollution Prevention Options for the Electroplating, Wood Furniture Manufacturing, Plastics and RFC, and Metal Fabrication Industries	Greenkorn	1996
John R. Schell	On Self-similarity of Microbial Populations	Ramkrishna	1996
Robert Allan Scott	An Experimental Study of Acrylic Acid Solution Polymerizations	Peppas	1996
Shelia Wright	Size Exclusion Phenomena in Drug Transport Through Ionizable Hydrogels	Peppas	1996
Dingjun Wu	Isolation and Purification of Paclitaxel From Plant Tissue Culture Broth and Needle Extraction	Wang	1996
Mark Edward Byrne	Pressure Effects in Adiabatic Adsorption and Adsorptive Reactors	Wankat	1997
Lu Chai	Fluid Mechanics of Distillation	Basaran	1997
Alvin Un-Teh Chen	Effects of Fluorescence and Phosphorescence Lifetime on Frequency Domain Optical Contrast for Biomedical Optical Imaging	Sevick-Muraca	1997
Kelley Patrice Doakes	Synthesis of a Metal/Ceramic Membrane for Oxygen Separation	Andres	1997
Christie Dorski Hassan	Dynamic Behavior of Glucose-Responsive Poly(Methacrylic Acid-g-Ethylene Glycol) Hydrogels	Peppas, Doyle	1997
Monica Denise Little	Poly(ethylene glycol) as a Mucoadhesion Promoter of Poly(acrylic acid) Microparticles	Peppas	1997
Jia Liu	Fabrication of 2-D and 3-D Nanocluster Networks	Andres	1997
Guadiana Lopez	Absorption and Fluorescent Contrast Mechanisms for the Detection and Diagnosis of Breast Cancer Using Single-Pixel Frequency-Domain Photon Migration Imaging	Sevick-Muraca	1997

Jonathan T. Matthews	Design and Characterization of a Distributed Arc Cluster Source for Nanopartical Synthesis	Andres	1997
Joseph Earl Pierce	Particle Sizing in Concentrated Suspensions Using Frequency Domain Photon Migration Techniques	Sevick-Muraca	1997
Daniel R. Randall	Monitoring and Analyzing Structural Relaxation Following Temperature Jumps in Doped Polymer Systems Using Second Harmonic Generation	Lackritz	1997
Lisa Marie Schwarte	Preparation and Characterization of pH-Sensitive, Cationic Hydrogels	Peppas	1997
Prashant Shrikhande	Prediction of Deformation and Enthalpy Relaxation for an Amorphous Polymer Using a Thermoviscoelastic Constitutive Model	Caruthers	1997
Shri Singhvi	Process-Property Relationships in Furnace Silicon Oxynitridation in Nitrous Oxide Ambients	Takoudis	1997
Eric Eugene Stangland	Mass Spectroscopic Studies of Nitric Oxide Decomposition over Supported Copper Catalysts	Delgass, Andres	1997
Elze Surgailyte	Pivot Control Strategy for a Class of Batch Scheduling Problems	Pekny, Reklaitis	1997
Nicole Maria Tureaud	The Effect of the Extent of Chemical Reaction on the Mechanical Relaxation of Epoxy Polymers	Caruthers	1997
Edward Dean Wilkes	Finite Element Analysis of Forced Oscillations of Supported Drops	Basaran	1997
Griselda Bonilla	A Time-Resolved FTIR Study of the Dynamics of CO Oxidation Over a Silica Supported Pt Catalyst	Lauterbach	1998
Dimitra Gerogianni	Incorporating Risk Analysis in the Solution of Process Management Problems: Knapsack Substructures	Pekny, Reklaitis	1998
Karen Elizabeth Green	The Adsorption and Photopolymerization of Methyl Methacrylate and Acrylic Acid on Pt(110) Using Time-Resolved FT-IRAS and Temperature-Programmed Desorption.	Lauterbach	1998
Kenneth James Kauffman	Analysis of Simulated Moving Bed Size Exclusion Chromatography	Wang	1998
Arkan Kayihan	Local Nonlinear Control of a Process Actuator	Doyle	1998
Kelley Britton Keys	Poly(ethylene glycol) Star Polymer Hydrogels	Peppas	1998
Jum Sik Kim	Effects of an Electric Field on the Deformation and Breakup of a Stretching Liquid Bridge	Basaran	1998

Roger Keith Hiep Kuo	Experimental Verification of Nonlocal Dispersion Theory in Aperiodic Heterogeneous Porous Media	Greenkorn	1998
Thomas Alan Manz	Selective Hydrogenation of Butyronitrile on Promoted Raney® Nickel Catalysts	Delgass	1998
Melvin Ortiz-Vega	Thermal Swing Adsorption for the Separation of Two Amino Acids	Wang	1998
Kevin Bruce Stavens	Distributed Arc Cluster Source for Production and Capture of Refractory Metal and Bimetallic Clusters	Andres	1998
William Edward Walters	The Effects of Cesiuim and Support on the Epoxidation of Ethylene	Delgass	1998
Xinyun Wen	Tension and Solution Behavior of Aqueous Soap and Gemini Cationic Surfactants	Franses	1998
Yi Xie	Separation of Two Amino Acids Using SMB Chromatography	Wang	1998
Chad Austin Farrenburg	Purification of Clarithromycin Using Simulated Moving Bed Chromatography	Wang	1999
Aaron Cooper Foss	Controlled Release of 5-Fluourouracil from Hydrogels.	Peppas	1999
Patrick K. Notz	Dynamics of Drop Formation in an Electric Field.	Basaran	1999
Timothy Dirk Pletcher	Ellipsomicroscopy for Surface Imaging: a Novel Tool for the Investigation of Surface Phenomena	Lauterbach	1999
Alissa Jennifer Prosser	A Survey of Equilibrium Adsorption and Tension Models for Ionic Surfactants at the Air/Water Interface	Franses	1999
Omer Samikoglu	Evolutionary Programming Based Analysis of the Critical Parameters of Combinatorial Optimization Problems.	Pekny, Reklaitis	1999
Alan Bruce Thompson	Multi-pixel Assessment of Fluorophore Uptake and Lifetime in the Detection of Heterogeneous Tissue Volumes	Sevick-Muraca	1999
Madeline Torres-Lugo	Novel pH-Sensitive Hydrogel for the Oral Delivery of Salmon Calcitonin.	Peppas	1999
Jiangshan Yan	Adsorption and UV Polymerization of Styrene and Methyl Methacrylate on Polycrystalline Platinum: Time-Resolved FT-IR and TPD Study	Lauterbach	1999

Cynthia Marietta Blake-Powell	Comparison Among Ad-Hoc Theories, Computational Fluid Dynamics Turbulence Models, and Experimental Data for Confined Jet Flow	Sinclair	2000
Eddy Kuwana	Measurement and Model Assessments of Multi-exponential Decay Fluorescence Lifetime and Propagation in Scattering Media	Sevick-Muraca	2000
Seshatre Natarajan	Repetitive Model Predictive Control for Continuous Periodic Processes	J. Lee	2000
Gudbjorg Oskarsdottir	Chemically Sensitive High Throughput Parallel Analysis of Catalyst Libraries	Lauterbach	2000
Javier Pacheco-Gomez	Glucose Sensitive Hydrogel Membranes for Controlled Delivery of Insulin	Peppas	2000
Qinling Qu	Adsorption of Organic Molecules on Gold	Andres	2000
Agus Sumantri	Comparative Analysis of Computational Fluid Dynamics Models for Gas-Solid Flow in Risers	Sinclair	2000
Jian Xiao	Use of Two-Stage Optimization in Model Predictive Control of Stable and Integrating Systems	J. Lee	2000
Shawn Patrick Adair	Batch Product Recipe Synthesis Using Disjunctive Programming	Reklaitis	2001
Rajan Agarwal	Nano-manipulation of Gold Clusters for Bio-chem Sensor and Nanoelec- tronic Fabrication	Andres	2001
Michael Austin Bock	Photoemission Electron Microscopy for Imaging of Platinum Foil Catalyzed CO-Oxidation	Lauterbach	2001
Chim Yong Chin	Versatile Simulated Moving Bed Systems	Wang	2001
Tom Tao Huang	Adsorption of Biotinylated Antibody on Microfabricated Silica Surface for the Detection of Listeria Monocytogenes in Biochip	Tsao, Ladisch	2001
Manoj Jhunjhunwala	Process Planning under Uncertainty using Parametric Programming	Reklaitis	2001
Jeffrey William Kloosterman	The Study of Rhenium Promotion on the Kinetics of Ethylene and Butadiene Epoxidation	Delgass	2001
Gopalan Natarajan	Thermal-Adsorptive Concentration	Wankat	2001
Priyan Patkar	Computer-Aided Material Design Using Hybrid Neural Networks and Genetic Algorithms	Venkatasubramanian, Caruthers	2001
Elizabeth L. Peckham	Application of Rapid-Scan FTIR Imaging to the Study of Solvent Diffusion into Biopolymer Films	Lauterbach, Robinson	2001

Karthik Rajan	Risk Management in the Selection and Scheduling of Interdependent New Product Development Projects	Pekny, Blau	2001
Daphne Nichole Robinson	Synthesis and Characterization of P(Methacrylic Acid-G-Ethylene Glycol) Nanospheres	Peppas	2001
Luis Roman	Atomic Force Microscopy Characterization of Cell Membranes and Biomaterials	Andres, Robinson	2001
Vijayanand Subramanian	ePIMA: A Computational Framework for	Pekny, Reklaitis	2001
Zhengchun Xiao	Investigation of the Pressure-Volume- Temperature Behavior and Associated Thermomechanical Properties as a Function of the Extent of Cure for a DGEBA Epoxy	Caruthers	2001
Nadia Jamil Abunasser	One-Column Chromatrograph with Recycle that is Analogous to a Four- Zone SMB	Wankat	2002
Ismail Ufuk Barutcu	Schedule Diagnosis Simulator for Stochastic Flowshops	Reklaitis	2002
Lee Peng Chua	New Integral Equation for the Structure of the Hard Sphere Fluid Based on Scaled Particle Theory	Corti	2002
Chie-Min Chung	The Effects of Particle Size, Coefficient of Restitution and Bed Width on the Flow Behavior of Fluidized Beds	Curtis	2002
Robert Andrew Hamilton	Beyond Log-Normal Distributions: A Hermite Spectral Method for Solving Population Balance Equations of Agglomeration, Breakage, Growth, and Simple Particle Flow	Curtis	2002
Erika M. Hernandez	Adsorption and Direct Probing of Fibrinogen and Sodium Myristate at the Air/Water Interface	Franses	2002
Michael David Heying	Determining Chemical Potentials Within the Small System Grand Ensemble	Corti	2002
James Zachary Hilt	Micropatterning Environmentally Sensitive Hydrogels for Integration into a MEMS Sensor	Peppas	2002
Hanxiao Jiang	Optimization of a Saccharomyces Cerevisiae Expression System for In Vivo Plant P450	Morgan	2002
Joseph Emmerson Krug	Local Density Correlations in a Dynamically Heterogeneous Lennard- Jones Fluid	Corti, Caruthers	2002
Steven Scott Lasko	Quantitative High Throughput Studies of Catalyst Libraries	Lauterbach, Delgass	2002

Jennifer Lopez	Cellular Evaluation of Transmucosal Insulin Delivery	Peppas	2002
Scott Jason McClellan	Competitive Adsorption of Albumin and Sodium Myristate at the Air/Water Interface	Franses	2002
Arthi Nagarajan	Risk Analysis in Project Selection Under Uncertainty	Pekny, Reklaitis	2002
Jon Anthony Shepler	Experimental Measurement of Cancer Cell Death	Ramkrishna, Hannemann	2002
Nora Wai Lin Yap	Synthesis, Characterization and Kinetics of Au/Titanium Silicalite-1 Catalysts for the Direct Epoxidation of Propylene	Delgass	2002
Juan Camilo Zapata	A Model Predictive Control of a Process Under Abnormal Situations	Reklaitis, Venkatasubramanian	2002
Dan Lei Chen	High-throughput Optimization of Culture Media of Saccharomyces Cerevisiae Expression System for in vivoPlant P450 Monooxygenase Activity	Morgan	2003
Alicia Tee Fuay Ng	Synthesis and Characterization of Binary-Component Metal Nanoparticles	Andres	2003
Jin-Won Park	Characterization of Hybrid Lipid Bilayer with Atomic Force Microscopy and Surface Plasmon Reasonance Spectrometry	G. Lee	2003
Gerard McKinley Rogers II	Tandem Simulated Moving Bed Chromatography for the Removal of Phenylalanine from a Three-component Mixture.	Wang	2003
Hao Shang	A Study of the Feasibility of Using Magnetic Force Differentiation for Measuring the Affinity of Phage Displayed Peptides.	G. Lee	2003
Sebnem Erdamar	Mesoporous Silica Film Growth from Solution: Formulation, Stability, and Pore Orientation Control	Hillhouse	2004
Leaelaf Mengistu Hailemariam	Growth of Bubbles in Viscoelastic Media: A Mathematical Model	Okos, Venkatasubramanian	2004
Jason Harper	Direct Electroschemistry of Human NADPH-Cytochrome P450 Reductase	Hillhouse, Morgan	2004
Thukaram Katare	Computer-Aided Industrial Polymerization Reactor Design	Caruthers, Venkatasubramanian	2004
Ho Joon Lee	Separation of Lactic Acid from Glucosein Fermentation Broth using Four-Zone Simulated Moving Bed Chromatography	Wang	2004
Patrick T. McGough	Surfactant Effects in Jet Breakup	Basaran	2004

Tze Lee Phang	Dynamic Adsorption and Surface Tension of Aqueous Dilauroylphosphatidylcholine and Bovine Serum Albumin	Franses	2004
Eric Alan Sherer	Population Balance Modeling of Leukemia Chemotherapy	Ramkrishna, Hannemann	2004
Daniel Siderius	The Entropic Force Between a Colloidal Particle and a Hard Wall: Extension of Scaled Particle Theory to Inhomogeneous Fluids	Corti	2004
Ta-Chen Wei	Ion Transport within ETS-10 Investigated by Impedance Spectroscopy	Hillhouse	2004
Patrick D. Figaro	Preparation and Testing of Water Gas Shift Catalysts	Ribeiro	2005
Shaun R. Graham	Copper Surfaces during Chemical Mechanical Polishing	Beaudoin	2005
Jin Il Kim	A Hybrid Model of Anaerobic E. Coli: Cybernetic Approach and Elementary Mode Analysis	Ramkrishna	2005
Caitlin LaClair	Covalent Immobilization of Saccharomyces Cerevisiae For Microscopy	Morgan	2005
Kyung-Min Lee	Kinetics of the Water Gas Shift Reaction Catalyzed by Noble Metals and Promoted by Basic Metal Oxides	Ribeiro	2005
Wridhar V.V.S. Maddipati	Determination of Kinetic Parameters for Multisite Homopolymerization and Copolymerization Reactions in a CSTR	Caruthers, Venkatasubramanian	2005
Eric Joseph Ritchson	Developing Methods for Catalyst Characterization in	Baertsch	2005
Chan-Yi Chen	New Configuration for Batch Distillation Column	Agrawal, Venkatasubramanian	2006
Ayush Goyal	Population Balance Models of Vulcunization Kinetics using Advanced Computational Methods	Caruthers, Venkatasubramanian	2006
Jesmin Haq	Population Balance Model for the Determination of Kinetic Constants from Single-Site Olefin Batch Polymerization Data	Caruthers	2006
Ankita Jain	Synthesis of Cu-In-Se and TiO2 Nanoparticles for Applications In Solar Cells	Agrawal, Hillhouse	2006
Saket Rai	Kinetic Studies of Water Gas Shift Reaction on Alumina Supported Platinum and Palladium Catalysts	Ribeiro, Delgass	2006

Joshua Ratts	FTIR Study of a Model NOx Storage/Reduction Catalyst	Ribeiro	2006
Bryce D. Sturtevant	Continued Development of an Integral Equation for the Structure of Hard-Particle Fluids from Scaled Particle Theory	Corti	2006
Soon Kay Teoh	Combustion of Single Titanium Particles	Varma	2006
Shuang Chen	A Study of the Folding of Methionine-Argine Human Proinsulin	Wang	2007
Paul D. Hobson	Ab Initio Studies of the Properties of Carbon Nanotubes and Silicon Nanowires	Thomson	2007
James George Kissel	Investigation of Bovine Serum Albumin Adsorption onto Gold Biosensors using Suface Plasmon Resonance	Beaudoin	2007
Rebecca Ann Martin	Investigation of the Linear and Nonlinear Viscoelastic Behavior Of Polymethylmethacrylate	Caruthers	2007
Javier Nieves Remacha	Design and Optimization of Simulated Moving Bed Based on Monolithic Columns	Wang	2007
Aparajita Bhattacharya	Non-Thesis	Caruthers	2008
Luis Bollmann	Non-Thesis	Hillhouse	2008
Moiz Diwan	Non-Thesis	Varma	2008
Balachandra B. Krishnamurthy	Non-Thesis	Caruthers, Venkatasubramanian	2008
Shatara C. Mayfield	Non-Thesis	Liu	2008
C. Rocio Misiego Arpa	Polyimide-Carbon Nanotube Foam Nanocomposites from Powder Precursors: Synthesis and Characterization	Pipes	2008
Navneet R. Singh	Non-Thesis	Agrawal, Ribeiro, Delgass	2008
Stephen D. Stamatis	Non-Thesis	Caruthers, Delgass	2008
Sumit Basu	Non-Thesis	Gore, Litster	2009
Saurabh S. Chaugule	Non-Thesis	Delgass, Ribeiro	2009
Michelle N. Chaffee Cipich	Real Time Steady-State Data Reconciliation and Gross Error Detection in Continuous Pharmaceutical Manufacturing	Reklaitis, Venkatasubramanian	2009

Steven Gaik	Optimization of Double Gyroid Film Synthesis for use in Inorganic Bulk Heterojunction Photovoltaics	Hillhouse, Agrawal	2009
Talesha Hall	Non-Thesis	Harris	2009
Intan M. Hamdan	Non-Thesis	Reklaitis, Venkatasubramanian	2009
Wenbin Hu	Non-Thesis	Varma	2009
Mahaprasad Kar	Non-Thesis	Agrawal, Hillhouse	2009
Yoonjee Park	Non-Thesis	Franses	2009
Rugved Pathare	Non-Thesis	Agrawal	2009
Jorge H. Pazmino	Non-Thesis	Delgass, Ribeiro	2009
Santhosh K. Ramalingam	Non-Thesis	Basaran	2009
Vishesh H. Shah	Non-Thesis	Agrawal, Reklaitis	2009
Pradeep Sharma	Non-Thesis	Wankat	2009
Qing Zhu	Non-Thesis	Harris	2009
Easa AL-Musleh	Efficient Liquefaction Cycles for Natural Gas	Agrawal, Reklaitis	2010
Shane A. Bates	A Study to Determine the Active Site in the Oxidative Dehydrogenation of Ethanol Over Mixed Fe2(MoO4)3-MoO3 Catalysts	Baertsch	2010
Ye Chen	Non-Thesis	Reklaitis, Pekny	2010
Shisheng Huang	Non-Thesis	Agrawal, Reklaitis, Pekny	2010
Clancy R.R. Kadrmas	Block Copolymer Toughened Polyimides and Quantitative Evaluation Of Epoxy Cure Kinetic Models	Won, Caruthers	2010
Jianfeng Li	Non-Thesis	Litster	2010
Maria Elisa Luque	Towards the Development of an Ontological Framework for Drug- Loaded Film Manufacture	Rekliaits, Pinal	2010
John P. O'Grady	Effects of Substrates and Light on the Growth and Lipid Production of Chlorella Protothecoides	Morgan	2010
Anirudh Arun Shenvi	Non-Thesis	Reklaitis	2010
Aviral Shukla	Non-Thesis	Venkatasubramanian	2010

Anand Venkatesan	Ion Exchange Pretreatment for Reverse Osmosis Desalination of Brackish Water	Wankat	2010
Nyah Zarate	The Influence of Interfacial Condensed Moisture on Adhesion Between Solid Organic Particles and Surfaces	Litster	2010
Rong Zhang	Non-Thesis	Baertsch	2010
Ahmad Y. Al-Kukhun	Non-Thesis	Varma	2011
Haojing Gao	Non-Thesis	Basaran, Harris	2011
Wensheng Lee	Non-Thesis	Caruthers	2011

Appendix Q

Professional ChE Degrees, Chemical Engineering, Purdue University

The following alumni received a professional Ch.E. degree between May 1916 and May 1952. The name of the thesis supervisor appears to the right of the thesis title.

The professional Ch.E. degree was established in 1914 and abolished in 1952. Only Purdue engineering graduates were eligible to register as candidates for this degree. The degree was granted after the submission of an acceptable thesis and not less than four years of professional experience subsequent to receipt of the B.S. degree. No resident study was required. Thus, the thesis subject was assigned by a "professor in charge" but it was always a subject relevant to the industrial experience of the candidate.

Merle R. Meacham	Potentials of the system Hz-Pt-0,1 N(HCl+KCl)	Loomis	1916
Roy E. Schmedel	The manufacture of evaporated milk.	Peffer	1921
Donald J. Maveety	The inversion of cane sugar syrup	Peffer	1922
David R. Wiggam	The development of the manufacture of celluloid using cotton linters as the base.	Peffer	1922
Raphael L. Stern	Evaluation of the adhesive property of animal glues.	Peffer	1924
Robert B. Lebo	Removal of hydrogen sulphide from gases by water scrubbing, and calculation of gas scrubbing towers.	Peffer	1925
Edward H. Roy	A resume of cracking processes for production of gasoline.	Peffer	1925
Neil M. Waterbury	A study of the malleable iron air furnaces.	Peffer	1925
Harland D. Wilson	A critical study of electro-chemical efficiencies and performance characteristics of the Wilson storage battery tubular electrode.	Anderegg	1925

Robert I. Wray	Aluminum paint for structural purposes.	Peffer	1926
Don Brouse	Factors affecting the test values of casein water-resistant plywood.	Peffer	1927
Reid L. Kenyon	Armco ingot iron.	Bray	1927
Herman F. Hedderich	The effect of moist closet temperature on the strength of standard cement mortar briquets.	Peffer	1928
Raymond F. Holtman	The development of an improved miner's cup lamp storage battery.	Maxwell	1928
Maxwell O. Johnson	Manganese chlorosis of pineapples and a new method of prevention by iron pyrites.	Peffer	1928
William H. Woodhall	The control of an acid open hearth furnace manufacturing charcoal steel.	Bray	1928
Robert C. Hayes	Heat balances of some drying and calcining operations.	Peffer	1929
Robert P. Courtney	Development of copper catalyst for oxidation of methanol to formaldehyde.	Peffer	1930
Bruce W. Gonser	The purification of zinc sulphate solutions.	Bray	1930
Bernhart H. Jeup	Sanitary survey for the City of Washington, Indiana.	Peffer	1930
Clarence H. White	A study of the accuracy of gas meters in the State of Illinois.	Leckie	1930
Harrold J. Bates	Physical properties of medium carbon and alloy cap screws.	Bray	1933
Frederic W. Bollman	American petroleum refining at Toledo, Ohio.	Shreve	1933
Howard P. DeVoe	Control of blast furnace operations by gas analyses.	Bray	1933
Elmore R. Fahy	Nickel plating an outline of its development and of its practice.	Bray	1933
Frank G. Norris	Influence of manganese, sulfur, and oxygen on red-shortness of iron.	Bray	1933
Lawrence J. Purgett	Reactor capacitor equipment for power factor correction.	Bray	1940
Walter R. Sterrett	Cellular rubber products.	Bray	1942
Robert Z. Bancroft	Design of pilot plant for thiopene production.	Shreve	1947
Ulysses B. Yeager	Fuel technology.	Shreve	1952

Professional Degree Graduates in Metallurgical Engineering

Charles J. Petry	A study of roll pass design.	Enos	1947
Norman F. Hindle	Coordinating casting design with production.	Enos	1949

Appendix R

BS Graduates, Chemical Engineering, Purdue University

The following pages include the names of more than 99% of the B.S. graduates of the School. For the completion of this Appendix we used the information of the Alumni office of Purdue University and the old files of the School. In some years the reader may find that the total number of names mentioned here does not match the numerical data of Appendix M. However, it must be noted that the data of Appendix M are accurate. This discrepancy is due to our inability to verify the names of some of the graduates who have passed away, and due to incomplete records kept in the School for some years. Verification of each and every name in this list would have required a monumental effort by the authors. We apologize for any omissions.

1909

Benjamin M. Ferguson

1910

Emery C. Plank

1911

James G. Buckley
David R. Clark
Frederick A. Frankenfield
Oliver M. Harrison
T.H. Henry
Thomas C. Hubbard
Dean M. Jackman
Calvin Earl Littell
Chauncey E. McCoy

1912

Claus H. Best
Norman W. Cole
Wilbur G. Crane
Ernest T. Fisher
Mark M. Inskeep
Elbert F. Mosher
Lytle R. Parks
Walter W. Pettibone
Lawrence E. Power
James R. Turner

1918

Oscar H. Berger
Edward A. Foy, Jr.
William F. French
Lee M. Gutgsell
William S. Harrah
Maxwell O. Johnson
Frederic H. Lang
John D. Ong
Ralph E. Parks
Calvin P. Richter
Robbin Z. Smiley
Frank E. Steineck
Wallace B. Van Arsdel

1914

John E. Berns
Roland R. Bliss
Athol B. Cotton
Edward J. Gardner
Arthur B. Gerber
Herbert T. Himmelein
Ray V. Major
Merle R. Meacham
Arthur L. Miller
Charles G. Miller
Eugene G. Nutting
Roy E. Schmeded
Ralph W. Simpson

1915

Ulysses G. Gish
Harold E. Hollensbe
Roger W. Jackson
George S. Kenzler
Emmett J. Mendenhall
Silven R. Merley
Harry L. Miller
John T. Moore
Anson B. Nixon
Ralph C. Patrick
Percival G. Scott
Dorman H. Sims
James A. Waldamith

1916

John H. Adams
Horace B. Cosler
Glen Edington
Arthur C. Embshoff
Richard George
Alfred G. Gierach
Robert C. Hayes
Walter S. Leach
Leonard C. McCloud
Frederick T. McCurdy
Edmund S. Mills
Cecil C. Pults
Virgil M. Robinson
Edward H. Roy
James H. Scott
Edgar N. Weber
Samuel Wilner
Merritt M. Wood
Luren H. Suit

1917

Bennett L. Boon
Howard H. Beatty
Floyd F. Campbell
Yingchang Cheng
Ernest R. Crosby
Norman A. Fraser
Russell A. Hayworth
Louis E. Horat
Robert B. Lebo
Joseph H. Long
William L. Lundy
Donald J. Maveety
Theadore C. Meinhardt
Albert R. Pickett
Harrie C. Pierce
Eugene H. Rights
Carl E. Ruth
Raymond V. Simpson
Donald K. Stier
George N. Unger
Julius L. Wasson
Floyd S. Weimer
Horace M. Weir
Orville R. Westfall

1918

Earl R. Allen
Roy C. Bromelmeier
William E. Chandler
Leonard H. Crudden
Wilbur K. Dodd
Howard R. Doswell
Isadore W. Greengard
Joseph H. Lewis
Donald L. McCollum
Alvin E. McDougall
John K. Speicher
Raphall L. Stern
Everton E. Stidham
Luren H. Sult
Welker W. Wentz
David R. Wiggam

1919

Marion J. Archbold
Kenneth D. Ashley
Merle B. Chency
Chester S. Cutshall
Ernest H. Hartwig
Edward F. Hyde
Reid L. Kenyon
Paul A. McLeod
Edwin L. McMahan
Leon H. Nelson
Robert R. Nichol
Max H. Norris
Harold S. Redelsheimer
Louis B. Schofield
John C. Siegesmund
Fred C. Smith
Robert J.F. Whipkus
George B. Wilson
Harland D. Wilson

1920

Merwyn R. Barnthouse
Herman W. Blanchard
John E. Cady
Harold E. DeCamp
Romney W. DeVore
Donald L. Ferguson
John L. Ford
Harold M. Fraser
Fernand L. Gerin
Charles M. Hastings
Clearence L. Heck
George Hileman
Clearence F. Hile
Herman G. Horstman
Fred W. Kuhn
Milo C. Leifer
Allan C. Miller
Arthur L. Mohler
Bernard J. Niesse
Lawrence J. Purget
Gerald L. Reasor
Arthur M. Reeder
Henry J. Shea
Robert T. Simpson
Russell M. Stacy
Winchell R. Stephenson
Paul J. Strickler
Winfield A. Sutton
Donald H. Tilson
Watson W. Tranter
Clarence H. White

1921

Lester M. Bolander
Borden C. Booth
Don Brouse
Paul V. Brower
Ralph L. Custer
Vern J. Ele
Gaylord B. Estabrook
Frank M. Ferguson
George J. Fertig
Raymond F. Forbes
Raymond B. Freeman
Hillard C. Fretz
John L. Goldthwaite
Omer W. Greemann
Carl V. Hansen
Lyman F. Hedden
Claude L. Hippensteel
Harry V. Johnson
Walter R. Johnson
Leonard B. Lane
Franklin A. Lenfesty
Glennard E. Miller
Herbert S. Moller
Jay B. Mull
Charles T. Obold
Walter J. Plumb
Evans E. Plummer
Paul R. Quick
John W. Rhodes
Frank W. Shipley
Russell G. Slayter
Frank L. Taylor
Ming L. Tsao
Edward M. VanWinkle
Neil M. Waterbury
Elbert F. Weaver
Roy A. Weaver
Harry A. Williams
Earl O. Wilson

1922

J.R. Barrington
R.L. Bartley
Lloyd A. Bellows
H.H. Bendixon
Holbrook H. Botset
D.B. Burkett
J.P. Butterfield
C.C. Clogston
R.L. Cook
C.G. Couley
S.F. Daily
D.H. Dice
H.E. Ebheler
R.V. Ford
H.H. Frasch
Clifford C. Furnas
R.S. Gaugler
K.W. Greenan
Alan M. Gundelfinger
R.S. Hancock
Herman E. Hedderich
W.P. Heller
D.C. Hills
E.F. Hutson
B.H. Jeup
Arthur Kelly
Paul L. Kinney
J.F. Kinney
F.W. Lancaster
F.F. Laymon
William E. Lebo
P.C. Lugenbill
John F. McCarthy
J.C. McCullough
R.F. Marson
V.N. Morris
Garrett H. Peters
H.S. Reasor
Thomas M. Reynolds
W.T. Robling
J.R. Rohrer
Hunton D. Sellman
F.A. Smith
J.H. Tomlin
James E. Watkins
W.R. Woodhall
R.I. Wray

1923

Robert C. Becherer
Maurice M. Beckes
John E. Begert
Charles C. Blakeney
Walter H. Borcherding
Milo M. Bowman
Wallace L. Claypool
Robert P. Courtney
Maurice W. Daugherty
W.C. Davis
Francis C. Davison
Newton C. Dodge
William M. Duncan
John F. Dye
James G. Dye
Daniel L. Edlund
Marshall M. Feris
Fred E. Fishman
Russell E. Gleason
Bruce W. Gonser
Garnet A. Greeman
Herbert P. Grissner
Walter G. Hay
Clark R. Hayner
George V. Herrold
Endocen H. Hillman
Alvin W. Holmes
Raymond F. Holtman
George T. Koons
Elton P. Kramer
Robert J. Kryter
Horace B. Levy
J. Frank Lingeman
Eldred A. Long
Frank D. Martin
Alfred B. Matern
Wayne K. Miller
Williard F. Millice
Fred Myers
George O. Pierce

Wayne B. Roberts
Walter W. Scheumann
Robert M. Sisson
Theodore R. Stanf
George H. Stinson
Chig H. Sun
Paul M. Viemont
Dwight H. Walker
Alwyn C. Wheat
Maynard C. Wheeler
Russell C. Wiese
Earl W. Woodhall
Ralph D. Wysong
Charles P. Zergiebel

1924

D.B. Beck
T. Blanchard
J.J. Bosonitz
R.M. Briney
W.H. Craig
W.A. Gocke
W.W. Hawes
Earl M. Hawkins
Raymond F. Hine
R.H. Hobrock
C. Wallace Jackson
Edmin R. Janes
Paul R. Judy
Earl L. Keeler
Arthur Kelly
G.J.H. Klein
J. Koster
H. Land
R.W. Lerch
D.D. Merchant
L.C. Miller
F.R. Miller
A.F. Olivery
James C. Sackman
W.H. Steinhauer
Andrew Tomlin
H.E. Wang
W.H. White
W.H. Whittington
W. Clifford Witham

1925

C.A. Aldag
D.H. Baxter
Lynn W. Bonefield
E.J. Buczkowski
R.J. Bush
T.Y. Chou
H.B. Currens
R.F. Davis
W.E. Dittrich
J.H. Erwin
E.W. Evans
James M. Evans
Paul A. Evans
Theodore O. Ferkinhoff
J.L. Fitzgerald
W.R. Fuson
O.H. Garwood
D.W. Gatwood
Robert C. Goodrich
John E. Haines
Charles S. Hegel
H.A. Herrera
N.F. Hindle
C.C. Hooge
R.C. Hosterman
O.W. Kuehrman
George E. McLeland
Lambert J. Nejdl
N. Newton
S. Ostrowski
Frank W. Scott
Ralph E. Sheffer
Gary W. Skeels
Edmund R. Shodgrass
Raymond C. Spencer
P.W. Thompson
W.H. Voyles
J.E. Whallon
Maynard C. Wheeler
P.H. Wiegand
Leonard W. Yagle

1926

Alvin A. Augustine
Sidney G. Behlmer
Ernest R. Boller
J. Stephen Bond
Lindley E. Clark
Lewis A. Davis
Charles B. Foster
Ralph N. Hosey
Charles L. Hulswitt
Alton L. Jones
Roland E. Kohl
Delmar W. Lucas
Ronald K. Merritt
Louis R. Muller
Frank G. Norris
Wilfred Odom
Roland R. Paulin
Paul A. Wangerin, Jr.
Harold G. Wents
U. Byron Yeager

1927

Paul F. Bahler
R.C. Banta
George W. Billingsley
David W. Bridges
Meridith C. Cree
Howard P. DeVoe
Ralph W. Dornte
H.M. Ellis
Elmore R. Fahy
Burnell H. Figy
Russell S. Fisher
Thomas L. Fritzlen
Donald E. Gates
Laurence J. George
Virgil D. Hager
Joseph H. Hoefer
W.P. Holtzman
Raymond J. Hull
Paul W. Jones
Walter B. Kruse
Charles E. Lennox
Harold J. Malone
Hugh O. Meloy
Warren E. Phillips
William Platt
Willur E. Robbins
Lee A. Ross
Carl O. Schopp
George R. Slick
Godfrey E. Steel
James P. Stephens
Forrest D. Stoops
H.W. Sutton
Alfred H. Walbaum

1928

H.L. Beck
J.D. Burlie
Frederic W. Carl
C.F. Dean
Frederick H. Denham
John T. Eash
Thurlow G. Gray
C.L. Hirlinger
John M. Hodge
August B. Hoefer
Erwin A. Kohler
Richard L. Miller
W.F. Perkins
William F. Perkins
William C. Pritchard
Donald B. Roberts
Robert M. Wagner
Thomas C. Williamson

1929

Albert A. Azar
H.J. Bates
Nolan A. Curry
J.D. Davis
J.F. Foale
Leslie H. Gaston
Virgil F. Green
Roland E. Hauber
H.J. Heath
E.E. Keiser
K.P. Ketcham
H.C. Klein
W.A. McIntyre
R.L. Mansfield
R.W. Martin
E.H. Niederauer
Harold V. Nyland
O.W. Peterson
George M. Poole
Virgil A. Revert
Carl H. Rohrer
Theodore E. Saxman
John M. Scott
R.D. Springer
Clifford J. Swann
Thomas L. Tweedle
Clell E. Tyler
Robert D. Vickers
Horace C. White
John A. Wright

1930

C.M. Adams
H.M. Banta
Paul W. Bartholomew
James C. Beckett
Basil A. Berchekas
O.L. Biddle
H.D. Bitner
Thomas Blenkinsop
Clifford Bodenhafer
J.E. Brennan
R.A. Daily
Robert C. Daniels
William G. Duncan
C. Dixon Eagle
Julius Evard
Edwin T. Gerhart
S. Gernstein
Edgar P. Gregory
Joseph K. Haney
J.A. Herring
Roland R. Hinrichs
Arthur L. Hollis
Sigmund Jablonski
E.H. Kelsey
E.J. Kirkpatrick
H. E. Klein
Daniel B. MacLaren
W.A. Mason

T. Matthews
C.J. Merritt
J.W. Mitchell
L.E. Moore
Dwight C. Muir
W.H. Newton
R. Noreus
J.H. Noyes
J.B. Nuner
F.P. Robinson, Jr.
D.L. Sandretto
H.C. Shagaloff
Malcolm H. Small
C.M. Traylor
Kenneth O. Uran
L.A. Weaver
Herbert M. Weinraub
J.W. Wiggs
Francis W. Wood
Lawrence H. Wright
Otho B. Yoder

1931

P.R. Auvil
H.J. Baker
G.W. Baur, Jr.
Stanley J. Biela
R. Scott Bowles
K.W. Brossart
G.B. Brown
O.L. Bumpas
William L. Campbell
John D. Carmichael
Joseph A. Clusserath
K.B. Cox
Edward B. Crowell
P.H. Dailey
Harold J. Edmon
Archie Frew
J.A. Gray
C. Russell Haag
E. Russell Hayes
Edward B. Hodge
Ralph Hutchins
Alvern V. Johnson
R.G. Johnson
R.W. Kennedy
John R. Low
William W. McCullough
Roger J. Ralston
A.L. Raymond
G.L. Shore
S.M. Speier
R.R. Sterrett
A. John Still
Frank L. Street
C.B. Streightif
Oscar J. Theobald, Jr.
Robert J. Thrift
William O. Trownsell
Edward A. Ulrich
N.E. Wise
R. Thomas Zimmerman

1932

B.T. Alexander
Ralph E. Alexander
Herbert F. Anderson
George B. Bailey
Houston R. Baker
Phillip C. Baker
W.E. Ball
F.W. Ballman.
William B. Bassett
C.E. Beck
A.M. Bond, Jr.
Orphie R. Bridges
Edwin C. Brinson
Forrest E. Cannon
Arthur G. Cass
John R. Creager
J.D. Crosby
J.O. Darnall
W.C. Diehl
Arnold S. Doty
Charles.M. Enders
W. Gerard Fassnacht
Harold L. Gaunt
H.A. Hager
Rea I. Hahn
Harry T. Hallstein
Eugene M. Hamilton
Joseph C. Hamilton
Frederick H. Haney
Robert L. Heath
H.L. Hire
Vernon K. Hitch
D. Gordon Holloway
Clemens W. Holtman
E.L. Home
C.P. Kemp
Percy N. Klein
A.M. Lopez
George W. Lowther
Joseph D. May
A.J. Miller
T.E. Milligan
B.L. Postlethwaite
Willis J. Resiner
W.R. Richmond
H.L. Rubenkoenig
W.A. Savage
Lewis F. Scott
Harry L. Sechrist
H.L. Sittler
Ervin O. Stitz
Paul F. Trevor
B.C. Upton

1933

Richard H. Anning
Raymond W. Asbren
J. Baron
R.W. Barton
H. Bates
Raymond H. Bish
V. Blagrave
W.B. Cameron
Donald R. Carter
Stanley M. Cash
John T. Clapp, Jr.
J.B. Cleveland
K.D. Conn
David E. Cordier
Frederic H. Craven
L.H. Frew
Robert P. Greenberg
Russell T. Griffith
Raymond E. Hanning
Frederick S. Hill
Arthur P. Himes
Perry W. House
Samuel P. Hughes
Harry H. Hull
Robert H. Imes
E. Carl Jacobs
Williard H. Joslin
T.L. Kendall
H.J. Klein
Joseph Kovacs, Jr.
Frank Leckie
R.B. Leckie
J. Richard Lowry
Wayne E. Martin
Frederic C. McCoy
Albert C. Miller
Fred R. Motsch
Richard P. Newcomb
John K. Park
Stephen J. Parker
William T. Parks, Jr.
Phillip P. Reactor
E.D. Rollert
Edward M. Rothermel
Richard J. Roussean
Joseph I. Routh
Arthur F. Rupp
C.S. Sale
Albert F.R. Schmierer
Albert B. Scott
D. Shper
William F. Strong, Jr.
L.K. Studebaker
Henry G. Thoeming, Jr.
Matthew Van Winkle
J.E. Wheeler
F. Kline White
Edward R. Wright

1934

T.A. Ruble
Gabriel Baker
Andrew E. Baluk
Henry J. Becker
Fred H. Bergstedt
R.B. Black
Stephen C. Brull
Richard H. Burns
Joe R. Cain
Hamilton P. Caldwell, Jr.
George I. Calvert
Paul G. Carothers
M.E. Carruthers
William D. Cheesman
William L. Cheesman
G.A. Clapesattle
Alfred B. Clayton
George H. Cleveland
Henry F. Delong
Albert J. Diener
George V. Dupont
Robert A. Eber
M.A. Efroymson
Edmond H. Engelking
George W. Engisch
Bernard J. Esarey
H.D. Farrington
J.M. Gaskill
John J. Graham
Joseph W. Gray
John A. Grodrian
Arnold S. Grot
John B. Harrison
Grant Heap
Adolph Heeseman
George A. Hertzing
R.B. Hickey
Graydon E. Holdeman
Clarence Jacklin
Wescott C. Kenyon
F.T. Klopsch
J.J. Kozacik
Irvan R. Lady
Frank G. Lambertus
Fred C. Lehman
C. Robert Lillie
L.B. Losee
Darrel E. Mack
C.M. Mainland
Wayne J. McDanels
Charles S. McGahey
Edgar L. McKinney

Charles E. Mills
Francis C. Moriarty
Richard Y. Moss
Charles A. Murray
D.S. Payne
H.G. Pfafflen
George S. Purple
John F. Rahel
Frederick J. Resner
Max H. Reynolds
Harold W. Ritchey
David L. Robb
Charles D. Hoyt, Jr.
Emil G. Schmidt
E.F. Schumacher
K.I. Schwab
W.K. Sidwell
Russell H. Smith
Ralph R. Snowball
Donald C. Spice
W.J. Sprau
Jerome W. Sprauer
Walter R. Sterrett
F. Forrest Stretmater
J.W. Swezey
A.W. Taff
Carl D. Tchalo
J.D. Troyer
Otto A. Trzos
James W. Walker
Nathan Wellman
H.V. Wenger
D.J. Wolfe
Otto H. York
Paul S. Zoller

1935

Clarence B. Allen
Norman R. Atwood
Walter E. Bailey
J. Robert Behrman
Justin S. Blay
Harold F. Borger
George F. Bostwick
Calvin C. Brown
C.O. Brown
E.F. Bryant
D.R. Burtsfield
Leonard Byman
John C. Carl
B.B. Carr
David F. Carter
A.D. Carvin
Elmer J. Culp
J.L. Embrey
James W. Emens
J.E. Evans
George A. Fisher, Jr.
A.R. Gaus
William C. George
Lester S. Gibbs
M.N. Gold
Walter K. Graham
Arthur A. Grunwald
Wilbur E. Harris
Wayne W. Harvey
F.H. Heiss
M.W. Helm
E.B. Henby
Elizabeth Henius
John W. Hershey
George F. Hornaday
Donald C. Horsman
Harold E. Hostetter
G.E. Howkinson
Charles D. Hoyt, Jr.
Walter C. Huffman
E. Ikan
James M. Jansen
H.A. Johnson
Frederick E. Jones
Edward Kaufman
R.H. Kirkwood
John S. Kramer
Edmund E. Lange
William F. Lange
William H. Loftus
Mark H. Longenecker
John C. Lottes
William M. Lyles, Jr.
F. James McGrath
D.W. McQueen
Phillip N. Mann
Walter E. Martin
Lewis G. Matthews
Harold R. Monfort
Richard A. Moore
W. Clarke Morin
Richard T. Myer
T.K. Myers
Walter G. Newman
Esten B. Olsen
M.H. Orbaugh
R.E. Pauley
Clyde E. Prechter
James H. Prescott
Earl M. Reitz
E.F. Repp
Norman F. Schlameradorf
John O. Shive
W.E. Sims
R.B. Smith
Warren K. Smith
James F. Snider
Robert H. Stone
John T. Strawbridge
Jerome R. Thinnes
Pete V. Uran
Harold C. Weimer
A. Welty
Joseph K. West
A.M. Wightman
David C. Williams
J.K. Williams
L.B. Williams
J.S. Wright

1936

Charlotte S. Bennett
Robert H. Bowman
R.W. Bowman
R.A. Brayton
Jacob C. Browning
M.D. Brewster
William E. Bruse
William J. Burich
Charles H. Campbell
Richard E. Carr
W.H. Chambers
Edward C. Clark
Marion A Cline
Dean E. Colvin
John A. Coombs
Gearald Diamond
Paul A. Donaldson
George E. Ebbeler
Richard S. Egly
R.B. Ellsworth
Walter J. Ewbank
K.L. Farr
Joseph J. Farkas
C.H. Fellows
R.A. Fenoglio
Wilburn H. Fricke
Nelson C. George
Alfred M. Goodman
Paul E. Hamilton
N.E. Hays
Robert T. Henson
A.A. Heuer
Arthur L. Hodson
John M. Hummel
Harold Y. Hunsicker
Louis Janos
Gerald F. Johnson
Martin A. Johnson, Jr.
John F. King
H.M. Krengel
Carl G. Lindquist
Joseph V. Longcor
J.O. Ludlow
William H. Maxon
Paul G. McCord
Lawrence G. Molique
Frank W. Morgan
R.C. Morgan
Homer A. Moulthrop
Robert B. Null
J.F. Oldaker
F.B. O'Mara
John I. Peterson
John G. Ploehn
F.W. Read
Davis Read, Jr.
Keith M. Roberts
James N. Roper
Lyle Rothenberger
Robert O. Schmitt
R.V. Siebel
D.F. Sharp
Jacob H. Silverman
Raymond B. Smith
Richard W. Smith
Frank C. Smyers
J.E. Sutherlin
V. Tarquinee
John A. Tate
M. Vinstein
Ralph D. Webb
John Willy
L.A. Wood, Jr.
Orval A. Wray

1937

Robert F. Andres
James R. Beck
D.E. Black
E. Bluemel
Fred E. Bowman
Donald A. Brafford
Alfred W. Brandt
H.H. Brandt
Kenneth R. Brown
J.A.J. Burgess-Dye
Robert H. Burks, Jr.
Robert H. Chandler
Ernest E. Chipman
H.R. Christy
John A. Coddington
M.T. Cory
Laurence T. Dailey
Ray P. Dunn
F.S. Engelking
J.G. Engle
G.B. Felix
Clark A. George
J.W. Gustaitis
William M. Harmon
Dale A. Harris
Rogers A. Hartman
John M. Heinen, Jr.
Heiman I. Hersh
Clark Holloway

Howard J. Homeyer
George P. Humfeld
R.S. Humphreys
William T. Hunt
Otto F. Hunziker, Jr.
E.K. Jones
R.L. Jones
W.R. Kidder
R.W. Kirkpatrick
Robert B. Klopfenstein
Hugo Lanuti
David H. Luedmann
Arthur W. McAlpin
Bruce A. McCandless
Harry H. McNary
R.J. Magill
Loren J. Miller
Ralph E. Morgan
Harold N. Myers
R.M. Nichols
F.G. Nicholson
Harold J. Oberding
R.D. Obede
Charles M. Offenhauer
George Perkins
Charles R. Petticrew
R.F. Phillips
Richard H. Pickard
Arthur E. Poarch
Robert M. Polstra
R. Pugh
F. Mac Rahn
Charles E. Reiley
Samuel H. Riggs
Frederick W. Robinson
Wallace U. Seiler
H. George Shrimp
W.L. Sibbitt
Charles Slesser
Charles D. Smith
William R. Smith
Ronald W. Staley
P.H. Sunnes
E.C. Svendsen
C.E. Tillett
J.C. Vaughan
J.R. Wergin
John E. Werner
Norman E. Westphal
Robert C. Wheeler
Chester S. Wlekinski
William S. Wood

1938

Harold H. Anderson
Harry W. Anderson
Harmon W. Arnold
W.E. Bartling
M.L. Barrett
William H. Barry
James R. Bateman
Robert J. Beck
Robert D. Best
Edwin A. Blair
Edward Bluemel
Roe C. Blume
Robert O. Borton
Howard S. Bowen
James D. Bowman
Fred L. Brower
Dalton V. Brunsdon
Oscar O. Buschmann
James H. Cronk
Earl R. Diggins
Charles W. Dudding
P.H. Egli
J.R. Engleton
John R. Favorite
Clarence W. Gault
Donald J. Goodman
J. Ward Greiner
Raymond P. Griffenhagen
Homer V. Grubb
John J. Hast
Richard W. Hockman
Robert Isenbarger
W. Byron Jenkins
M.J. Johnson
B. Karnisky
John F. Keppler
James B. Kirkpatrick
Edward J. Klein
H. Koenigsberg
James R. Kriegbaum
Robert Lloyd
J.M. Lyles
Edward H. Martin, Jr.
Paul J. Masanz
Donald E. Mayo
Charles G. McCollough
George E. McCullough
Clair S. McDonall
H. Metz
Raymond A. Moses
Harry G. Noll
Henry F. Nolting, II
Eugene G. Nutting, Jr.
Theodore L. Oberle
H.J. O'Neill
Willard A. Olsen
Jerome H. Ottenweller
Robert E. Pahler
John T. Patrick
Marvin R. Paullus
Harry Pforzheimer, Jr.
C. Harold Phillips
George D. Pratt
C.H. Prien
Robert J. Purdy
Charles A. Reichelderfer
William S. Reveal
G.F. Roquemore
J.C. Sanders, Jr.
Ray C. Schenk
William R. Scholle
Robert H. Schueler
Frank J. Scott
Lewis C. Sellers
J.I. Shafer
W.D. Shonkwiler
D.A. Smith
John R. Smyth
William M. Steinfeldt
Robert F. Stevens
C. Frederick Strom
R.A. Suesse
J. Leonard Taylor
C. Conrad Thiel
A. John Vitale, Jr.
H.B. Wantland
R.W. Welborn
C.V. Ward, Jr.
Herbert F. Wiegandt
S.C. Williams
Rudolph C. Woerner

1939

Charles J. Anstrand
Lorenzo E. Armstrong
Booker M. Ashbaucher
William H. Barry
Thomas G. Beck
Charles J. Benner
Jack M. Berry
James W. Best
David Blitz
Harold H. Bonewitis
William F.R. Briscoe
Henry E. Burkhardt
Edward N. Burnett
Lee S. Busch
Daniel D. Cameron
Charles J. Camp
Eldon D. Carr
Jack W. Castino
John M. Ciborski
Charles M. Coe
William S. Craft
Garland Craig
George J. Dell
William J. Devaney
William H. Dietch
James H. Dinius
Morey J. Doyle
Dick Duffey
Robert F. Duncan
Eugene H. Duval
Allen G. Eickmeyer
Robert A. Fowler
Thomas F. Frangos
Jack N. Frazier
John A. Fulwider
Peter J. George
Burton A. Gerpheide
John W. Greenis
Charles W. Hamilton
Maxwell E. Harris
Clinton W. Hartman
Ralph M. Hill, Jr.
Kenneth G. Hookanson
Anton A. Hrast
Glen V. Hutchens
James H. Jacobi
Edward J. Janusz
Jesse H. Jones
Milo W. Jones
Robert D. Juve
J. Keith Kirkpatrick
Joseph H. Kline
Floyd M. Knowlton
Charles E. Lacy
Walter D. Lahey
Charles E. Lang, Jr.
Clark Langworthy
Alan R. Lennox
Harold E. Lewis
John D. Longfield
Harold W. Lownie, Jr.
James E. Ludberg
Charles F. Lumm
John H. Lux
Meinert C. Magnussen, Jr.
Alvin T. Maierson
Chester B. Malysiak
Don S. Martin, Jr.
Sam L. McCormick, Jr.
William D. McEachron
Richard M. McGhee
Robert E. Meiser
Dick H. Meissner
John H. Miller, Jr.
Robert L. Myers
Rex W. Oyler
John M. Parks
Allison R. Peirce
Robert A. Peterson
Charles J. Petry
William F. Platt
Myron A. Pugacs
James M. Rosenberg
Jack M. Rudolph
Robert H. Schrohe
Robert R. Shellhamer

L.W. Shellhamer
Frank W. Silva
L. Wayne Sink
John F. Spitler
Leroy F. Stutzman
Earl L. Tyner
Reign C. Ulm
Robert A. Voigt
Charts S.C. Wagner
Donald E. Waid
Robert B. Wehrung
Kenneth E. Werling
Byron H. Werner
Loren L. Whitney
James M. Willis
Bruce D. Witwer

1940

Eldon L. Armstrong, Jr.
Kenton Baldock
Roy C. Becker
Warren A. Beman
E. Ellen C. Bossong
Raymond Bossong
Carter C. Boyd
Norman H. Brubaker
J.D. Bush
Ethel E. Carter
Richard W. Burks
S. Lee Carter
William E. Catterall
Hiram J. Coe, Jr.
Lewis B. Counterman
Chien Chu
John C. Curnick
Paul H. Darmer
Theodore E. Dann
James O. Davis
Hartley C. Dellinger
Paul W. Edwards
Andrew Elmlinger, Jr.
Edward L. Erickson
Herbert F. Fishburn
James H. Fisher
Herbert A. Fuente
Jacob M. Geist
Harold R. Gingher
Fred L. Granger, Jr.
Margaret C. Gran
Milton W. Gregory
Robert E. Hall
Everette O. Hann
Van Deursen Harms
William J. Harris
Oral C. Hathaway, Jr.
G.W. Hearne
Donald P. Heath
William D. Hedden
John M. Heeter
Courtland M. Henderson
Louis M. Hirsch
Francis B. Hollowell
Robert E. Howard
Thomas J. Hutchison
Cyrus R. Jones
Harold N. Jones
Maurice M. Karnowsky
Stanton Knotts
Clarence E. LaLiberte
Kenneth L. Landon
C.V. Larch
Richard E. Long
Charles B. Luce
Carl M. Ludwig
Carl F. Lutz
George Malinoff
John R. Mann
Robert J. McGrath
Joseph S. McKinsey
L.R. Melser
Charles B. Metz
Donald W. Meyers
Perry E. Miller
John P. Moehling, Jr.
Maurice D. Neptune
Samuel A. Noblet
Joseph F. O'Mahoney, Jr.
Norbert H. Olsen
George A. Omohundro
Carleton B. Patrick
Robert A. Phillips
Frederick A. Prange
Joseph Price
Arthur W. Rifenburgh
Paul V. Riffin
Charles G. Ryder
Edward L. Sanders
Louis W. Schmidt
Robert E. Schornstheimer
Robert J. Schrader
Charles D. Schroeder
Harold J. Segrave
David A. Sherman
Sam W. Shiley
Marshall Sittig
John H. Smith
Hugh M. Snider
Robert A. Specker
John Staley
Raymond C. Stephan
Brady L Stroup
Robert C. Stroup
Michael Swaha, Jr.
Theodore C. Swanson
William B. Szabo
Victor B. Thegze
Herbert C. Thober
Matthew S. Thomson
Robert E. Ulrich
William E. Unger
Robert A. Verner
Darwin C. Wamsley
Preston H. Weisman
Samuel R. Wells
John W. Whitson
Myron F. Wildish
Harvey D. Wilmeth
Edgar E. Wilson

1941

Edwin C. Aldrich
Lloyd G. Alexander
Harry W. Andrewsen
R. Stuart Armstrong
Orlen E. Baker
Robert Z. Bancroft
Eugene Bell
Reinhart H. Bergstedt
Robert K. Bonnett
Donald E. Boynton
Carson F. Buckman
Robert S. Campbell
Donald M. Chenoweth
Alexander B. Clarke
Ernest Cortissoz
Walker Curry
George D. Dewey
Ross A. Dickey
Robert W. Donahue
Roy E. Dunn
Charles G. Edwards
Richard M. Edwards
Willard E. Fabing
Eugene M. Fauber
George G. Ference
Robert E. Finch
Paul S. Forsyth
Burton H. Gedge, III
Bruce W. Gibson
Robert E. Gleason
Alfred C. Goerss
Brage Golding
Fred C. Goldsmith
H. Ray Hall
George E. Hamilton
Olin M. Herner
Lansing M. Hinrichs
Thomas E. Hoover
Mark K. Howlett
William D. Huls, Jr.
Charles H. Jackson
Howard H. Jones
George R. Jungerman
William S. Kennedy
Kenneth N. Kettenring
Jack V. Kinsey
Frank B. Kuchinaky
Justin T. Long
Edwin M. Luedeka
R. Kenneth Mack, Jr.
Kenneth F. Machacek
Arthur J. Malcomson
Robert G. Massey
Victor T. Mavity, Jr.
Robert B. McCrum
Charles A. McFadden
William C. Mertz
Carroll J. Miles
Ben F. Miller
Robert M. Miller
Bruce W. Morgan
Walter E. Moss
Benjamin L. Moulthrop
Charles E. Myers
Ronald B. North
Richard H. Paul
Harry F. Poll
Leon E. Primeau
Francis E. Reese
Jose A. Sacasa
Earl C. Schrader
John M. Sell
Richard A. Spaker
Richard C. Springgate
George W. Stanford
Thomas J. Stephens
Roy J. Taylor
Francis W. Theis
John C. Van Horn
Willard E. Vernon
Charles R. Welter
Ralph I. Williams
August A. Winkler
William A. Woods
Anthony A. Yankowaki

1942

Bruce E. Adams
Robert E. Ahlf
Earl L. Alexander, Jr.
John F. Amos, Jr.
Michael J. Antal
Carl M. Anderson
Clark S. Armstrong
Lloyd W. Bartlett
Richard E. Bauman
Jerome D. Beale
William T. Bell, Jr.
Reid M. Bennett
James A. Bock
William J. Borne
Charles A. Borton
John C. Boynton

Joseph E. Bradbury
James W. Brameier
Frank M. Branner
Charles B. Breedlove
Paul L. Breyfogle
Donald T. Brophy
S. Robert Browar
Nelson E. Burrin
Hugh A. Burwell
A. Wilson Byer
Lewis S. Campbell
William A. Campbell
Robert R. Cartmell
Joseph E. Cettel
Herbert E. Chinworth
R. Morrison Click
William R. Clingenpeel
Fred R. Cordug
Thomas H. Curry
Edward L. Czenkusch
Willis E. Dake
Charles F. Dangelmajer
Oscar R. Daum, Jr.
John R. Day
William H. Day
Ray J. Dearth
Robert E. Depuy
Encel H. Dodge
Hiram S. Edwards
John P. Edwards
John Ember
Ned H. Engelhart
James S. Evans
Richard L. Fee, Jr.
William R. Feik
Kenneth W. Fisher
L. James Ford
Maurice H. Foster
Frank H. Freiherr
Charles Friedman
David A. Frost
John R. Galloway
Jack Gatewood
Richard P. Gerke
Jack M. Godsey
Lois M. Goerss
Charles L. Good
James N. Good
Henry O. Graff
C. Clay Hale
Arthur A. Harban
William H. Harlacher
Bronson O. Harris
John W. Hawkins
James M. Henderson
Donald O. Hensiksen
Eduardo R. Hernandez
Vaughan C. Hill
Robert F. Hinderer

Gerald B. Horn
Charles M. Hoskins
Mark K. Howlett
Alfred W. Hubert
Arthur H. Huisken
0. Bryan Husted
Alfred L. Jackson
Dale L. Jackson
James Jay
George D. Johnson
Edward L. Johnstone
Robert C. Jones
Robert D. Kahn
Harry W. Kellar
Clifford E. Kent
Abram Kessel
James R. King
Charles C. Kirchenbauer
Wade W. Knipp
Richard R. Kraybill
George A. Kruder
Robert A. Kuntz
Leonard Kurland
Frank B. Lake
Edward H. Landgren
Edward M. Lang
Frank L. Lanuti
Maurice B. Lawler
Philip J. Leininger
David H. Lennox
William H. Leukhardt
Edward C. Lewis
Ting L. Liang
Edwin H. Lougher
Gordon H. Lovett
Walter H. Lupke, Jr.
R. Emerson Lynn, Jr.
Norman E. Marosick
LeRoy J. McAllister, Jr.
Erwin W. McCullough
Lewis A. McDonald
Stewart A. McHie
Donald W. Meier
Harvie M. Merrill
Jesus Mesta
William D. Millard
Robert F. Miller
William C. Miller
Alan T. Morphew
Stanley H. Munger
Claude M. Murray, Jr.
Randall T. Murrill, Jr.
William E. Musselman
Lawrence Myers, Jr.
Emil G. Nasser
Joseph F. Neff
Ralph O. Norcross
C. Thomas Nugent
Morris E. Packman

Wallace R. Parker
Edward L. Paulsen
Samuel A. Pence, Jr.
Philip A. Phillips
Arthur F. Pier
Morgan C. Plummer
David L. Richardson, Jr.
Carl A. Rivasi
Norris G. Robison
Janet Rossell
Richard L. Salzer
John Santos
Robert P. Schaaf
John M. Schnaible
Dale C. Schumacher
Clarence E. Schwartz
Carl F. Shedrick
Albert D.V. Silva
Bernard Silverman
George H. Singer, Jr.
Richard C. Smeltzer
William D. Southard
Richard E. Spangler
William E. Spengler
Stevens C. Sperling
Robert P. Stambaugh
Walter H. Stanton
John L. Steele
Chester A. Stoeckel
Henry H. Striby
Harry T. Sutherlin
William L. Swager
C. Donald Swaim, Jr.
Roy J. Taylor
Ernest H. Tessmer, Jr.
Francis E. Thompson
Alphonso A. Topp, Jr.
William H. Traylor
L. Daniel Tschopp
Gerhard Vah Biema
Robert J. Visin
William C. Walker
Donald L. Wasson
Louis J. Wdowka
Phillip J. Weaver
Richard R. Weichel
Milburn S. Weir
William F. Welsh
Clifford C. Whiting
Howard J. Wilhoyte, Jr.
A. Eugene Williams
Norman Witte
Charles A. Wulf
Uriel L. Yoder
Frank J. Zehnder
Dwight E. Zeller

1948

John R. Arnold
John W. Badger
Arthur S. Barab
Ernest C. Bernhardt
Paul E. Bohm, Jr.
George S. Bond
Robert E. Buntain
Louis Caldarelli
Charles A. Clark
Richard M. Clawson
Charles W. Cunningham
Robert E. Donaldson
George C. Eastin, Jr.
George A. Emerson
Theodore L. Etherington
Frank F. Ferry, Jr.
Hubert H. Forbes
William E. Fremgen
Donald G. Frier
Paul E. Geiser
David M. George
Merritt M. Goff
Joseph J. Gregory
Alan U. Hageman
William A. Hammer
Robert H. Hass
Harry E. Hedderich
Robert W. Hemmingsen
David F. Hinshaw
Samuel C. Hite
Burt F. Hofferth
Pete F. Hohnhaus
Arthur P. Hunter
David C. Hyde
William E. Johnson
Vercoe C. Jones
John L. Kallok
Dale F. Kiester
Charles Knue
Walter Koester
Karl Kumlander
John L. Laudenberg
Charles B. Leffert
Richard D. Lerner
Ramon I. Lindberg
Charles S. Lynch
Thomas T. Makielski
Daniel D. Mast
William D. Meakin
Peter P. Mellio
Harold R. Miller
Richard E. Million
William L. Morgan
Alan T. Morphew
Karl J. Moulton
Albert J. Mullin
Carroll R. Nees

Donald Nielsen
Thomas M. Nourse
Ralph S. Olson
Albert E. Perkins
Carter E. Porter
William Resnick
Allan E. Reynolds
John F. Roorda, Jr.
Kenneth G. Roquemore
Fred D. Rosen
Max Sacks
Danilo G. Santini
Arthur F. Schlueter
Charles W. Showalter
Richard C. Sleeper
Harry L. Smith
Matthew E. Smith
Richard M. Smith
Robert P. Smith
Carl G. Steitz
Samuel N. Stevens
Hugh R. Strong
John J. Tirpak
Constantine L. Tsaros
Tsu-Kan Tsui
Leonard L. Vick
Arthur H. Vogt
Luther A. Warren
Philip J. Weaver
Edward P. Wells
John B. Wells
Henry J. Wilkens
Robert A. Winslow
William R. Wuestenfeld

1944

Edwin R. Arbegust
C. Daniel Bopp
James R. Bowen, Jr.
Andrew Bremer
Wayne B. Brewer
Neubeme H. Brown, Jr.
C. Marshall Bush
William J. Butler
Robert I. Carlson
David D. Coffey, Jr.
Charles Crooks
Howard W. Davis
Paul T. Davis
Forrest G. Day
Edward Del Rio
William J. Del Rio
Alfred C. Dumrose
Edwin F. Edwards
John W. Faust, Jr.
Louis A. Fischer
Leighton E. Fisher
Robert E. Fischer
John D. Flex on
Robert J. Formanek
W. Ferrell Forsyth
Frederic S. Fowler
Walter E. Freitag
Conrad L. Gaunt
Donald P. Gentry
James A. Green
Paul W. Grosser
William H. Guernsey
Donald E. Haase
Robert Hansen
Stephen Humnicky
Robert L. Jaegly
Lloyd P. Jeske
Theodore E. Kline
Gerhard Langer
Frederic R. Lloyd
Albert L. Ludwig
Edward E. McCombs
Robert E. Metcalf
James G. Mitchell
Richard E. Mitchell
Herbert H. Noren
John F. O'Brien
P. James Perille
Henry R. Roberts
Albert F. Ruehlmann
H. Ray Schmidt
Ross O. Shideler
Paul A. Steinkritz
A.R. Stoltenberg
Ralph E. Truax
William H. Tyson, Jr.
Gerard N. Vriens
Robert E. Walker
John P. Weir
Allen D. West
William H. White
Richard K. Wildermuth
James E. Wilson
Frank C. Wise
John L. Woolling
Andrew J. Wright

1945

Glenn A. Arter
Albert J. Barnes
Robert A. Baugh
Harold E. Boren, Jr.
Ralph V. Braun
L. Doten Bush
William P. Conant, Jr.
John W. Conyers
Robert M. Currie
Vincent B. Diebold
Edward M. Diss
Robert C. Duncan
John H. Gantz
Calvin C. Gaynes
William J. Greer
Robert A. Hard
Wilbur Harpenau
Robert E. Hathaway
Hugo C. Heinemann
George R. Helffrich
Paul B. Hessert
Betty J. Holmes
John H. Kenefick, Jr.
Vincent Kenny
George R. Koenig
Walter C. Kohfeldt
Wilbert M. Lair
Milton C. Lauenstein, Jr.
Eugene J. Long
John M. MacDonald
Richard K. Major
Richard L. Marion
Betty H. Martin
Kenneth C. Matthews
Robert L. McIntire
William E. McKinney
James R. McMillen
David E. Middleton
John R. Miller
Walter R. Pavelchek
John P. Pierce
Robert F. Plank
Albert J. Pleatman
Alfred M. Pleatman
Ardath M. Prantner
Robert F. Purcell
Richard S. Reed
Frank H. Riley, Jr.
Charles R. Rohn
William F. Scanlan
Charles E. Schmoekel
Henry B. Schroder, Jr.
Richard Schweinsberger
Warren R. Sedlacek
James L. Shelton
Clifford H. Springer
Alejandro Torres
Virgil G. Trice, Jr.
Gerald F. Ulrich
Willas L. Vermilion
David A. Vogel
Gerhard J. Vogel
John J. Wahl
Richard E. Walker
Douglas R. Weck

1946

Oscar R. Buehler
Betty M. Carlson
Barbara A. Cropper
Richarg G. Dalbke
Glenn K. Dippon
Betty C. Duncan
Laurence H. Earle, If
William O. Emde
Russell D. Evans, Jr.
Eldon L. Graham
Jerrold G. Hedin
James B. Henderson
John F. Horner
James D. Johnson
Rudolph E. Kottemann
John S. Lamont
Robert Luedeking
Harold E. Marsh, Jr.
William L. Mason
Howard K. McLaughlin
Leslie B. Moberly
Arnold N. Nawrocki
Paul P. Pinckley
Charles H. Rivers
Henry R. Rossen
Harold E. Saewert
Dwight Sanderson
Elerington Saunders
George M. Stephenson, Jr.
Robert R. Stewart
C. David Sursa
Albert S. Tavenor
Robert C. Thalheimer
John R. Thornberry
Willas L. Vermilion
Paul J. White

1947

Robert H. Altherr
Alfred C. Anderson
Eugene A. Andre
Brandt H. Beckett
James C. Bell
Ben T. Bernacchi
Eleanor A.B. Bernacchi
Julian R. Bishop
George T. Booth
Helen L. Borton
Edward D. Boston
Robert W. Brooks
Arthur E. Brumfield
Richard F. Buchholz
Donald G. Bunnell
F. Glenn Bushey
Robert V. Buts
Howard E. Carlson
William G. Carter
Lewis N. Case
Joseph W. Clark
Thomas H. Coffing
Fredric M. Cooper

Eugene D. Crittenden
Alfred G. Cummings
William H. Cummings
Richard G. Dalbke
William K. Daniel
Benigno M. de Dereyra
Donald A. De Tatras
William L. Dolch
Robert F. Drees
David M. Eckman
William K. Fawcett
John M. Fisher
Samuel L. Ford
Marilyn G. Forney
Robert C. Forney
Andrew A. Fronczek
Douglas J. Gammie
Glenn H. Gets
Mabel M. Glenn
Louis H. Going
John E. Goddemote
John R. Green
Paul V. Greenfield
L. Eugene Grosh, Jr.
Harold Haidt
Edwin F. Hall
Donald V. Hanlon
Charles T. Harmon
Herbert A. Harrington
David C. Hartley
Laurence P. Hess
Donald H. Hessling
James B. Himes
Charles E. Hoke
Finley A. Hooper
Arthur H. Hussung, Jr.
Harold B. Igdaloff
Thomas E. Ingels
Donald L. Johnson
Hobart M. Johnson
Robert D. Johnson
Henry W. Kaak, Jr.
Robert F. Kalmbach
John R. Kendrick
George F. Kenworthy
Hugh E. Klein
Robert W. Klein
Joseph C. Kotarski
Kenneth H. Krieger
William A. Kuhn
Charles L. Leamy
Forest L. Leighty
George H. Link
William W. Lowe, Jr.
Philip G. Magner, Jr.
Frank F. Mauro
John R. McWharter, Jr.
Ronald R. McVay
Robert M. Mendelson
Francis T. Micklich
Roy W. Miller
Paul Moll
David W. Montgomery
William C. Moser
Robert P. Murphy, Jr.
Darrel O. Neidigh, Jr.
Brantley I. Newsom, Jr.
Bruce C. Olmsted, Jr.
Richard R. Pickett
Edward Rapkin
Robert E. Rawlings
Herbert E. Rissinger
Elwood C. Rogers, Jr.
Egon H. Rohr
Kermit E. Rosenthal
Robert L. Saxton
William F. Schmidt
James K. Seabright, Jr.
Waldemar B. Seefeldt
Paul H. Seehausen
Charles L. Seely
Evan P. Shea
Davis M. Shryer
Ray C. Smith
Max R. Spencer
John E. Stewardson
Wilfred H. St. Germain
Donald A. Stoltenberg
William J. Thiel
Carmen V. Thomas
John W. Tierney
Timothy L. Tilton
William A. Tinsler
Clarence Y.C. Tom
Max A. Tuttle, Jr.
I. Slack Ulrich
Thomas A. Valvoda, Jr.
William D. Wagers, Jr.
Gustav Warner, Jr.
John F. Whalen
Jesse M. Wright
Sinesio A. Zagnoli
Robert J. Zastrow
Jack D. Zeff
Edward J. Zeigler

1948

Stuart T. Allen
Henry K. Arnold, Jr.
Charles E. Atwell
Lowell W. Austin
John F. Babbitt
Ford G. Bair
Glwynn R. Baker
Frank J. Batug
Howard F. Bauman
John W. Begley
James W. Bellonby
Joseph M. Berhle
James S. Benson
William F. Binkley
James M. Black, Jr.
Robert E. Blatt
Ned C. Boatright
Stanley A. Bobrowski, Jr.
John E. Bossong
Max R. Boyer
William J. Boyne
Keith E. Bradway
Wallace E. Brede
David M. Brenner
Martin J. Brown
James R. Bumke
Donald S. Bunin
G. William Busch
Warren T. Buschmann
Leo L. Cavender
William H. Chilton
D. Richard Clearwater
Robert W. Cochran
Morris I. Cohn
Harold E. Cook
Robert O. Crisler
Robert P. Crooks
I. James Cummings, Jr.
Charles A. Davis
John L. Day
Thomas B. Dellinger
Floyd E. Demmon, Jr.
Charles A. Doan
George M. Doyle
Robert J. Eastman
Keith H. Edmundson
Ralph F. Egli
Robert J. Emerson
E. Bruce Euchner
George R. Fairhurst
Jorge Fernandez
Robert C. Fishback
John W. Fleck
Charles F. Foster
Charles N. Foster
Donald P. Foundriat
Robert M. Franklin
Osborne Fremd
Raphael Galerman
Harold G. Garman
Robert F. Gasaway
Herbert V. Gawthrop
Martin O. Gernand
John F. Gumpper
Albert A. Gunkler
Clarence M. Harper, Jr.
Gilbert R. Harr
Richard E. Haskell
Edward W. Hausburg
George P. Hawley
Cyrus C. Highlander
Frank P. Holloway, Jr.
Alan D. Holmes
Perry A. Hopkins
Harold R. Horner
Francis G. Hosimer
S. Garry Howell
Robert C. Huber
Keith G. Huizenga
James F. Hunt
James M. Jacobs
Edward A. Janis
Janis E. Johnson
Milton Kaplan
John S. Koegle
Michael Kovalow
Robert W. Kropf
Harry W. Kuhn
Kenneth F. Lantz
Stephen D. Lathrop
Donald A. LeachJr. ,
Herbert B. Lewis
Roy E. Lockhart
William M. Lyerly
George W. Lyon
John K. LytleJr. ,
Donald H. MacDonald
Wendell E. Mann
Robert L. Mannfeld
Harry G. Matson
Melville M. May, Jr.
Stuart G. McGriff
John D. McKenzie
Ralph M. Moorehead
Maximo W. Morales
George J. Morgan
James E. Murray
John R. Myers
Charles R. Nash, Jr.
Paul L. Nevil
J. Robert O'Ferrall
John J. O'Grady
William J. Ohan, Jr.
H. Cecil Oliver
G. Raymond Olsen
George E. Palmer
Clyde E. Parish
Albert N. Peters
Jack S. Proseus
Alice W. Pruiss
Carl E. Pruiss
Norman W. Pruitt
Raymond R. Rankin
Levi E. Ratchford, Jr.
Herbert L. Rawlings
Francis H. Ricks
John E. Rogers
J. Norbert Rollin

Fred Rosenbloom
Vernon A. Rutherford
Norris L. Sample
Zafer A. Sawwaf
William S. Schubert
Rudolph W. Schuler
Norman M. Shapiro
Thorton D. Skaggs
Gerard C. Smith
Norman W. Snow
John P. Snyder
Vincent P. Stallings
Richard A. Stober
William L. Swihart
Lonnie J. Thomas, Jr.
E. Arthur Thompson
George E. Thompson
James E. Thomson
William P. Thomson
Dorr E. Tippens
Howard P. Voth
Edward T. Walford
Robert C. Wells
John N. Whelan
Harold E. Whitlock
Foster C. Wilson
Leonard R. Wood
Stanley Yakowicz
Earl V. Ziebell
Agustin Zorrilla

1949

Janice J. Allison
Vito P. Apkenas
Lawrence J. Barello
James R. Barrington
Dan Ben
Donald V. Berchtold
Melvin Bernstein
John H. Bins
Jim N. Bohn
Lawrence P. Bowers
Marvin E. Bowman
Henry Y. Braddock
Edward E. Bressler
James M. Brown
Thomas R. Brown
William F. Brown
Bruce H. Bryan
Robert L. Bryant
Edward W. Buerger
Edward A. Burkhardt
Wilbur E. Campbell, Jr.
James W. Canan
Edward D. Carlton
Richard V. Carmer
Franklin E. Caskey
Gene E. Catt
George W. Chaille
Tai Siang Chao
Kenneth M. Christensen
Howard F. Christner
Clarence B. Clark
Charles H. Clifford
Irving A. Cohen
James S. Coleman
Harry R. Colgate
Paul Comiter
Justin F. Cooper
John B. Crenshaw
W. Brandt Crooker
William T. Crow
Keith W. Curry
Theodore W. Cutshall
George Danchi
Kenneth W. Davis
John M. Dempster
Talbott Denny
Clarence W. Ditton
David G. Driscoll
Donald Duane
Harry W. Eikenberry
Norman M. Ewbank, Jr.
John L. Federman
Robert D. Ferrell
Isadore Fogel
Ralph G. Fox, Jr.
John E. Frank
Richard W. Froelich
George G. Gale
Norman B. Garnett
Frank J. Gavaghan
Marling G. Geiger
Walter E. Gerke
Nicholas A. Gimber
George A. Green
Paul Greenberg
Lin H. Griffith
Robert J. Groben
John J. Guyer
Sanford N. Harrod, Jr.
Jack Oliver Harshman
Robert E. Hartshorn
Henry J. Hess
Harold J. Hileman
Clyde R. Hiles
Barton L. Hinkle
Duane F. Hogsett
William T. Hollar
James E. Hoover
Charles L. Huppert
Ralph H. Joers
Howard E. Johnson
Ernest S. King
Robert L. Kinney
Donald R. Klang
James E. Klipp
Robert G. Koegler
Robert S. Kollman
Howard L. Landon
William C. Lawall
Louis B. Lesem
Sherwin Lewis
Angelo J. Lidon
Alan H. Lobley
Walter J. Lutz
Charles H. Madge
Aron S. Mandelbaum
James A. Margendant, Jr.
Ralph A. Marks
Frank T. Mathews
James B. May
Ernest E. McClellan
Robert A. McGlasson
James O. McKelvey,
Robert C. Melberg
Morris V. Merchant
Jerome A.W. Miller
Robert S. Morgan
Alfonso V. Murguia
John Nasser
S. Albert Nesbit, Jr.
Maxine S. Nichols
Per Hallvard Nilsen
Lee J. Nindle
Robert F. Nootbaar
Myron Norton
Arthur L. Olender
Paul F. Oreffice
Leonard V. Parent
John K. Patterson
Richard E. Perkins
Walter W. Peter
Louis S. Phillipp, Jr.
Leonard R. Piasecki
Joseph P. Piers
Donald H. Ping
Robert L. Pioli
Henry J. Ramey, Jr.
Richard A. Reeves
Fred L. Reig, Jr.
Charles I. Reynolds
James H. Roberts
Leland H.S. Roblee
William H. Rodewald
Edward J. Rubin
Ronald C. Ryan
Samuel Salem
Robert E. Salveter, Jr.
Robert D. Sanford
James R. Saunders
Edwin D. Schapiro
J. Kenneth Scheil
Carl J. Schleck, Jr.
Leon R. Schlotzhauer
Donald Schnedeker
Robert T. Seith
Douglas F. Shearer
Otto P. Sheller
Stanton V. Sheppard
Glenn A. Shultz
Marvin Silvern
Frank A. Sinnock
Floyd M. Smith
Thomas H. Smith
Edward R. Sokolowski
Charles W. Spinn
Wendlin D. Steele
Eleanor L.B. Steiger
Harold E. Stelling
Edward E. Stephenson
John V. Stinerock
Stanislaus Stryjewski
Chester F. Sudda
Robert J. Sutton
James C. Swihart
Clinton B. Tharp
Charles B. Thompson
George E. Thompson
Marion E. Tislow
Arthur L. Treisback
William G. Tuscany
James J. Uebelhart
Daniel A. Uland
George J. Vans
Kenneth L. Varley
Herman D. Von Gunten
Robert H. Waixel
Robert B. Walters
Robert L. Warden
Edward F. Waszak
George M. Watt
Lester G. Weber
John E. Welsh
Harry B. West
Robert E. Wilkinson
Carl L. Williams
Lawrence A. Wilson
Robert A. Wilson
George E. Woehler
Harold L. Woehler
Elzie Wolker
Warren L. Wollrab
Thomas J. Woodlock
George A. Worley
Robert P. Wright
Max L. Youmans
Andrew F. Zeller

1950

James D. Ahern
Reuben J. Aldrich
Charles Anastoff
Eugene F. Anderson

Donald V. Badgley
Franklin R. Baker
Roscoe E. Baker
Charles E. Barnabe
Eugene R. Baumgaertner
Ross L. Beall
Theodore R. Beatty
Robert V. Beaudreau
Robert L. Berg
William P. Best
John E. Bigelow
Harold D. Bless
Werner C. Born
M. Eugene Bowman
Raymond J. Boyle
Peter C. Breaz
Emil Breas
Donald H. Briggeman
James W. Briscoe
Jack N. Brown
Vance B. Brown
William F. Brown
Lawrence E. Brugmann
Robert L. Buechler
John W. Burgeson
Edward L. Burton
Bernard B. Butcher
Robert W. Camp
'Carl W. Carter
William C. Cartmell
Alden P. Chester, Jr.
Leland W. Christensen
Louis J. Chmielowiec
John D. Cochrane, III
Herbert L. Cohen
J. Robert Cripe
Carrol D. Cross
Edward L. Culbertson
Warren H. Dale
Thomas M. Darby
William R. Dayen
'John L. Denton
Clarence W. Ditton
Joel M. Dlugos
Robert W. Duhl
Egto W. Eilert
Charles E. Ennis
Richard D. Etherington
A. Anthony Etter
Robert W. Farris
J. Robert Fields
Albert T. Finney
Thomas A. Fisher
H. Jack Fivel
Herbert W. Flandreau
John S. Fosse
Raymond H. Frenk
Allen J. Fritsche
Joseph H. Frohman
Richard A. Frohreich
James G. Furey
Howard W. Gindelberger
Robert C. Goodrich
William S. Gorman, Jr.
Mervin K. Goss
Jack T. Gould
Herbert W. Grable
Frank L. Grabowski
Thomas C. Gregson
Richard L. Groben
Paul M. Gronendyke
Thomas J. Hahn
Thomas E. Hall
Theodore R. Hamilton
Jack D. Harden
James E. Hays
Daniel J. Heald
Robert W. Heinz
Charles B. Henderson
W. John Hingst
Joseph R. Hinkle
Raymond T. Hofferber
Harmon L. Hook
Dan B. Houser
Thomas C. Hoxie
Thomas F. Huemmer
Richard L. Hummel
Otto M. Ikeda
Walter W. Jaeger
Elbert G. Jackson
Edmund J. Jatczak
Lawrence E. Jenkins
Philip D. Jonts
Dogan Kabalak
Thurman W. Kaiser
James A. Karnavas
Robert L. Ketcham
Burl W. Keys
Kenneth E. Klotz
George Klupchak
Jerome E. Knaebel
Andrew L. Kort
Michael Kuzyk
David E. Larkin
Jack M. Law
William R. Lewright
Edgar W. Lines
Henry C. Lottes
Milan D. Lummis
Walter J. Lutz
Lewis Malter
Martin Manich
William L. Mapel
Merritt G. Marbach
Harvry L. Marquand
Leonce E. Martin
Walter S. Marynowski
William C. May
Emil D. Mazzarella
William H. McCammon
Bain McClintock
W. Gene McMahan
Raymond E. Mietz
Richard N. Miller
Robert L. Miller
John E. Mock
William E. Moehlenbrock, Jr.
Billy M. Moss
Richard R. Mybeck
Gene A. Myers
John R. Nichter
John D. Nielson
H. Dail Nies
Charles L. Nix
Robert C. Nordberg
David H. O'Herren
Max Ogilvie
George L. Orescan
Roger N. Pauls
Lawrence C. Paulsen
Richard B. Payne
Jerome B. Peterson
Benjamin F. Pettus, Jr.
Leonard B. Petty
J. Robert Pickering
Richard N. Platt
Alvin E. Preiser
Thomas H. Price
Arthur J. Prohl
Robert G. Ragsdale
Kollipara D. Raju
Robert F. Redmond
Robert C. Reid
Warren E. Rice
John L. Rodgers
Russell A. Sault
George W. Saunders
Francis A. Schiffhauer
Harold W. Schnaible
Dave W. Schornstein
Lynn E. Schrier
Arthur Schwarz
John H. Shafer
Michael R. Shaffer
Robert E. Shaw
Harold W. Shear
Michael M. Shendrick
Howard L. Simpson
Eugene J. Skerkoske
James E. Smith
Robert C. Spears
Robert S. Springmier
C. Richard Stanley
James W. Stephens
Charles H. Stockman
Lee E. Strong
John R. Stroud
Donald L. Sullivan
Harry A. Swaim
Frank J. Taranto
Rex A. Thorne
Rudolph J. Timm
Norman W. Todd
Robert E. Torrance
James F. Turner
James W. Turner
Roland J. Vanderschmidt
Kenneth L. Vandervoort
Claude C. Wall, Jr.
Edward Wanca
Kenneth Wark, Jr.
Frederick W. Warwick, Jr.
Robert C. Wasson
Robert F. Wernett
James V. Worrall
Earl D. York
George A. Younger
Nelson Zetterberg
William H. Zuse

1951

Robert J. Adam
Donald E. Amos
James A. Armenti
Theodore C. Babinsky
Coleman L. Baker
Benjamin J. Barrett
Jack H. Beck
Robert T. Beck
Stuart L. Bender
Kenneth O. Blanchard
Ronald M. Bland
William R. Blew, Jr.
David D. Bockman
Robert C. Bogott
B. Frederick Boone
Howard K. Bostock
William H. Bowles
Robert L. Brace
Lynn J. Brand
Charles J. Brandt
Robert T. Brandt
Garland R. Brown
John E. Brust
Herman J. Bryan
Royce Buffington
Beuford M. Bunnell
Donald L. Byerley
Boyd P. Byrer
William R. Carlson
Joseph L. Caruso
Amarendu P.R. Choudhury
James M. Coleman
John P. Corbett
Louis P. Costas

Jack R. Creasey
William A. Daliman
David J. Daniels
John W. Davis
John J. Deasy, Jr.
Franklin E. DeLong
Lawrence J. Deissler
Walter J. Dornbusch, Jr.
Richard M. Downing
Richard E. Drews
Jack H. Dubs
Lloyd A. Duwelius
Philip E. Ebert
Edward C. Elliott
T. Darrell Eubank
Daniel G. Evans
J. Bennett Feallock
Ronald K. Finley
William M. Fisher
John F. Flanagan
Myron A. Frank
Richard D. Frick
Henry G. Fricke
Bill W. Fry
James F. Geiger
Leonard A. Gliatto, Jr.
David L. Loris
Jack T. Gould
Jerome Govits
Robert E. Grames
Haldon Graves
Dean L. Gray
William H. Griswold
Reigh C. Gunderson
Harold C. Haase
Harry F. Hassmann
Walter H. Heckelmann
Richard A. Heitz
Frederick J. Hellhake
Jack R. Hildebrand
Wallace L. Hoelscher
N. David Honningford
Charles J. Hoover
Harold L. Hoover
James L. Hopper
John B. Hoyland
William H. Jackson
Richard E. Jarsombek
John H. Jenkins
William J. Jesernig, Jr.
James C. Johnson
Robert L. Johnson
Robert W. Jones
Alexander D. Jung
Edward J. Kastner
Paul R. Kinsey
Byron C. Kistler
Robert T. Kramer
Charles A. Kremers
William F. Krudewig
Robert J. La Fortune
Donald M. Lee
George Liolios
John W. Little
Robert R. Loos
Frank S. Lyndall
James A. Margedant
Ralph A. Marke
John C. McBride
Paul R. McCloud
John F. McDevitt, Jr.
Richard V. McDowell
William G. McLaughlin
Ronald C. McMurray
Robert P. Meyerand
Charles G. Mikitich
Benjamin Z. Miller
Dain L. Miller
Sidney G. Miller
Thomas A. Morris, Jr.
George W. Morrow, Jr.
Roger A. Moser
John L. Myers
Edwin M. Novak
John R. Nye
Donald E. O'Reilly
Shirley E. Osborn
Alan A. Osgood
James L. Otterstein
Allen C. Paula
Edwin M. Payton
Celso R. Perez
Donald F. Phinney
George L. Pitts
Richard L. Pottkotter
Ernest R. Prow, Jr.
Joseph E. Quinty
Thomas A. Reiter
Dale L. Rhodes
Roger A. Riehl
Gerald A. Roeder
Miguel A. Romero-Borroto
Jack E. Ross
James P. Ruch
Richard R. Rudge
John O. Sanders
Herbert F. Schmidt
H. Edwin Schultz
William R. Schultz, Jr.
Arthur C. Schulz
Robert C. Schumann, Jr.
Bruce A. Scott
Wendelin C. Seng, Jr.
Luis E. Siero-Estrada
Robert A. Simon
Walter A. Sjoberg
Paul F. Smith
Ray W. Snell
C. Devon Snyder
Donald M. Stagg
Franklin Standish
William E. Stewart
Carrol J. Stiles
Warren E. Strong
James E. Sudhoff
Wei Men Sum
Ross A. Taggart
Fred T. Takenaka
Joseph G. Temple
Robert W. Theobald
Gordon W. Thomson
John Toney, Jr.
James D. Transue
Alfred M. Turkel
Barney Vallino, Jr.
Charles F. Vance, Jr.
Robert D. Vaughn
Fred H. Vietmeyer
William L. Wascher
Gordon W. Whitaker
Harold T. Wingfield
Franklin T.S. Withers
Forest B. Wortman
Gerald L. Wyne
Thomas E. Yockey
James M. Young
Kenneth C. Youngblut
John J. Ziccarelli

1952

Peter H. Abbrecht
Donald Albaugh
W. Herbert Bahlke, Jr.
Robert S. Bailey
H. Stanley Bays
David A. Beaty
Robert J. Benzing
Robert L. Berger
Lewis E. Blakely, Jr.
James J. Blazek
William R. Bolen
David W. Bosse
Henry E. Botts
Robert P. Bringer
Jonathan O. Brooks
Calvin C. Burwell
William L. Cannon
John M. Clarke
James A. Collins
Joseph B. Corns
Thomas E. Davies
Richard C. Davis
Frederick E. Dickerson
John L. Donahue
Lionel E. Dotson
John W. Durkin
Vernon A. Fauver
Charles R. Ferguson
Joseph J. Florek
Robert L. Foster
Thomas L. Francis
G. Richard Franson
Howard W. Gardner
Minds T. Gordy
Charles F. Gray, III
Robert K. Gregg
Thomas Gretzinger
Stanford E. Groves
Stanley Gussow
James C. Hance
Roy J. Handwerk
Donald E. Hannemann
Robert E. Hannemann
Gordon G. Harkreader
Richard F. Harrington
Robert W. Horney
Robert C. Irving
Walter V. Jesernig
Benjamin A. Johnson
William L. Jones
Richard D. Joos
Milan R. Jurco
Abe H. Kaufman
Bruce K. Kerr
Philip L. Krug
Don R. Kuespert
Ronald P. Lance
Robert E. Lawrence
Donald R. Leamy
Gerald S. Lellouche
William K. Luckow
Thomas F. Luenser
James E. Marberry
Calvin H. Marcus, Jr.
Joseph A. McCarthy
Robert McFedries, Jr.
William V. Miller
Marion R. Obergoenner
Robert E. Obergoenner
Edwin J. Ogden
John W. Olsen
Curtis A. Olson
John N. Ralston
Thomas G. Reed, Jr.
George D. Robertson
James C. Rohrer
Richard H. Rosenberg
Charles P. Ross
Henry A. Schulz
Edward M. Shinners
Kenneth D. Slining
Jerold B. Smith
Donald E. Snyder
Robert Spadinger
Marvin H. Stegmann

Donald R. Stewart
Walter B. Stumpff
Frederick G. Subt
David R. Sylvester
Thomas D. Talcott
John B. Tibbets
Richard P. Tippey
Frank E. Tweedle
Leslie H. Vanhuben
Robert M. Wade
Dean L. Wann
Jack R. Wehrly
Robert D. Wesselhoft
Earl R. Wieland
James W. Williams
Nelson E. Wittman
Donald E. Wurster

1953

Louis J. Anastasia
Donald H. Ashmus
Walter C. Bajus
Bertram L. Berman
R. Lewis Blanchard
George D. Blyholder
Robert D. Bradshaw
James M. Carman
Robert I. Cohen
Richard H. Collins
Wendel W. Cook
Robert B. Covalt
G. Theodore Daehnke
Leo J. Dagley, Jr.
Jefferson I. Day
William A. Deluca
William V. Dicke
Wayne M. Dowden
Donald R. Dunner
Frank C. Ernhart
Marshall H. Eubanks
Merrill E. Evans
Roland A. Fiorino
Richard K. Francais
Vincent L. Gelezunas
Thomas Gordon
Donald L. Graham
John J. Halfaker
Ronald H. Harding
Keith P. Hensler
Walter Hertz
Robert F. Hill
Ross B. Holler
Donald A. Hoover
Robert W. Kaiser
Ralph E. Kemp
Irving E. Knudsen
Lawrence D. Lacroix
Donald L. Lamberson
Russell W. Lanham, Jr.
Richard E. Lepley
John L. Liebenthal
Robert L. Littler
Fred A. Locke
Kenneth R. Lukow
Stanley A. Marcus
John G. McCubbin
Orla E. McCutcheon
Kenneth R. McGrath
Wayne T. McIntosh
Dario Mejia-Uribe
Walter E. Meyer
Don L. Nachbar
David B. Nelson
Arthur F. Oldham, Jr.
John H. Pashley
Robert G. Phillips
John R. Reehling
Michael P. Renaud
John E. Ritchie
Richard D. Rosborough
Norman T. Rossen
Allen G. Rubin
S. Eugene Sankey, Jr.
D. Rees Sands, III
William J. Sauber
Robert W. Scher
Philip P. Schulp
William A. Shrode
Ronald F. Stoeckel
William M. Swanson
Norman Swift
Robert F. Treadway
Clarence M. Tyler
Richard A. Votaw
David L. Wade
Jack W. Walter
Vern W. Weekman, Jr.
Carl G. Weis
Larry G. White
Glen A. Williams
George H. Youse

1954

James P. Armington
Maurice Axelrad
Arthur G. Baker
Jerry D. Baker
Ronald H. Bauman, Jr.
Harold C. Bays
Herman C. Brandt
David L. Brooks
Eugene C. Brouillette
Richard C. Brown
Donald F. Buenx
James P. Burgoon
John P. Chesick
Sang Kenn Chun
Howard P. Dallas
William B. Elmer
Frederic J. Forrester
Harvey A. Frank
Richard B. Graver
Richard Gretzinger
H. Robert Hadley
Robert T. Halladay, Jr.
Robert L. Harrington
William R. Hartshorn
Harold W. Hebermehl
James D. Jackson
Charles R. Jacoby
Boonyasakdi Jaijongkit
Donald W. Kalinchuk
Robert J. Kauchak
David H. Kievit
John W. Klar
Harry B. Lansing
R. Kent Larson
Charles W. Leffert
Willis D. Leip, Jr.
Robert C. Lerch
.Anon L. Lundborg
John J. Madden
George A. Momany
Lewis S. Mounts
Thomas P. Mulcahey
Edward F. Mullikin, Jr.
Jack Muraoka
James C. Orem
Donald L. Peters
Roger A. Riehm
Thomas W. Sanders
Donald W. Sands
James F. Schorr
Daniel G. Sellers
J. Quinn Selsor
Gerald Skidmore
Paul J. Skvaril
John C. Staton
Donald W. Steinkamp
Story C. Stevens
Hubert A. Stommel
Ernest F. Stroh
Warren P. Thayer, Jr.
Stanton S. Unger
J. Rodney Warner
William D. Wesely
Ned A. Whalley
James G. Woodruff
Kay N. Woollen

1955

Richard L. Armitage
Francis J. Ballard, Jr.
John J. Bartfai
Patrick R. Beck
Hollis V. Becker
James E. Benjamin
Floyd E. Benner, Jr.
Ronald D. Berg
Edwin L. Berkowitz
Albert Blank
Lawrence A. Booth
William B. Borst, Jr.
George L. Bruggemeier, Jr.
William D. Carr
Richard L. Caupp
Edwin W. Chilcote
Jack N. Clupper
Richard E. Cole
Richard C. Coonrod
Arnold C. Cooper
John W. Durbin
Donald L. Evans
Joseph N. Feil
Frederick D. Fisher
Alan H. Fox
Frederick H. Gahimer
Henry T. Gawrylowicz
Paul K. Graegin
James G. Graham
Loren R. Graham
M. Wesley Groshans
George R. Heffner
Forrest F. Hicks
James F. Houle
Robert T.M. Hsu
Donald A. Huber
Thomas F. Hums
Donald Hunter
Joseph D. Jacob
John C. Jacobsen
Ralph Kafesjian
Charles E. Karabell
Marion B. Keisling
Roy V. Kirk
Philip H. Klein, Jr.
Steven L. Koehler
James L. Krum
Robert C. Laatsch
Charles A. Laff
Bert J. Lewen
Ashley W. Lutz
Terrence W. Lyons
Frank J. Male
Ralph Mallory, Jr.
C. Bruce McCarty
Michael A. McCoy
James B. McNeely
Richard K. Miller
Richard A. Mulcahy
Roger A. Murray

Edwin J. Orzada
Alfred L. Paschen
James A. Pearson
Frederick H. Pfarrer, III
Keith W. Pfeil
Joseph Rahmanan
Robert L. Rain
Glenn R. Reasner
E. Eugene Richards
Clifford J. Roberts, Jr.
Thomas F. Rogers
Arthur J. Ruess
William A. Sanders
Robert D. Scott
John W. Sheldon
Michael S. Shumate
W. Douglas Smith
John R. Spice
Richard J. Stettler
Douglas M. Stuart
John E. Swartz
John C. Unger
Carroll E. Voss
Oreon R. Walker
Richard H. Walker
David L. Waterman
Dwight M. Wever
Maynard C. Wheeler, Jr.
Harry D. Wolter
John D. Wooledge

1956

C. Boyd Adams
Davis Allen
William J. Asher
Stanley J. Barlog
John R. Bartlit
Robert D. Beiter
John W. Bilderback
George N. Bizoukas
Samuel C. Brubaker
Dallas G. Butcher
David R. Campbell
Arthur W. Carew
Harold V. Caucig
Gene L. Coleman
David B. Cooper
Vernon C. Coy
Richard A. Crawford
James W. Demaree
John F. Drewno
Richard N. Dunbar
Gary W. Elmer
William L. Ernst
G. Richard Eykamp
Frank Fang
W. Edward Fisher, Jr.
James E. Flinn
0. Irvin Franson
John L. Fritze
Jerry P. Furlong
Gary H. Garvens
Norman M. Geyer
Lincoln S. Gifford, Jr. ,
Gerald A. Gordon
Morton H. Gothelf
Byron S. Gottfried
Leslie R. Graham
Ted C. Gruenhagen
Harry L. Hans
Dean O. Harper
Jack M. Hatcher
Richard C. Herout
James K. Hetrick
C. Larry Hinderager
Gene N. Hoke
Kent G. Huebner
Charles E. Hulswitt
Leon C. Huneke
Robert L. Huxtable
Charles L. Irvin
Clarence S. Johnsen
Cloyd W. Johnston
Alva M. Jones
James K. Joyce
Ronald L. Joyce
David P. Kessler
Barnard F. Klein
Raymond H. Koo
Charles J. Kropp
Ronald E. Kruse
Richard R. Kucia
Walter C. Kuehnle
Harold E. Kyle
Donald R. Longwith
Maurice G. Lorenz
Richard C. Lyon
Benecdict MacFarlane
Joan M. Matt
Phillip M. Mcarthy
Robert W. McCord
Robert M. McCutchan
Leo G. McDermott
Noel E. Moore
Jimmie R. Mosley, Jr.
Stanley J. Mucha
Robert F. Murphy
Richard J. Narta
Robert D. Nation
Howard D. Nott
Richard J. Obsitnik
Alfred L. Paschen
William H. Pechin
Su Tiong Phoa
A. Lewis Reitemeier
Raymond R. Rimkus
Delbert E. Ross
James A. Rozmajzl
Henry T. Sampson
Manuel L. Sanches
R. Stephan Scheffee
Ervin E. Schroeder
Paul R.G. Schwan
John P. Short
Robert A. Sifford
Sherman N. Sills
Edward T. Smolarski
Allan C. Soderberg
Steven T. Spees, Jr.
Edward Steinhoff
William D. Stepanek
Robert N. Tanksley
Lawrence E. Taylor
David T. Terry
Kenneth D. Tremain
Raymond J. Vurpillat
Edward A. Weaver
Darrow E. Wells
Paul E. White
Richard J. White
Edward Wong
Richard A. York
Dennis C. Zeiss

1957

Abe Alasraki
Ronald E. Allera
Arthur L. Altman
Richard A. Anderson
Alex J. Bajusz
Richard A. Baker
Thomas K. Bayles
James F. Beddingfield
George F. Benton
Donald G. Bess
Harry K. Bjorkman, Jr.
Richard L. Boggs
J. Claude Boudreau
Jesse K. Brennan
James E. Brodeske
Robert W. Bruner
William D. Bush
Thomas H. Chilton, Jr.
James W. Christie, III
Myung Soo Chun
Marcus A. Clarke, Jr.
Burton M. Cohn
Larry G. Criswell
Nicholas D. Cromwell
Charles R. Despain
Phil E. Depoy
Joseph K. Donner
Joseph C. Enneking
Richard F. Evard, Jr.
Tony S. Fadda
Loren D. Felten
Robert L. Fleming
Richard L. Floyd
Robert D. Fox
Joseph R. Franke
James A. Fromuth
Richard G. Galambos
Rodger C. Garrison
Jerome E. Grader
Paul J. Green
Frederick C. Haas
Allen W. Haig
Owen T. Hanna
Richard D. Hercamp
Roy E. Hofer
John J. Hoglen
Joseph B. Honnigford
Richard P. Horner
John S. Hoyt
Edward J. Hriber
Phillip L. Huffman
Gerald B. Hurr
Thomas A. Jameson
William F. Johnson
John F. Jones
T. Anderson Jones, Jr.
Ervin R. Karaba
Daniel W. Kemp
Larry D. Kunkel
James H. Larsen
Francis P. Leahy
William E. Lewis
Charles E. Libich
Stephen A. Locke
Harold P. Madsen
Charles A. Madson
John Maniotes
Leonard G. Marianowski
Alfred J. Martin
Alfred C. Masotti
Donald U. McBride
Lowell H. McCarter
Robert M. Meck
John A. Messura, Jr.
Ray A. Miller
Thomas L. Miller
Darrell C. Morrow
Gordon D. Mounts
Robert V. Mrazek
James L. Osmond
Ronald D. Osucha
Robert O. Pecha
Richard A. Peters
Morris R. Reel
Jack B. Revelle
George D. Rhoades
Harold J. Richards
James A. Richman
Ross F. Robbins

Alexander S. Robertson
Richard H. Rogers
William B. Ross
Frederic L. Scheffler
Richard E. Schneck
John G. Schumm
Gerald S. Schur
Charles E. Seibert
Norman C. Shroyer
H. Richard Simon
Armand V. Smith
James C. Smith
George P. Spaulding, Jr.
Ronald R. Stalker
Norwood Stanhope
Richard O. Stark
Richard A. Stephans
Charles E. Stonerock
James A. Sutton
David L. Swift
Robert S. Thomas
James R. Underhill
John D. Upfield
Donald L. Voss
Glen L. Wegmann
James K. White
Jack N. Williams
Edward M. Winter
Roger B. Wojcik
Theodore R. Woodfield
Jerry L.B. Yee

1958

Sanford Astor
David M. Atkin
Thomas W. Ault
John H. Barron, Jr.
Herbert A. Bartick
Richard H. Berneike
Kenneth A. Bishop
Ernest R. Boller
John R. Bracken
Roy D. Bundy
Bruce W. Burklow
Ralph N. Caprio
George R. Caruso
John A. Cengel
Do Sup Chung
Peter J. Cislak
Donald Ray Clapp
Richard T. Crews
Harry A. Crooke
William J. Daniels
Donald E. Devlin
John R. Dicks
Robert M. Dipert
William C. Douglas
Max C. Downham
James N. Dyer
David R. Ellis
J. Gordon Eversole
R.W. Eykamp
Leonard A. Fabiano
Gerald A. Fisher
Thomas J. Flannery, Jr.
Robert J. Fortman
Donald H. Frampton
Deloss L. Fry
Wendell G. Goodman
Jo A. Graves, Jr.
John C. Hartney
James N. Herman
William J. Himmler
Henry B. Hinckley, III
Charles L. Hoffmeyer
Alexander Illsen
C. Richard Jackson
John E. Jackson
K. Michael Jacobs
James W. Jaeger
Joseph A. Jaumotte
Donald R. Johnson
Joseph A. Jones
Fred E. Krause
Arie Leegwater
Ivy Logsdon, Jr.
Thomas F. Lomont
William V. Longley
Walter B. Marx, Jr.
John P. Mayne
Jack L. McCord
David R. Mills
Bernard C. Ogarek
James A. Patterson
Paul E. Pettler
Perie R. Pitts, Jr.
Gary W. Poehlein
Richard A. Raichle
Bruce B. Robertson
Donald D. Rosebrook
James H. Rust
Martin J. Salkowski, Jr.
Spero "Spike" Sampanis
Harold V. Sayers
Paul A. Seib
John L. Sherff
Unn Simonsen
Clayton S. Smith
Thomas R. Sparks
Donald W. Stitz
W. Royce Stroud
Robert E. Suckow
Louis B. Sullivan
George S. Sumereau
Leon L. Sutton
Phil G.Sutton, Jr.
Thomas G. Swift
Harrold C. Swoverland
Allen A. Thieme
William Tolson
William G. Tope
Richard H. Tucker
'William J. Vallier
Kenneth D. Vesely
Bruce G. Vogt
Benjamin H. Voliva
James W. Walker
John L. Weaver
Richard Weinburg
John L. Willard

1959

John L. Andrew
David A. Barrett, II
Frank C. Becker
Frank Bella, Jr.
Anthony G. Blake, Jr.
Henry T. Blekicki
William C. Bodkin
Robert H. Buckman
Lind U. Chuanico
Francis A. Conroy
Lloyd C. Cooper
C. Robert Curtis
Calvin R. Dexter
J. Kenneth Dysart
Larry E. Faith
John E. Feit
Kent L. Fredrick
Norman A. Gac
Robert J. Galbo
Kenneth A. Genoni
Frederick A. Glaski
Nelson A. Gould
John I. Green
Robert J. Greischar
Robert B. Grubbs
Leland M. Haines
Kenneth K. Hayashida
Curtis L. Holmes
Roger A. Hosfeld
B. David Howe, Jr.
John E. Hoyt
Ronald T. Hudson
William O. Jones
Michael P. Kenes
Robert S. Kirk
Daniel T. Kitson
Joseph V. Klusnick
Frank P. Kristoff
Robert E. Kucinski
Frank M. Lewis, Jr.
Thomas J. Lonson
Allen L. Ludwig
Dale A. Ludwig
Geza P. Lux
Robert M. Matuska
R. Craig Maze
James R. McBride
Richard L. McCray
Larry E. Meyer
Norman T. Mills
James R. Miner
Ronald F. Morgan
James W. Morrone
C. Victor Morton
James F. Mosby
Louis B. Noble
Thomas W. O'Rourke
Alan L. Olsen
Peter S. Petrunich
Richard W. Pfeiffer
Date A. Piepho
John J. Quigley
Robert G. Rigg
Gordon R. Rittmeyer
Charles L. Roeder
Thomas P. Rorke
James M. Rosenberger
Leonard G. Rossa
David L. Russell
Robert A. Sandilla
Stephen G. Sawochka
Steven L. Schrock
Joseph C. Shockney
David M. Singel
Joseph A. Smrdel
Neil S. Snider
Eric S. Spector
R. Edward Steele
Thomas B. Storer
Donald W. Stretchberry
Richard A. Surber
David M. Thompson
Charles C. Todd
Charles F. Walshon, Jr.
Thomas E. Walter
Robert V. Wargin
H. Parker Wayland, Jr.
S. David Weaver
William D. Weaver
Lewis F. Webb
Robert Weil
Robert S. Weis
Steven A. Zlatarich

1960

Yongkee Ahn
Thomas D. Anderson
James L. Arneson
Leoniel C. Baldwin
James V. Biggers
Robert J. Brinson

Kenneth E. Bruns
G. William Churchill
David L. Click
Gediminas C. Damasius
Dale A. Doty
Neil R. Eisenhut
John W. Feagans
Stanley W. Fletcher
Robert D. Foster
Anthony J. Gallo
Roberta B. Gleiter
Albert M. Hall
Rudy B. Hauser
Harry F. Hixson, Jr.
John M. Hugg
David F. Hunt
Thomas W. Huseby
James W. Jackman
Elizabeth F. Jensen
Ralph A. Johansen
Robert A. Jurish
Gene C. Keys
David W. Lannin
Wayne E. Luetzelschwab
Keith W. Martin
John S. Mattoon
William A. McKinney
Harold A. Messinger
Charles R. Most
Richard W. Neubert
Patrick S. O'Neill
Ronald B. Piritz
Raymond E. Polik
J. David Porthouse
Joseph J. Prabulos
John H. Scarborough
Lloyd A. Scroggins
James E. Sharp
William L. Sherman
E. Graham Shook
Larry L. Simpson
David J. Slocum
Robert C. Smart, Jr.
Donald R. Tiegreen
Donald A. Todd
Robert T. Wainwright
John C. Wilbur
John R. Wold
Clarence Zak, Jr.

1961

James E. Aker
Raymond V. Anderson
Leon E. Bartos
Dan F. Bass
Albert F. Baumann
Robert K. Brenton
Stephen K. Burton
James R. Cannon
Barry J. Carlson
Edward K. Castetter
Peter W. Cole
William M. Cole
Carl G. Corrello
Donald F. Craig
Thomas E. Darling
Joseph M. Divijak
Charles E. Easley
Leon Engel
Larry W. Evans
Carl A. Friehe
Thomas J. Fruth
James H. Garman
James R. Hallstrom
J. Carroll Hatcher
Joseph I. Hirsch
Wayne Hoover
Robert T.Induye
Robert W. Kable
William A. Kapella
Dong S. Kim
John B. Kim
Charles R. Kline
G. Lewis Kropff, Jr.
James W. Kruger
Uldis N. Lacis
John H. Lehman
Jerrold L. Levine
Steven M. Lindquist
Donald V. Luebke
Sherman O. Lyon
James W. MacDonald
John E. Maya
James M. McCornock
Raymond D. Miller
Michael E. Minard
William Murray
Frederic Newton
Henry Orejuela
Donald J. Orr
Robert K. Pfeiffer
Larry L. Piper
Robert E. Pontius
Bernard R. Sacks
Norman E. Schei$er
Frederick L. Schweiger
David A. Senn
Alan R. Silver
D. Bruce Smith, II
Charles E. Stanbery
John F. Stauffer
J. Steven Steinkamp
Gene E. Tampa
C. Thomas Uncapher
Raymond T. Wagner, Jr.

1962

David A. Baker
James H. Biteman
Benjamin R. Bright
K. Scott Cain
Thomas J. Cox
Gary M. Dillon
Ronald L. Doades
Lee W. Ewing
Adam Fisher, Jr.
Jerome N. Freedman
George A. Gauthier, Jr.
Anthony T. Gaw
Louis E. Goebel
John P. Grasso
James H.V. Harlow
Carl H. Hendricks
John F. Hesselberth
Robert L. Huffman
Robert L. Jones
Ronald H. Kahney
John P. Kauchak
Frank T. Krahulik
Paul J. Kuchar
Carl D. Lask
William R. Leach
Harry M. Levy
Bennie J. Lipps, Jr.
Edward J. Lui
William P. Madar, Jr.
Tommy G. Martin
Rodney V. Matasovsky
James A. McCoy
Marvin E. McDonald
Melvin E. McDonald
Edwin K. Middleswart
Edward S. Monohan, IV
John S. Munday
Malcolm T. Myers
Kenneth E. Nidiffer
James H. Peery
Charles L. Peter
David A. Petkus
W. Jay Pettit
Melvin Pomerantz
David R. Rea
Allan K. Reed
Robert A. Reynolds
William E. Ropp
Guy G. Roudneff
Paul S. Sartori
Algirdas A. Saulis
Marion C. Schmitz
Leonard W. Senglin
David G.R. Short
Ted R. Slack
Frank H. Sollman
David C. Tandy
Robert A. Ullman
Robert D. Weist
Roger W. Wheatley
John A. Wiesbrock, Jr.
Eugene I. Williams
Charles L. Wilsbacher
Russell L. Wood
Robert S. Yates, Jr.
Michael Z. Zatorski
Ronald A. Zell

1963

Robert G. Altschuler
William G. Bares
Harvey L. Beeferman
Larry R. Bright
Robert G. Brinkley
Bruce J. Broberg
Alan I. Brodsky
Valdis D. Bross
David R. Butcher
Larry E. Campbell
Philip H. Carrico
Edward F. Chouinard
Eugene A. Cover
Robert C. Danielson
Johathan E. Devoll
Terry G. Dischinger
Patrick K. Doherty
Donald R. Drescher
Robert B. Ely
W. Joseph Faassen
Bert R. Francis
James A. Frenchik
Thomas C. Friday
Robert H. Frushour
John W. Grieb
Steven A. Harrison
Thomas R. Hodgson
Lindell R. Holtzmeier
John M. Hyer
Frederick T. Jebens
James R. Julian
Ross E. Kendall
Thomas W. Knowles
Hershal Kohut
Andres E. Kotulski
Harry H. Koval
Frederick E. Lash
John C. Lillich
Douglas L. McCorkle
J. Timothy McGinley
Charles G. Mersereau
David J. Metherd
August K. Meyer
Charles J. Michelson, Jr.
Arthur R. Morstadt
Ronald D. Myer
Robert L. Nier, Jr.

James K. Nolen
Walter J. Nunning
Felix P.A. Obi
Mason I. Pilcher
Anthony C. Potter
Richard A. Reitz
W. Kent Richeson
Thomas S. Roberts, Jr.
Keith V. Rockey
Dwight A. Rust
Charles R. Saville
James E. Short, Jr.
Laurence V. Shnppert
Edward F. Strickler, II
Judith H. Suzurikawa
Richard G. Taylor
Frank J. Uxa
Neal R. Vandewalle
Roy W. Viehe
Richard L. Waibel
Doublas D. Walls
Carl E. Weir
Loren J. Western
Max L. Whitlock
R. Bruce Williams
David K. Winegardner
Robert L. Wood

1964

Michael C. Allemang
Senol Altuglu
Gregory Avdakov
James M. Ayres
Robert J. Bouse
Douglas R. Boyd
Richard M. Burkhart
Arthur L. Cherry
Joseph A. Chess
Robert S. Cichowski
Larry G. Cole
Louis A. Collier
Gary D. Corson
Robert M. Davidson
William L. Delis
John R. Deputy
Doublas S. Doremus
Paul E. Duncan
David C. Ehlers
Rodger M. Ewbank
Robert F. Fanter
Joseph D. Feuquay
Robert L. Gahman
Stanley A. Gembicki
Edward C. Gemperle
Ernest R. Gillam
Edward D. Haak
Ronald L. Hagedorn
Gregory E. Hales
Russell J. Hausman
Richard A. Hazleton
David C. Henderson
Thomas N. Henkel
Steven S. Hodorowski
J. Kevin Kearney
Frederick B. Kramer
Stanley L. Krasienko
Andris Lacis
David B. Lay
James E. Luebering
Mario S. Marsan
Thomas R. Maykrantz
Sheldon M. McCullum
Edward D. Michaels
Russell A. Novak
C. John Nuss, Jr.
David P. Olson
Richard A. Panek
Larry R. Perry
Ernest R. Presser
Frank W. Rahe
Monte L. Reed
Lyle W. Ritze
Lloyd M. Robeson
Dale C. Rosenow
Thomas J. Schmiege
William M. Schmitt
F. Robert Schultz
Steven P. Sidwell
Dennis L. Siemsen
James H. Skaggs
Donald T. Smith
Anthony M. Sobkowics
Ronald J. Sprenger
Fred J. Steininger
Robert C. Stephens
Rudolph A. Stewart
Larry A. Stichweh
Neil D. Stiegelmeyer
Stephen S. Strom
Roy Y. Sugawa
William T. Sute, Jr.
Sidney A. Taylor, Jr.
Cletus A. Toschlog
Roger E. Tower
Reid H. Vancleave
William R. Vanhoy
Dennert O. Ware
Joseph M. Welser
Byron H. White
Fredric P. White
Richard L. Wills
Kong-Ling Yang

1965

James I. Alyea
Kenneth A. Anderson
Robert L. Andrews
David W. Ashley
George P. Barnett, Jr.
Charles L. Beatty
Welden E. Blum
Robert F. Boldt
Gerhard N. Bolen
Gary L. Bossen
Charles H. Brandt
Allen J. Budnick
William R. Burk
Thomas E. Burtch
D. Michael Callahan
Donald P. Carver
Larry D. Chojnowski
William D. Cobb
Gary L. Cofran
Ralph H. Dale
Douglas L. Danneman
S. Michael Desmarais
Joachim F. Diedrich
Charles E. Doehrman
Samuel G. Dow
David F. Ehren
Jerry G. Paw bush
Bruce A. Feay
Arthur L. Floran
John C. Gengelbach
Toby C. Gerhold
J. Barry Golliday
Ronnie M. Gore
G. David Growcock
Willard A. Hale
Richard A. Hariis
George R. Heavilin
Richard A. Herman
Donald L. Hess
R. Franklin Hollis, Jr.
Allen H. Horstman
'Frank R. Honda
Marvin L. Jacobs
Theodore J. Jenczewski
John E. Johnson
Stephen T. Johnson
Thomas D. Johnson
Charles C. Kallstrom
Thomas F. Kasline
Michael D. Kimak
Eric T. Kirk
H. John Kreinheder
William R. Kristoff
John M. Krochta
Keith H. Kuhlman
William S. Lane
Dale W. Lerch
Alan E. Leviton
Robert C. Lindberg
David L. Linhardt
Thomas H. Lyon
John Markiton, III
Peter C. Marks
Frank R. Mason
Robin J. McGlynn
John P. McGraw
Rodney B. McMillan
H. Thomas McNary
Paul Milios
Robert L. Miller
Christopher H. Murray
Robert E. Nagy
Harold D. Neptune
Terry M. O'Heron
Richard F. Palas
Mitchel J. Papanicolas
Roger W. Parkhurst
Wendell L. Pieper
Verleon H. Porter
Robert F. Rieter
Robert A. Rode
James F. Rohrbach
Robert K. Rosler
W. Ronald Salisbury
Everett J. Scherrer
Philip J. Schoner
Fred J. Schweikle
Judith K. Simmons
Charles J. Sipple
Shaw F. Skillings
Robert J. Slivka
John P. Smiljanic
David A. Snyder
Michael L. Stone
Thomas D. Storm
Lawrence B. Swerling
Anthony C. Taroni
Jerome M. Taroni
G. Phillip Tevis
Robert D. Theobald
William C. Thiele
Richard L. Thomas
George M. Tiffany
J. David Tucker
Otto J. Walter
Frederick G. Weaver
Kenneth A. Wells
Robert L. Wells
Michael F. White
Edwin G. Wiggins
Nancy M. Wylie

1966

James E. Ackert
Joseph S. Alford, Jr.
C. Ronald Anderson
Peter G. Ayers
Jay N. Beasley
Larry D. Berkey

David M. Boles
Stephen R. Bolin
Thomas E. Boller
Charles J. Boone
Thomas F. Boyden
James I. Brunner
Richard H. Buol
Kenneth J. Caldwell
Michael W. Chapman
John L. Cooper
Larry R. Cramer
Thomas E. Crull
Dean W. Decker
Larry Dews
Scott H. DeYoung
John T. Duke
Larry D. Eckelman
James R. Fiedler
A. Michael Glosecki
David O. Goble
Matt J. Goldasich
Nicholas D. Halbrook
David L. Harris
Bruce G. Heleniak
Richard C. Jaeger
Larry D. Jones
Michael J. Jones
Aired G. Kessler
Robert W. King
Gary E. Kirsch
Richard K. Kloss
Nicholas P. Kohut
David A. Koslow
William G. Kraft
John G. Leech
Thomas W. Leslie
Sanford D. Levine
Terry D. Linne
James F. Lottes
William H. Luerssen
Bill E. McKay
W. Randolph Merton, II
Robert W. Meyer
Christakis A. Michaelides
John E. Miller, Jr.
Raymond J. Miller, Jr.
Evert H. Mol
Fredrik E. Mollenkopf
James T. Murphy
Daniel A. Nawrocki
Terry A. Newendorp
0. James Norris
William S. Norris
Paul D. Nystedt
John E. Parker
W.H. Persinger, Jr.
James M. Phemister
Michael R. Radecki
Michael P. Ramage
Philip W. Ranck
Darrel G. Reininga
Alvin S. Rhorer
David L. Roberts
Stephen C. Robling
Michael C. Rominger
Michael P. Rose
Richard E. Roselle
Steven A. Savage
James A. Shaevel
James L. Smith
Robert D. Snook
Marion L. Stanley, Jr.
Richard G. Stevens
Richard G. Striegel
Roger L. Suchanek
Wayne J. Svoboda
Kenneth C. Swanson
Albert J. Verdouw
Raymond L. Vlasak
David A. Walters
Phillip C. Wankat
Raymond Ward
John D. Weesner
James T. Welch
John W. Whitinger, Jr.
Jack A. Wiesenthal
Paul J. Wood
Virgil R. Worrell, Jr.
C. Ronald Young, Jr.
William D. Young

1967

James L. Adcock
Fred E. Andrews
John H. Austin
James V. Barnes
John T. Bartlett
Michael P. Belts
Albert R. Bernard, Jr.
Harold D. Bonewits
Roger G. Boyer
Danny L. Briscoe
J. William Bruner, Jr.
Thomas H. Buller
David T. Clay
Stephen K. Craig
Philip J. Crihfield
John R. Currena
Michael F. Donahue
Emerson L. Foote, Jr.
David L. Frazier
Stephen W. French
John M. Garrison
Charles F. Gillard
Donald F. Haan
Kerry L. Hansen
Thomas C. Hill
John B. Hosmer
Joseph H. Jacobs, Jr.
Victor F. Jamri
Robert M. Jones
Gerald D. Kennett
William E. Kimmell
Richard B. Kitchen
Howard C. Korte
William T. Krieg
James R. Kriegbaum, Jr.
Steven K. Lindamood
John L. Lustig
Warren L. McBride
William C. McCoy
Charles A. McFarland
Robert D. McNeeley
Michael C. Medlock
Dale E. Moline
Dennis Eugene Moore
Larry M. Myers
Edwin H. Niemann
Donald J. Obuch
Slavo G. Panich
Richard A. Peacock
David Chi Poon
Gary W. Probst
Ronald R. Remick
James L. Robertson
John A. Roman
Wendell M. Roodman
Thomas E. Sawyer
Kenneth L. Scheel
Dennis C. Schnecker
Michael K. Seubert
Lawrence A. Shute
Jack G. Smith
James L. Smith
Lincoln Hung-Leung Soo
Michael W. Stewart
George A. Suhorsky
Larry J. Tekker
G. Ray Trisler
Robert G. Weddle
Clifford L. Whitaker
Paul D. Wibbeler
David M. Woody
Walter J. Zoladz
Irl L. Zuber

1968

Larry R. Albaugh
Thomas C. Austin
Dennis D. Balutewicz
Steven L. Blankenship
Stephen R. Castle
David M. Clark
Andrew L. Crowe
Robert N. Davis
Robert F. Donnell
Gary A. Eckman
Parke K. Flick
Lowell H. Franz
Milton L. Fraser
Donald H. Gage
John S. Gahimer
Gary A. Gerhold
David R. Hartman
Thomas J. Hassell
William R. Hays
David R. Hayward
Eric R. Hengst
Robert C. Henninger
Alan W. Hoagland
Gary S. Hofman
Frank P. Jasek
Richard J. Kadlick
Philip E. Kendall
Edward J. Kleese
David L. Koehler
Edward H. Koors
Myron I. Kuhlman
James V. Lilly
James D. Lynch
Craig M. Mclaughlin
Robert F. Melcher
Robert E. Molzahn
Wilfred E. Morrison
Thomas E. Nidiffer
Ronald F. Niedziejko
Ronald E. Nilson
Roger A. Noop
Theodore J. O'Connor
Richard L Overman
Harold W. Pinnick
Dennis D. Price
John J. Rak, Jr.
Robert R. Rautzen
Michael D. Reese
Orlander G. Richardson
Robert E. Rieck
Kenneth S. Rosenberg
James R. Ryland, III
Fredric L. Schrock
Ronald C. Schwabel
C. Locke Scripps
Douglas R. Seifert
Dennis T. Siedlecki
Michael C. Snyder
Stephen L. Spurgeon
Joseph M. Sroka
David J. Stephan
Lawrence J. Szrom
Paul S. Todd
Peter D. Trautman
Dean D. Trindle
Robert J. Tylicki
Douglas K. Wagner

Kenneth A. Wanek
William R. Weaver
Charles H. Weber, III
David L. Weinstein
James E. White
Robert B. Wilken
Kent A. Williams
William L. Wishlinski
David T. Young
Peter M. Zatorski

1969

Bruce W. Allison
Richard M. Barnes
Gabriel J. Belmont
Charles A. Benner
Peter W. Bird
Jay A. Blewett
Richard W. Chase
Frank C. Coe
John F. Coursen
Courtland T. Dahlin
Richard E. Derby, Jr.
Carlos F. Dierolf
William R. Dougherty
Thomas F. Downey
David R.Duros
Michael E. Farrell
Robert H. Foster
Robert E. Gadomski
Terry A. Gibson
Thomas L. Goad
Henry O. Graff
David L. Harper
John C. Heiman
James M. Hendricks
John L. Hendrickson
George H. Henry
Philip R. Herrick, Jr.
Thomas A. Hertwig
John M. Hornyak
Kieth G. Johnson
Andrew F. Kacmar
Thomas C. Kilburn
John F. King, III
Ralph T. Knauer
Michael A. Kowalczyk
Lee M. Marsh
Charles J. Marsman
Thomas C. McKee, Jr.
Steven B. Moore
John R. Mowry
Olagoke Olabisi
Eugene J. Pancheri
Ralph I. Pereida
Gary M. Phillips
Dale E. Phinney
John E. Provencal
Jerry A. Rankin
Paul E. Rhodes
Jon D. Rice
Ronald R. Riesing
Cary D. Riggs
Glen M. Rosenow
Rodney J. Saddler
Robert W. Salnick
Jan N. Schlamp
Alan G. Scully
Patrick H. Shannon
James E. Silver
William E. Smith, III
James L. Struna
Roger W. Swift
Keati Thammongkol
Robert W. Tiffany
Jose C. Trevino
Keith W. Turner
Michael J. Vanhoy
John W. Wilkinson
LLoyd D. Williams
Robert A. Winslow
Richard H. Zailen

1970

David V. Addington
Philip O. Allen
Arl A. Altman
William H. Andras
Larry A. Baker
George A. Becker
Robert G. Blakey
Steven Bozich
Donald P. Braun
Stephen E. Brewer
Craig A. Campbell
John B. Cavender
James V. Coleman
Richard L. Cumberlin
John L. Fast
Martin A. Ferman
William M. Fruit
Thomas R. Gallant, III
W. Jefferson Gault
Michael W. Golem
Dennis L. Gudel
James B. Gulley
Chester G. Gunter, II
Robert D. Harrer
Michael D. Harvey
Larry D. Hathaway
John J. Hayes
James H. Hillaert
Leslie C. Hollingsworth
James E. Huff
Linda P. Huff
Thomas J. Jaques
Phillip H. Jenkins
Gary R. Kapperman
Michael J. Kolarik
Russell L. Kratowicz
David J. Lawrence
James H. Leslie
Lester N. Luetwiler
Kenneth W. Lewis
John E. Logsdon
Kenneth D. Maclean
George C. Martin
Richard D. Marvel
Milton N. Mauntel
Steven L. Mayes
Patrick D. McCorkle
Leslie R. McKechnie
Donald W. Meyer
Robert B. Miller, II
Thomas F. Murphy
Christopher T. Nance
Donald Nedanovich
David L. Need
Charles F. O'Brien
Allen W. Parrin
David W. Pershing
LLoyd M. Petrie, III
Robert F. Polich
Robert N. Postlethwatt
Joseph W. Powell
Joseph R. Powers
George P. Quinn
Paul H. Reger
Michael W. Rosa
Stephen J. Salter
Gary B. Samuel
Douglas M. Sawyer
William G. Schmidt
Dale H. Schultz
Randall D. Seitzinger
Thomas D. Simpson
Randy L. Smiley
Jeffrey S. Smith
Dean F. Sonntag
Kent M. Sproat
John L. Steimke
Donald F. Storrier, Jr.
James A. Thomas
Philip D. Thorpe
David C. Tirsell
Michael A. Tucker
Deane A. Voss
John A. Waupsh
Ralph S. Webber
George H. Wilcox-Jones
Stuart C. Williams, III
Don F. Wilson
Thomas L. Wood
Michael L. Worrell
David J. Zurawski

1971

Robert L. Baldwin
Thomas W. Barre
David E. Blazer
Darrell C. Bonner
Larry O. Bowler
Neale H. Byrnes
Jeffrey G. Christopher
Lester E. Ciciora
Ronald L. Cutshall
Richard D. Darling
Michael A. Deren
Stephen B. Dixon
Michael A. Doerner
Steven L. Dolan
Bradley M. Fearnley
John T. Fieler, Jr.
James F. Floyd
Stephen C. Fry
Rundell C. Galles
William P. Garten
Adrian J. Gordon
Michael C. Grabowski
Lawrence W. Grauvogel
Joseph W. Hager
Byron N. Harrod
James P. Henderson
Ronald R. Hockemeyer
Kenneth W. Horn
Richard T. Ige
Walter I. Jaw orsky
Kenneth W. Johansen
Stephen J. Jones
Michael Kaczur
John M. Kather
Thomas W. Kirkpatrick
Michael L. Lappa
Richard G. Lawrence
Charles R. Meehan
Richard C. Meyers
David A. Mohr
Stephen R. Murrill
Timothy K. Nordahl
Patrick A. O'Connell
Dave E. Parro
Frank J. Pellicori
Joseph A. Pulsifer
Bayard P. Quinn
Michael J. Ragnetti
Robert A. Read
R. Michael Reed
Richard W. Reynolds
Steven E. Richardson
Michael J. Ruhl
Robert R. Rutkowski
Robert L. Schilling
Henry J. Schmitt

Wayne M. Schulenborg
L. Jerome Spillane, Jr.
Michael C. Springman
Thomas P. Sullivan
Steven J. Swanson
James D. Swearingen, Jr.
Steven J. Terranella
Dung Quoc Tran
Robert E. Urban
Dale K. Voss
Dennis A. Weyant
Joseph C. Winner
Douglas C. Witt
Stanley J. Wohadlo, Jr.
David B. Young

1972

Steven T. Augsburger
Carey L. Baker, III
Federico J. Baptista
Gregory A. Bates
Rand F. Bergeson
William B. Bispeck
Jack J. Brandush
Steven R. Broadstreet
Sean P. Brown
Clifford W. Browning
Richard A. Burdette
Mark V. Carle
John W. Carr
Bill J. Chen
Alan J. Conley
Robert J. Cosgrove
Mark J. Davenport
Charles D. Davidson
Dennis L. Davis
Darrell G. Dippon
David DiBiasio
Jerome D. Drabiak
Geoffrey D. Drissel
Robert H. Fehnel
Allen V. Forster
Daniel K. Foster
David N. Foster
David O. Goldrick
Vern L. Goppelt, Jr.
John D. Grove
James K. Halliburton
Dale A. Halverstadt
Cathy J. Hamilton
Chester H. Harris, Jr.
John R. Heering
Thomas Q. Henry
William C. Hiatt
Richard K. Hoehn
Douglas A. Horn
Dwight K. Ilk
David W. Ingalls
Douglas F. Irish
Kevin J. Killigrew
Gregory J. Klein
Robert A. Kumse
David M. Leonard
William J. Leslie
Fred J. Line
Michael L. Littlejohn
Jerry K. Lucas
Michael A. Machkovech
John D. Mackellar
I. David Martin
Thomas A. McClellan
Randolph W. McColly
James N. McCutchen
John D. McDowell, Jr.
Brian T. Meadows
Joseph E. Moll
David E. Morris
Herschel E. Morris
Jeffrey Z. Mortensen
Steven L. Nail
Gerald E. Nick
James M. Nigg
Brian W. Opel
Stephen D. Orr
John E. Page
William D. Payne
Kenneth D. Peters
Michael E. Reed
Richard A. Reich
Glen A. Richardson
Alvin G. Rohrer
Roberta M. Sahlin
Michael C. Sander
Z. Peter Sawicki
James H. Schenk
Richard F. Schreiber
James W. Sexson, Jr.
David M. Shannon
Ronald P. Sjoberg
Craig A. Smith
Thomas L. Smith
Daniel M. Sobieski
Robert D. Sproull
Daniel P. Stambaugh
Donald J. Stanutz
Bruce M. Stawiarski
Philip C. Stover
David F. Strahorn
Glenn S. Suga
Mark A. Taylor
Henry D. Thomas
Raymond D. Thompson
Craig L. Werling
John M. Witte
Paul R. Wood
Ronald R. Wright
Anthony D. Zatkulak
Joseph E. Zuback

1973

Mark S. Allison
William R. Ashcraft
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Adam I. Smith
Meredith E. Spencer
Michael J. Stoner
Michael R. Sutton
William B. Taber IV
Divya A. Tiwari

Sean R. Upchurch
Stephen E. Van Pelt
Andrew J. Ward
Jessica L. Wilkes
Laura A.F. Willis
Nicole M. Wright
Allison L. Yates

2009

Jonathan E. Adams
Eric Adijanto
Lawrence Adijanto
Zaki Al Zayer
Melissa A. Barber
James T. Bartley
Adam J. Belcher
Brian M. Billings
Sarah E. Black
Matthew L. Bobart
Venkatesh Botu
Ryan M. Bowditch
Mitchell B. Bray
Cori N. Bucherl
Susanna M. Burns
Craig G. Cameron
Rushoti Chatterjee
Lok H. Chau
Chim T. Chin
Tahsin S. Choudhury
Matthew Christiansen
Caleb A. Class
Jacob A. Crum
Michael T. Cyb
Julie M. Deck
Andrew C. DeFrees
Anish E. Desai
Chieh Y. Diao
John R.F. Douglas
Richard D. Edwards
Taylor A. Faga
Amanda M. Fairbanks
Stacy K. Farkas
John T. Farris
Yehia M. Fouad
Matthew L. Francisco
Eric A. Frankowski
Clifton L. Fussner
Amanda A. Gantz
Rachel C. Gardiner
Christopher G. Gianopoulos
Robert W. Goeltz
David G. Hanna
Brittany J. Hasler
Ernest F. Hasselbring
Erica E. Havekost
Brian A. Heasley
Kyla T. Hebard
Matthew W. Hopson
Michael E. Hosford
Ruiyi Huang
Amanda L. Jackel
Joan F. Jang
Daniel D. Jemison
Genesse R. Jenkins
Samuel W. Jun
Arnab Khasnobis
Faysal M. Khatri
Nicholas A. Kissel
Daniel W. Knight
Manda R. Knust
Claire M. Kubinski
Medan E. Kwek
Kyle A. Kyburz
Lubbert L. Lambert
James E. Lancaster
Noel V. Lantin
Brenton L. Leach
Anthony S. Lee
Leidya Leksokumoro
Fuyue Li
Jeffrey M. Livarchik
Donna C. Minas Cornejo
Kenton E. Morrell
Nathan J. Mosbrucker
Kee K. Ng
Rebekah M. Noble
Landon Ohta
Renan P. Oliveira
Yi-Tze Pan
Aimie M. Parry
Laura E. Quock
Dustin J. Rains
Colin P. Ruemmele
Emily E. Ruf
Charles D. Rutter
Christiana E. Saunders
Phillip K. Schoch
Amy E.K. Schuetter
Cory J. Shank
Pulak Sharma
Dian Silvani Pradana Peturi
Nicholas C. Soloski
Manoj Somasundaram
Kaitlin E. Sommers
Andrew P. Steinhauser
Brandon B. Stiles
Wei Sun
Pervin R. Taleyarkhan
Kiem S.R. Tan
Kareeba M. Tyus
Kevin B. Vargo
Stephanie Watson
Ashley W. Wenger
Marc E. Willerth
Sumarthin William
Christopher S. Wirkowski
Jared K. Witte
Dennis T.K. Yang
Dingding Yao

2010

Steve C. Ackerman
So Y. Ahn
Samantha J. Alexander
Luis G. Alfaro-Santoni
Eric W. Allen
Jacob M. Anderson
Adil M. Asif
Khalid A. Askar
Sarah E. Atanasov
Andrew E. Baker
Emma C. Baker
Mary E. Beeson
Sarah P. Beigh
David G. Belair
Abraham E. Bendek
Steven T. Berube
Shiven Bhatia
Theodore W. Birky
Harish Boini
Elise A. Branstrator
Emily C. Brestel
Austin J. Brown
Trevor S. Bryant
Lauren N. Cervellere
Yosan N. Chandra
Andrew B. Chin
Mark A. Chinworth
Yun W. Chung
Pelin Cox
Kathryn L. Cramer
Miladin Crnkovic
Robert F. Cunningham
Daniel R. Curtis
Rochelle M. D'Cunha
Shannon E. Drew
John D. Dunlop
Eduardo A. Elizondo
Mark T. Endo
Harrison J. Estepp
Daniel R. Ettensohn
Lauren M. Fagerman
Vivian A. Fam
Julia E. Finer
Patricia T. Fiorio
Gin Y. Fong
Matthew D. Foust
Brent A. Frazier
Jason R. Garlanger
Eduardo Garza
Jarrod C. Goh
Christina R. Grube
Jason A. Hall
Jonathon H. Hall
Melanie J. Hankosky
Ricky Hardis
Morgan R. Hayes
Eric D. Hazelbaker
Robert J. Henning
Joseph A. Hernandez
Derek M. Herron
Adam E. Hirsch
Li-Yang Huang
Ryan J. Hutnick
Mumtaz B. Jafferali
Kevin G. Jazdzyk
Justin M. Kable
Jeff C. Kehoe
Adam T. Kern
Gary J. Kerr
Kara L. Kessler
Spencer Keusch
Se Y. Kim
John M. Kindler
Donald P. Krystof
Min H. Lee
Drew A. Liebrecht
Jacob L. Lilly
Brian R. Lowry
Edward T. Lugo
Andrew R. Lundfelt
Nathan A. Mahynski
Andres F. Martinez
Matthew B. Matney
Selina P. Mays
Luke T. Mc Afee
Edward J. Mc Laughlin
Clayton D. Mc Neff
Paul R. McCain
Daniel M. Mearhoff
Bradley M. Messmer
Jason G. Miller
Sonali Modi
Abdullah S. Mohammed
Kyle J. Morton
Kenneth W. Mullane
Danielle M. O'Brien
William F. Peterson
Matthew T. Platek
Daniel S. Prystawsky
Lauren D. Quig
Autumn N. Rains
Jonathan W. Rendak
German Rendon
Matthew J. Richardson
Kyle W. Roche
Tiffiny R. Rummell
Jordan M. Schmitt
Bragadeesh Selvarajan
Amanda L. Sesselman
Meagan Sesselman
Ravi C. Shah

Elizabeth G. Shewmaker
Kathryn M. Shrock
Zachary J. Singer
Lauren N. Skoog
Patrick E. Small
Julia E. Smith
Braden J. Snook
William S. Soetrisno
Joshua D. Sparks
Sam C. Steffen
James T. Studt
Lauren N. Suica
Kevin T. Sullivan
Joseph A. Susoreny
Hamza Tanvir
Nicholas J. Teo
Vasilios P. Theodosopoulos
Kristopher M. Townsend
David J. Tye
William R. Unger
Adam H. Van Pelt
Santhosh Varadarajan
Nathan S. Vogler
Joseph L. Waldman
Byron D. Wall
Po Y. Wan
Darryl D. Wenner
Lindsay A. Williams
Benjamin T. Wilson
Kevin R. Wood
Jason Wu
Moatez K. Yehia
Heather L. York
Simuck T. Yuk
Austin R. Zeiler
Jeremy A. Zeller

2011

Mohammed Al Kaki
Sultan K. Al Kendi
Sarah L. Alexander
Alvin Ang
Jason M. Arlotta
Kellan W. Babbs
Amanda C. Bade
John Baez
Scott I. Bailey
Melissa D. Baker
Sara V. Balander
Ankush D. Bhartia
Mark A. Boman
Lindsay A. Bostrom
Kimberly L. Bowser
Phillip A. Boyd
Duncan W. Brooks
Kathryn A. Buckalew
William R. Burns
Tochukwu T. Chimezie
Dalsu Choi
Benjamin J. Dausman
Amanda M. Davis
Nathan J. Davis
Frank T. DeVilbiss
Matthew S. Dodd
Emily A. Ellsworth
Erin M. Fitzharris
Ian B. Flynn
Colin M. Fritz
Nathanael T. Goodwin
Alex R. Griessman
Jiang Guo
Tala Haddadin
Grant S. Haeussler
Anant K. Handa
Anna C. Harlan
Scott M. Harman
James B. Havron
Adrienne E. Heinzelman
Nicole M. Hinde
Tyler V. Hoehn
Jacqueline S. Hosford
Yaerid Jacob
Matthew J. Janis
Allison R. Jaspering
Colin S. Jepsen
Timothy R. Jokl
Evan B. Jorgenson
Dimitri S. Kapsalis
Jeffrey D. Keller
Stephen D. Kelley
Kyle R. King
Michael D. Kmiec
Mark A. Kovacevic
Benjamin T. Krushinski
Benjamin L. Lasher
Kyle N. Lichauer
Teresa Lin
Wei-Hsuan Liu
Cynthia Lo
Jacquelin S. Logan
David L. Lyons
Justin R. Mc Cormack
Stephanie A. Miller
Daniel J. Moeller
Brock N. Morgan
Mihir R. Mullick
Andrew C. Nguyen
Melvina Nyoto Setiadi
Kimberly Ohn
Michelle K. Ongko
Benjamin W. Oser
Melissa G. Perram
Ajay Raj
Vijay Raj
Suzanne K. Robison
Joel C. Roche
Diana P. Rubiano
Arial E. Ruble
Rachel E. Ryan
Jeuz A. Salvacruz
Kelsey B. Schaefer
John H. Scheel
Caitlin S. Schmitt
Dave C. Schwierman
Nicholas J. Seprodi
Benjamin A. Sheyko
Jared R. Shields
Soo-Yeon Shim
Brandon M. Small
Sarah B. Southerland
Justin E. Stanczyk
Sara M. Steinwart
Curtis P. Studebaker
Jia Sun
Veronica Thahar
Jessica M. Turner
Ashley N. Vacchiano
Eileen D. Van Wonterghem
Thomas C. Vonderschmitt
Sivali Wahab
Matthew S. Walters
Ezra S. Wan
Steven A. Warren
George S. Weeden
Jason D. Wendholt
Shaylyn N. Whelan
Bryant C. Williams
Owen L. Williams
Piyasit Wongareesanti
Apurv L. Yadav
Thomas A. Young
Elizabeth D. Zaseck
Amy N. Zeltwanger
Aaron M. Zettler
Yiyi Zhao
Lifeng Zheng

B.S. Graduates In Metallurgical Engineering with Degree Issued by the School of Chemical Engineering

1941

I. Beck
A. Christenson
W. Dempster
G. Fritzlen
T. Hamilton
T. Haver
P. Lauletta
R. Machery
W. Moss berg
W. Oaklay
G. Phillips
F. Roth
C. Schaefer
W. Scherrer
R. Schier
W. Short
D. Sloan
J. Richardson

1942

J. Bach
R. Bain
M. Beard
F. Beiser
G. Brick
J. Buck
S. Clow
E. Esping
J. Fraser
L. Frazier
R. Frazier
B. Glaser
R. Hadley
J. Harlan
G. Hoffer
A. Hoppe
T. Hughel
J. Irwin
E. Kinelski
R. (Levin) Maddin
H. Mann
J. Marshall
J. Mercer
J. Mesoff
S. Minton
J. Mohr
B. Montavon
R. Nash
D. Newhouse
J. Owens
R. Parker
E. Ponder
A. Powers
R. Raney
L. Richardson
W. Ruggles
G. Sauter
W. Schalliol
P. Schnedler
S. Shapiro
R. Simmons
E. Sopcak
J. Starkey
W. Taylor
E. Vicars
E. Warzynski
J. Weir
D. Wiese
J. Winterhaler
J. Wolff
G. Wood
R. Worthington
P. Zimmerman

1943

S. Bakalyar
J. Beckett
S. Berry
J. Bonick
R. Dohrmann
E. Grider
H. Harrison
D. Heckard
J. Houston
E. Klein
T. Luney
R. Neff
T. Peppler
M. Schussler
A. Seddon
T. Simon
K. Smith
C. Sperlik
D. Sutherland
E. Swarts
E. Wiley
B. Williams

1944

D. Baughman
R. Brody
W. Glover
J. Hafsten
G. Hangaman
W. Hendry
R. Homes
J. Hurwich
J. Kattus
G. Klouman
C. Michaels
B. Osmundson
R. Pettibone
J. Rutledge
J. Samulowitz
G. Stockmeier
R. Teitel

1945

T. Avril
R. Butler
J. Holzwarth
R. Mayer
R. Quinn
G. Peer
S. Johnson

1946

J. Baugher
R. Evans
H. Hackett
W. Haynes
F. Losson
L. Myers
J. Radavich
A. Risser
R. Saner

1947

Roger M. Atkins
William R. Benn
John H. Culling
Joseph Cutro
Ray W. Guard
William A. Hammer
Robert F. Kalmbach
Robert F. Kirkpatrick
Ralph J. Kotfila
Robert H. Kroeplin
Wayne A. Lundy
Paul M. Miller
John D. Pearson
R. Pettibone
Thomas W. Rappailber
Edward G. Ridoux
Richard F. Ringbam
Vernon K. Rising
Robert E. Ross
Stuart T. Ross
Dwight H. Sanderson
Arno Scoccia
John D. Sheley
William H. Wilson
Lawrence A. Zeis

1948

Lester E. Alban
David R. Appel
Eugene R. Andreotti
James W. Baldwin
Paul A. Blakely, Jr.
Forrest P. Coonrod
John R. Cuthill
William F. Davenport
Cecil K. David, Jr.
Harry E. Eccleston
James E. Hand
Theodore H. Heemstra
Morgan Henika, Jr.
Lawrence E. Higgins
Ray E. Huffaker
Wilson Kinsey, Jr.
Theordore Krengel
Chester F. Jatczak
Robert D. Lynch
Dwite M. McCloud
Robert H. McCreary
Roger E. McVay
Jack H. Pope
James S. Rosenbaum
Philip S. Savage, Jr.
Adolph J. Scheid
Warren A. Scott
Robert A. Senour
George F. Sommer
Alfred A. Strasser
William H. Tholke
Ralph F. Triska
Vaughan Tufts
James E. Ziegler

1949

Thomas R. Bradley
John F. Biehle
William J. Boesch
Paul R. Borneman
Norris E. Caudell
Robert H. Christenson
James F. Craig
Walter B. Crosset
Donald F. Currier
Henry J. DeKoyer
Gilbert Dementia
James W. Denison
Philip G. Denchler
Byron W. Elder
Harold L. Emmons
Leonard J. Ewalt
Howard C. Fiedler
Edward V. Golaszewski
Bruce D. Gribben
Donald W. Hackett
William F. Hackett
Walter Haynes
Martin D. Hecht
Arthur C. Heitmann
Robert L. Hughes
Thomas G. Johnston
James C. Kenney
Almon E. Leach
Robert Lautzenhiser
Joe C. Mahlie
William R. McCarthy
Walter P. McFatridge
Charles R. McKinsey
Richard P. Nelson
James R. Pequignot
Roger A. Perkins
Alexander A. Pinkowish
Raymond P. Pritchard
Louis J. Privosnik
William P. Quigley
John H. Reed
Lois M. Reinhold
Robert J. Reitz
Russell E. Rhoades
William H. Roberts
John O. Ross
Maurice Sadowsky
Emerson H. Sayell
Robert E. Schots
James R. Sims
Martin L. Smith
'Oscar H. Smith
Earl E. Swans en
Ervin E. Underwood
Jeryy K. Weinberg
Robert A. Wells
Perry L. Weston

1950

Chester A. Anderson
Steve J. Arendas
Paul W. Bergstedt
Richard D. Birocci
Bernard D. Bowen
Richard E. Bredeson
Gene R. Brehm
Ralph T. Brower
Roy G. Clark
Anthony C. DeSessa
William H. Dickey
Clayton D. Dickinson
Justin R. Drake
Richard P. Edwards
Richard A. Endsley
Jack L. Fehrenbach
Melvin J. Feldman
Vincent C. Festa
Robert C. Griffin
Melvin C. Hankel
Everett D. Harness
John R. Harvey
Russel Heath
Robert E. Heise
Robert N. Hendricks
Robert N. Hooker
James E. Huss
Henry F. Keller, Jr.
William A. Leeper
Paul R. Lewis
Jene P. Leterle
Hugh G. Lusher
William H. Lynch
Robert P. MacKenzie
Phillip F. Macherey
Flyod E. McBride
Donald S. McGlasson
John M. Nees
Edwyn H. Nielsen
Howard E. Nutt
John W. O'Neill
Harold K. Pearson
Charles E. Petit, Jr.
William Petro, Jr.
David W. Ritchie
William A. Rodefeld
Irwin B. Roll
Harry Rosen
Donald R. Scheid
Calvin S. Sherrill
Rita M. Siegrist
Charles R. Simcoe
Rowland E. Smith
Rudolph F. Spacek
Robert B. Sparks
Cecil K. Starks
Robert B. Stauber
George E. Stein
John B. Stobbs
John G. Strinich
Romeo L. Suffredini
Thomas Tignor
Robert K. Wagner
John C. Weis, Jr.
James T. Williams
William H. Yake

1951

Basilio J. Abbadessa
James W. Anderson
Ralph E. Anderson
Donald E. Beitsch
Robert D. Bell
James M. Benbow
Richard D. Black
Walter H. Blanck, Jr.
John W. Bethel
Edward J. Borto
Joseph B. Brauer
William A. Bringman
Don P. Carter
Eugene F. Chojnowski
Harold C. Colley
Richard E. Corder
Ralph L. Corbin
Roger A. Covert
Alvin W. Czanderna
Adolphe J. Edwards
Robert L. Edwards
Burt N. Eichkorn
Bruce E. Farwell
Doyle Geiselman
Daniel O. Gloven
Richard E. Grace
Harold P. Haberstroh
Bennie E. Hill
Donald M. Hjortland
Charles R. Johnson
George E. Kampschaefer
Joseph D. Karthman
Thomas N. Kelley
Bernard Kleiman
Carl W. Lauenstein
George E. Martin
Raymond J. Mayer
Edward J. Matot
Harry A. Matrone
Norman L. McClymonds
Robert D. Merrick
Charles W. Mettlen
John A. Miller
James G. Miller
A. T. (Mitrano) Morgan
James G. Morris
Keith H. Morrison
William Nighman
Stanley J. Noesen
William J. Pennington
Donald W. Pontius
Roy E. Rohrabangh
John E. Rosenberger
Bernt A. Ruediger
Donald E. Schultz
David B. Scott
Richard L. Shoner
Edward R. Slaughter
Robert G. Song
Edwin F. Steeb
Floyd I. Steffens
Malcolm B. Swan
Burton R. Turner
George L. Vonnegut
Robert P. Williams
Peter Zouraeff

1952

Russell U. Acton
Paul J. Ausbeck
James E. Berry
Robert J. Binder
Richard J. Braman
Hiram B. Cannon, Jr.
Neill J. Carson
W. Bruce Clymer
Nelson B. Colton
Marion H. Cornell
Samuel E. Eck
Robert A. Eidam
Henry M. Eikenberry
Robert H. Ewing
Andrew G. Forrest
James L. Golding
George R. Janser
J. Phil Jensen
Charles R. Kennedy
Donald E. Kirby
Paul E. Krupp
Thomas G. Lake
Edmund St. Madrzyk
William S. Meyer
Ronald L. Meyers
William C. Phelps, Jr.
Floyd W. Richards
John F. Schilts
Robert S. Shuns
Douglas H. Strong
William O. Treat
Clarence M. Wayman
Herbert D. Wedge
Thomas Witter
Reed E. Yount

1953

Jack N. Barnett
Stanley J. Block
Sheldon I. Clock
Fred C. Dyer, Jr.
Bennie C. Edmondson
Charles B. Gentry
Lawrence E. Gerlach
Lee H. Goetz
William M. Hogg
Louis Horvath
LeRoy Klingbeil
Richard C. Lacerte
Barry H. Levine
Dewein H. Naffziger
James E. Roberts
William E. Rogerson
Edwin D. Sayre
Milton W. Schlemmer
Robert E. Schueter
David W. Schulz
Edward H. Smith
Clinton A. Snow
Ronald D. Sutton
Carl R. Tufts
Victor H. Ulrich
Charles E. VanGilder
Robert B. Warrick
Richard W. Zieg

1954

Kenneth C. Antony
Eugene J. Axe, Jr.
George C. Beals
William A. Bennett
Zaude Bessoufecad
James H. Clark
William H. Cooney
Jacob Crane
Verle W. Fiegle
Robert B. Fraser
Gerald P. Fritzke
John D. Grozier
Donald G. Harrington
James R. Hornaday, Jr.
Eugene B. James
Philip F. Murray
James H. Peacock
Robert S. Peterson
Leo C. Powers
Elliott H. Rennhack
Joseph H. Rice, Jr
Douglas J. Roth
Sherwood Salmassy
David W. Schulz
Jerome M. Selig
James V. Sprong
Raymond C. Stoll
Paul W. Turner
Adrian O. Vanaman
Richard P. Waugh

1955

Thomas F. Archbold
Albert M. Barlega
Robert E. Benedict
Donald C. Carmichael
James R. Cone
Abraham L. Eiss
Willard G. Fear
Richard Garlander
Raymond B. Gavert
Keith L. Gilbert
Richard A. Gorecki
Paul Grande
Wilson A. Holland
Jared K. Jackson
Earl E. Jenkins
Gerald L. Liedl
Robert Martin, Jr.
James C. McFatridge
Phillip S. Oberlin
Lawrence A. Olson, Jr.
Alvin L. Panitch
Stan R. Seagle
William B. Smith
John R. Stewart
David Tanger
Robert R. Wagner
George E. Wood

1956

Wayne L. Amber
Walter J. Arrowsmith
John A. Basmajian
Edward E. Billinghurst
Robert W. Dague
Buddy M. Galubiewski
Lester A. Griffin
James R. Gross
George S. Hamilton
Rollin E. Hook
Michael Kelyman.
Carl L. Klinefelter
Lawrence W. Lindquist
Harvey B. Meieran
Richard D. Quinn
Robert A. Rapp
Richard P. Reed
Alvin D. Thomas

1957

Eugene H. Barnes
Stuart Wallace Bolinger
Peter B. Briney
Paul N. Browand
James R. Capen
Leon F. Chamberlain
Stuart A. Cohn
Calvin G. Conrad
Robert E. Conreaux
Richard D. Darling
Michael E. Deitch
Roger W. Diehl
James J. Dore
Lee R. Duffner
Kenneth J. Filar
Gaylord L. Francis
Robert F. Freeman, Jr.
Pual J. Gripshover
Hugh D. Hanes
William K. Heinlein
Barrett H. Heise
John L. Hokanson
Thomas F. Kassner
Arthur E. Lord, Jr.
Kenneth L. Love
Thomas A. Lynch
Donald R. MacKinnon
Raymond V. Maik
Robert N. Martin
John E. McConnell
Stephen M. Meier
Thomas D. Moore
John R. O'Beirne
Kenneth E. Parr
Edward T. Peters
Robert Richards
Kurt O. Rieder
Clifton R. Seltzer
Victor H. Thevenow
Bill S. Wong
Raymond H. Wyczawski
William B. Wylam

1958

John L. Bray, Jr.
Richard J. Choulet
Philip S. Cowen
Alfred R. Divan
Larry J. Dwiggins
Donald Dybalski
Gerald L. Houze, Jr.
Richard M. Howell
Samuel M. Kaplan
Frank Lambertus, II
Bernard W. Lifka
Terrance B. Lindemer
Donald G. Matheson, Jr.
Vassilis C. P. Morfopoulos
Karl E. Muszar, Jr.
Michael A. Pallotto
Donald A. Pearson
Robert E. Seward
Gary L. Spahr
Robert W. Spiggle
Carmine J. Spinelli
Robert W. Zollinger

1959

Edward N. Armit
Charles R. Bieber
Thomas V. Ciukaj
Joseph D. Clyne
Robert W. Cook
Peter F. Coyle
Wayne A. Farrington
E. J. Fitzgerald, Jr.
Ronald I. French
Raymond W. Gass
Billie C. Gaskins
Thomas A. Gorecki
David A. Halterman
Samuel J. Hruska
Robert G. R. Johnson
Wayne R. Johnson
Gary E. Kieinedler
Lawrence S. Krol
Edward A. Lauchner
Walter F. Lewellyn
Robert C. McAllister
Raymond J. McCallum
Eugene S. Meieran
John M. Morrison
Robert Rucoba
Lee F. Schutmeister
Robert L. Sharkitt
William W. Shropshire, Jr.
Frank A. Sianta
Edward J. Simanek, Jr.
Richard S. Stenberg
Edward A. Tellefsen
Homer M. Wolfe
Lee Wolfson
John B. Young, Jr.

Appendix S

ChE Research Expenses

Fiscal Year	ChE Research Expenditures	#Professors	Exp/Prof	COE Research Expenses	ChE as % of COE Res. Expenses
1951-52	47,000	17	2,700	424,000	11%
1952-53	58,000	18	3,200	507,000	11%
1953-54	53,000	15	3,500	1,030,000	5%
1954-55	79,000	15	5,300	852,000	9%
1955-56	132,000	15	8,800	950,000	14%
1956-57	60,000	15	4,000	883,000	7%
1957-58	70,000	15	4,600	921,000	8%
1958-59	52,000	16	3,200	913,000	6%
1959-60	97,000	15	6,500	1,347,000	7%
1960-61	95,000	15	6,300	1,597,000	6%
1961-62	67,000	15	4,500	1,684,000	4%
1962-63	75,000	15	5,000	2,104,000	4%
1963-64	51,000	17	3,000	2,239,000	2%
1964-65	72,000	17	4,200	2,515,000	3%
1965-66	41,000	17	2,400	2,640,000	2%

1966-67	78,000	15	5,200	4,407,000	2%
1967-68	87,000	21	4,200	5,166,000	2%
1968-69	142,000	21	6,800	5,507,000	3%
1969-70	309,000	21	14,700	6,769,000	5%
1970-71	298,000	20	14,900	7,026,000	4%
1971-72	329,000	20	16,500	7,314,000	4%
1972-73	317,000	17	18,600	7,675,000	4%
1973-74	301,000	20	15,100	8,795,000	3%
1974-75	611,000	16	38,200	10,612,000	6%
1975-76	837,000	17	49,200	12,018,000	7%
1976-77	1,065,000	16	66,600	12,956,000	8%
1977-78	1,463,000	18	81,300	15,356,000	10%
1978-79	1,541,000	19	81,100	17,122,000	9%
1979-80	1,165,000	18	64,700	19,349,000	6%
1980-81	1,357,000	21	64,600	23,329,000	6%
1981-82	1,604,000	21	76,400	21,994,000	7%
1982-83	1,743,000	21	83,000	23,334,000	7%
1983-84	1,144,593	21	54,504	20,458,353	6%
1984/85	1,307,883	18	72,660	22,952,288	6%
1986	1,352,278	15.5	87,244	24,626,935	5%
1987	1,583,801	13.76	115,102	28,586,247	6%
1988	1,725,828	17.98	95,986	29,576,961	6%
1989	1,610,799	17.31	93,056	28,596,191	6%
1990	1,568,869	15.73	99,737	28,738,370	5%
1991	1,761,593	18.26	96,473	30,536,478	6%
1992	2,128,039	20.25	105,088	33,476,168	6%

1993	2,557,960	20	127,898	35,729,698	7%
1994	3,088,599	20	154,430	36,754,443	8%
1995	3,508,767	20.1	174,566	40,151,251	9%
1996	3,473,968	18.43	188,495	42,014,104	8%
1997	8,400,521	18.85	445,651	43,824,888	19%
1998	6,412,000	20.86	307,383	44,908,870	14%
1999	6,553,000	20.25	323,605	47,735,997	14%
2000	7,378,000	19.75	373,570	46,701,589	16%
2001	6,019,000	18.24	329,989	49,925,424	12%
2002	8,858,231	19.44	455,670	52,904,777	17%
2003	9,149,750	22.04	415,143	65,318,408	14%
2004	11,371,299	22.25	511,070	67,463,167	17%
2005	12,270,000	23.25	527,742	75,547,022	16%
2006	6,299,156	22.63	278,354	75,962,682	8%
2007	8,902,457	22.38	397,786	76,591,765	12%
2008	10,847,556	23.63	459,059	89,684,808	12%
2009	11,271,675	21.63	521,113	97,987,643	12%
2010	13,986,000	24.13	579,610	120,454,295	12%
Total	171,900,310			1,586,543,822	11%

Appendix T

Scholarly Journal Publications of ChE Faculty

Table T-1 presents the number of publications of the Purdue ChE faculty since January 1923 when the first such publication was written by Peffer. Table T-2 also presents the number of publications by ChE faculty, but from a different source. Note that textbooks (Table 7-9), the various books in Table 8-10, and most educational publications (Appendix W) are not included in Tables T-1 or T-2. To compare Tables T-1 and T-2, note that the data in Table T-1 is by two year periods. For example, the 2007-08 publication number from Table T-1 is 161 while from Table T-2 is 90 + 113 = 203. The effect of using different data bases is evident. Table T-3 lists the major journals ChE faculty published in and Table T-4 classifies the articles by category.

Table T-1. Publication Numbers by ChE Faculty from 1923 to 2008

Data for the years 1923 through 1950 are from the Appendix of the *History of Chemical Engineering* by J.L. Bray. Data for the years 1952 through 2008 (the last year data are available) are from the *ACS Graduate Directory of Research*. Since some professors included in their papers listed in the *ACS Graduate Directory of Research* papers published in conference proceedings, magazines, and as preprints; and others did not; to be consistent these items were excluded after 1982. The normal practice in comparing publications from different universities is to exclude these papers. In addition, after 1982 papers with multiple faculty authors were counted as a single paper (surprisingly, this correction is often not made when publications by faculty at different schools are compared—instead a paper with three faculty authors would be counted as three papers). This correction can be significant (e.g., without this correction the publications per faculty per year would be 3.6 in 2007-08 instead of 2.9). Because of these adjustments, the count after 1982 is more conservative than before and including 1982. Papers by temporary visiting faculty and by emeritus professors are also excluded.

Period	Publications per Year	Faculty Members	Publications/Faculty/year
1/1/23-12/31/24	1	2	0.3
1/1/25-12/21 /26	1	3	0.2
1/1/27-12/31/28	1	3	0.2
1/1/29-12/31/30	2	5	0.2
1/1/31-12/31/32	7	5	0.7
1/1/33-12/31/34	25	5	2.5

1/1/35-12/31/36	15	6	1.2
1/1/37-12/31/38	8	5	0.8
1/1/39-12/31/40	14	6	1.2
1/1/41-12/31/42	7	6	0.6
1/1/43-12/31/44	18	6	1.5
1/1/45-12/31/46	9	8	0.6
1/1/47-12/31/48	21	9	1.2
1/1/49-12/31/50	19	12	0.8
1/1/51-9/29/52	No report		
9/30/52-9/30/53	45	18	2.5
10/1/53-9/30/55	51	15	1.7
10/1/55-9/30/57	51	15	1.7
10/1/57-9/30/59	No report		
10/1/59-6/30/61	19	15	0.6
7/1/61-6/30/63	18	15	0.6
7/1/63-6/30/65	27	16	0.8
7/1/65-6/30/67	83	15	2.8
7/1/67-6/30/69	59	16	1.8
7/1/69-4/30/71	45	21	1.1
5/1/71-4/30/73	64	18	1.8
5/1/73-4/30/75	58	18	1.6
1/1/75-12/31/76	133	19	3.5
1/1/77-12/31/78	112	19	2.9
1/1/79-12/31/80	127	18	3.5
1/1/81-12/31/82	159	21	3.8
1/1/83-12/31/84	125	22	2.8
1/1/85-12/31/86	154	22	3.5
1/1/87-12/31/88	178	23	3.9
1/1/89-12/31/90	184	23	3.9
1/1/91-12/31/92	148	25	3.0
1/1/93-12/31/94	213	25	4.3
1/1/95-12/31/96	308	24	6.4
1/1/97-12/31/98	221	25	4.4
1/1/99-12/31/00	207	25	4.1
1/1/01-12/31/02	143	24	3.0
1/1/03-12/31/04	185	27	3.4
1/1/05-12/31/06	157	25	3.1
1/1/07-12/31/08	161	27	2.9

Table T-2. Publication Numbers by ChE Faculty from 1973 to 2010

Data are from the Web of Knowledge v.5.3 version of the Web of Knowledge ® system of ISI. Published papers includes refereed publications, proceedings like MRS and SPIE proceedings, and ACS symposium series, but no books, magazines (e.g., *ASEE PRISM),* reports or abstracts. All information collected was for all publications that bear the address "chem engn" AND "purdue."

1973	30	1986	65	1999	108
1974	19	1987	74	2000	106
1975	19	1988	71	2001	80
1976	33	1989	79	2002	80
1977	37	1990	60	2003	107
1978	49	1991	81	2004	102
1979	46	1992	61	2005	106
1980	46	1993	86	2006	119
1981	50	1994	100	2007	90
1982	54	1995	109	2008	113
1983	60	1996	123	2009	97
1984	56	1997	131	2010	116
1985	82	1998	79		

Table T-3. Distribution of ChE Faculty Publications

Based on Web of Knowledge data for 1973 to 2010. Journal impact factors are for 2010.

Journal	Papers	%	Impact Factor
Industrial Engineering Chemistry Research	165	5.5 %	2.07
AIChE Journal	150	5.0%	2.03
Computers & Chemical Engineering	137	4.6%	2.07
Chemical Engineering Science	110	3.7%	2.38
Biotechnology and Bioengineering	108	3.6%	3.70
Langmuir	63	2.1%	4.27
Journal of Chemical Physics	55	1.8%	3.15
Macromolecules	52	1.7%	4.84
Journal of Catalysis	51	1.7%	5.41
Journal of Applied Polymer Science	50	1.7%	1.24
Journal of Colloid and Interface Science	49	1.6%	3.07

Journal of Controlled Release	49	1.6%	7.42
Polymer	38	1.3%	3.83
IEC Fundamentals	37	1.2%	2.07
IEC Process Design and Development	36	1.2%	2.07
Journal Chemical and Engineering Data	34	1.1%	2.09
ACS Symposium Series	28	0.9%	---
Biomaterials	28	0.9%	7.88
Chemical Engineering Communications	28	0.9%	0.91
Fluid Phase Equilibria	26	0.9%	2.25
Journal of Physical Chemistry B	25	0.8%	3.60
Biotechnology Progress	23	0.8%	2.18
Computer Aided Chemical Engineering	22	0.7 %	0.20
Physics of Fluids	21	0.7 %	1.72
International Journal of Pharmaceutics	19	0.6 %	3.61
MRS Proceedings	19	0.6 %	----
SPIE Proceedings	19	0.6 %	0.82
Colloids and surfaces A	18	0.6 %	2.13
Physical Review B	18	0.6 %	3.77
Journal Polymer Science, Polymer Physics	16	0.5 %	1.59
Polymer Bulletin	16	0.5 %	1.21
Journal of Membrane Science	15	0.5 %	3.67
Physical Review E	15	0.5 %	2.35
Analytical Chemistry	14	0.4 %	5.28
Journal of Process Control	14	0.4 %	1.65
Separation Science and Technology	14	0.4%	1.01
Catalysis Today	13	0.4 %	2.99
Journal Biomaterials Science,Polym Ed	13	0.4 %	1.84
Journal of Pharmaceutical Sciences	13	0.4 %	3.03
Journal of Physical Chemistry	13	0.4 %	2.73
Journal of the Electrochemical Society	13	0.4 %	2.42
Applied Physics Letters	12	0.4 %	3.82
Journal Vacuum Science Technology A	12	0.4 %	1.28
Molecular Physics	12	0.4 %	1.74
Physical Review Letters	12	0.4 %	7.33
Engineering Applic Artificial Intelligence	11	0.4 %	1.34
Journal American Chemical Society	11	0.4 %	9.02
Pharmaceutical Research	11	0.4 %	4.46
Applied Biochemistry and Biotechnology	10	0.3 %	1.88

Table T-4. Classification of ChE Faculty Publications

According to the Web of Knowledge ® classification and Web of Knowledge data for 1973 to 2010 , the research published by Purdue ChE faculty are classified as follows:

Classification	No.	%
Chemical Engineering	987	33.13 %
Chemistry (multidisciplinary)	574	19.27 %
Physical Chemistry	387	12.99 %
Polymer Science	273	9.16 %
Biotechnology & Applied Microbiology	193	6.48 %
Materials Science (multidisciplinary)	183	6.14 %
Computer Science	158	5.30 %
Pharmacology & Pharmacy	130	4.36 %
Physics (atomic molecular chemical)	91	3.05 %
Applied Physics	84	2.82 %
Industrial Engineering	83	2.78 %
Biomedical Engineering	71	2.38 %
Mechanics	68	2.28 %
Biomaterials	65	2.18 %
Analytical Chemistry	60	2.01 %
Automation & Control Systems	58	1.95 %
Nanoscience & Nanotechnology	56	1.88 %
Physics of condensed matter	55	1.84 %
Thermodynamics	48	1.61 %
Engineering (multidisciplinary)	47	1.58 %
Optics	46	1.54 %
Physics of Fluids	46	1.54 %
Engineering (electrical electronic)	45	1.51 %
Food Science & Technology	45	1.51 %
Biochemistry & Molecular Biology	44	1.48 %
Applied Chemistry	40	1.34 %
Materials Science & Coatings Films	38	1.27 %
Energy & Fuels	37	1.24 %
Environmental Sciences	30	1.08 %
Electrochemistry	27	0.90 %
Biophysics	23	0.77 %
Environmental Engineering	22	0.74 %
Medicinal Chemistry	20	0.67 %
Education	19	0.69 %

	RA	LA	RPA	CB	RB	OB	SB	GB	JMC	KC	DC	JSC	WND	FD	AE	RE	EF	RG	HLH	REH	MH	HWH	RNH	DK	SK	LK	JAL
RA													X									X					
LA					X											X											
RPA													X														X
CB													X														
RB		X																X		X			X	X			
OB																	X				X						
SB																											
GB									X				X														X
JMC								X		X			X				X										X
KC									X		X							X						X			
DC										X							X										
JSC																											
WND	X		X	X				X	X								X										
FD																											X
AE																											
RE		X																									
EF						X			X		X		X							X		X					X
RG					X					X																	
HLH																											
REH					X												X										
MH						X																	X				
HWH	X																X										
RNH					X																X						
DK					X					X																	
SK																											
LK																											
JAL			X					X	X				X				X										
GL																											
JHL			X																								
JDL														X							X		X				
HL															X									X		X	
JM																											
JP								X				X		X													
BP									X																		
NP									X			X		X													
DR									X			X	X	X					X	X							X
GR								X						X												X	
FR	X							X	X																		
DS																											
ESM																											
CT													X														
JT			X																X								
TT		X			X																		X				
KT									X				X				X					X					X
GT									X				X			X											
AV													X														
VV								X	X	X			X	X													X
LW					X												X					X		X			
PW					X			X					X		X								X	X			
JW1									X																		
YYW									X												X						
JW2																X											
RS		X																									
WW					X																						
#	3	4	4	1	9	2	0	8	14	5	2	3	14	6	2	3	9	2	2	3	4	4	5	5	0	2	8

RA=Rakesh Agrawal, LA=Lyle Albright, RPA=Ron Andres, CB=Chelsey Baertsch, RB=Ron Barile, OB=Osman Basaran, SB=Steve Beaudoin
GB=Gary Blau,JMC=Jim Caruthers,KC=KC Chao,DC=David Corti,JSC=Jennifer (Sinclair)Curtis, WND=Nick Delgass, FD =Francis Doyle, AE=Alden Emery
RE=Roger Eckert, EF=Elias Franses, RG= Robert Greenkorn, HLH=Hillary(Lackritz) Hampsch,REH= Robert Hannemann, MH=Mike Harris,
HWH = Hugh Hillhouse, RNH=Neal Houze, DK=Dave Kessler, SK=Sanghae Kim, LK =Lowell Koppel, JAL=Jochen Lauterbach, GL=Gil Lee,
JHL=Jay H. Lee, JDL= James D. Litster, HL=Henry Lim, JM=John Morgan, JP=Joe Pekny, BP=Byron Pipes, NP=Nicholas Peppas,

GL	JHL	JDL	HL	JM	JP	BP	NP	DR	GR	FR	DS	ESM	CT	JT	TT	KT	GT	AV	VV	LW	PW	JW1	YYW	JW2	RS	WW	
										X																	RA
															X									X	X		LA
	X													X													RPA
																											CB
															X					X	X					X	RB
																											OB
																											SB
					X				X	X									X		X						GB
						X	X	X		X						X	X		X			X	X				JMC
														X					X								KC
																											DC
					X		X	X																			JSC
								X		X			X			X	X	X	X		X						WND
		X			X		X	X	X										X								FD
			X																		X						AE
																	X							X			RE
																X				X							EF
																											RG
								X						X													HLH
								X																			REH
		X																					X				MH
																X				X							HWH
		X													X						X						RNH
			X																	X	X						DK
																											SK
			X						X																		LK
																X			X								JAL
																											GL
								X																			JHL
																											JDL
								X			X				X		X									X	HL
								X																			JM
									X										X								JP
																							X				BP
									X						X												NP
	X		X	X													X	X									DR
					X		X				X								X					X	X		GR
																X											FR
			X						X																		DS
																											ES
							X													X							CT
																				X							JT
			X																								TT
										X				X						X							KT
			X					X													X					X	GT
								X													X						AV
					X				X							X											VV
													X	X		X	X				X						LW
																	X			X							PW
																											JW1
																											YYW
									X																		JW2
									X																		RS
			X														X										WW
0	2	3	8	1	5	1	5	11	9	5	2	0	2	5	5	8	8	2	8	8	9	1	3	3	2	3	243

DR=Doraiswami Ramkrishna, GR=Gintaras Rekliatis, FR =Fabio Ribeiro, DS=Dan Schneider, ESM=Eva Sevick-Muraca, CT=Christos Takoudis, JT=Julian Talbot, TT=Theofanis Theofanous, KT=Kendall Thomson, GT= George Tsao, AV= Arvind Varma, VV= Venkat Venkatasubramanian, LW=Linda Wang, PW= Phil Wankat, JW1= John M. Wiest, YYW=You Yeon Won, JW2=John M. Woods, RS= Robert Squires, WW=William Weigand. New assistant professors are not included since they have not had time to develop collaborations and publish results from these collaborations.

Appendix V

Evolution of ChE Research at Purdue

Applied Mathematics

David P. Kessler	(1965-73)
Henry C. Lim	(1966-87)
Doraiswami Ramkrishna	(1976-)

Biochemical Engineering

Clifton L. Lovell	(1943-46)
Alden H. Emery	(1971-90)
Henry C. Lim	(1971-87)
William A. Weigand	(1971-80)
George T. Tsao	(1974-2005)
Phillip C. Wankat	(1974-2000)
Doraiswami Ramkrishna	(1976-)
Jin-Ho Seo	(1986-89)
John A. Morgan	(2000-)
Julie C. Liu	(2008-)
Raj Chakrabarti	(2009-)
Chongli Yuan	(2009-)

Biomedical Engineering

Robert E. Hannemann	(1969-)
William A. Weigand	(1970-75)
Ronald G. Barile	(1970-80)
Nicholas A. Peppas	(1976-02)
Linda N.H. Wang	(1980-85)
Elias I. Franses	(1986-2001)
Eva Sevick-Muraca	(1994-99)
Joseph Pekny	(2002-)
Doraiswami Ramkrishna	(2003-)
Stephen P. Beaudoin	(2003-)
You-Yeon Won	(2003-)
Julie C. Liu	(2008-)

Catalysis

R. Norris Shreve	(1945-53)
Joseph M. Smith	(1946-55)
Lyle F. Albright	(1958-91)
Robert G. Squires	(1962-88)
William N. Delgass	(1974-)
Doraiswami Ramkrishna	(1976-)
Ronald P. Andres	(1981-2004)
Christos G. Takoudis	(1981-96)
Jochen Lauterbach	(1996-2002)
Kendall T. Thomson	(2000-)
Venkat Venkatasubramanian	(2002-08)
Fabio H. Ribeiro	(2003-)
Arvind Varma	(2004-)

Colloid Science & Interfacial Phenomena

R. Norris Shreve	(1945-50)
Doraiswami Ramkrishna	(1976-)
Elias I. Franses	(1979-)
N. H. Linda Wang	(1990-)
Osman Basaran	(1995-)
David S. Corti	(1998-)
Michael T. Harris	(2002-)
Stephen P. Beaudoin	(2003-)
You-Yeon Won	(2003-)
Chongli Yuan	(2009-)

Control

Donald R. Coughanowr	(1960-67)
Lowell B. Koppel	(1961-85)
John W Woods	(1964-70)
Theodore J Williams	(1965-70)

Henry C Lim	(1966-87)
William A Weigand	(1967-81)
Daniel R Schneider	(1970-74)
Ronald P. Andres	(1981-91)
Francis Doyle	(1992-97)
Jay H. Lee	(1998-2000)
Raj Chakrabarti	(2009-)

Energy

George Tsao	(1974-2005)
Hugh Hillhouse	(2002-10)
Arvind Varma	(2004-10)
Rakesh Agrawal	(2004-)
W. Nicholas Delgass	(2004-)
Fabio H. Ribeiro	(2004-)
Arvind Varma	(2005-)
John A. Morgan	(2006-)
Doraiswami Ramkrishna	(2008-)
Joseph F. Pekny	(2008-)
Raj Chakrabarti	(2009-)
Yue Wu	(2009-)
Brian Boudouris	(2011-)

Environmental Engineering

Henry C. Lim	(1968-75)

Fluid Mechanics

Clifton L. Lovell	(1934-46)
John E. Myers	(1950-55)
Edward W. Comings	(1951-59)
Alexander Sesonske	(1954-70)
Paul T. Shannon	(1958-63)
David P. Kessler	(1964-80)
Robert A. Greenkorn	(1965-2001)
Ronald G. Barile	(1966-80)
Roger E. Eckert	(1968-80)
James M. Caruthers	(1977-)
R. Neal Houze	(1969-78)
Theofanis G. Theofanous	(1969-75)
Phillip C. Wankat	(1970-77)
John M. Wiest	(1988-95)
Osman Basaran	(1995-)
Michael Harris	(2002-)
Sangtae Kim	(2003-08)

Gas Engineering

Robert B. Leckie	(1928-36)

Heat and Mass Transfer

R. Norris Shreve	(1945-53)
Joseph M. Smith	(1945-57)
Carroll 0. Bennett	(1949-59)
John E. Myers	(1950-66)
Hendrick C. Van Ness	(1952-57)
Alden H. Emery	(1954-70)
Alexander Sesonske	(1954-70)
John M. Woods	(1955-60)
J. Henry Rushton	(1955-71)
Robert D. Vaughn	(1960-64)
Roger E. Eckert	(1964-72)
Ronald G. Barile	(1966-80)
Theofanis G. Theofanous	(1969-75)
R. Neal Houze	(1969-78)
Doraiswami Ramkrishna	(1976-80)
George T. Tsao	(1974-2003)
Nicholas A. Peppas	(1976-2002)
Phillip C. Wankat	(1976-80)

Kinetics & Reaction Engineering

R. Norris Shreve	(1935-55)
Clifton L. Lovell	(1940-46)
Joseph M. Smith	(1945-56)
Thomas C. Doody	(1947-70)
John M. Woods	(1952-70)
Lyle F. Albright	(1955-91)
Robert G. Squires	(1962-88)
Roger E. Eckert	(1966-2003)
W. Nicholas Delgass	(1974-)
George T. Tsao	(1974-02)
Doraiswami Ramkrishna	(1976-)
Ronald P. Andres	(1981-2004)
Christos G. Takoudis	(1981-96)
James M. Caruthers	(1998-)
Fabio H. Ribeiro	(2003-)
Arvind Varma	(2004-)

Metallurgical Engineering

John L. Bray	(1923-52)
Harold L. Maxwell	(1926-30)
Joseph W. Campbell	(1930-35)
John F. Eckel	(1939-45)
George M. Enos	(1946-52)
Dillon Evers	(1948-56)
Thomas J. Hughel	(1951-55)

Molecular and Nanoscale Modeling

Julian Talbot	(1989-96)
David S. Corti	(1998-)
Kendall T. Thomson	(2000-)
Michael Harris	(2002-)
You-Yeon Won	(2003-)
Raj Chakrabarti	(2009-)

Optimization

Lowell B. Koppel	(1961-85)
Gintaras V. Reklaitis	(1970-)
Venkat Venkatasubramanian	(1988-)
Joseph F. Pekny	(1990-)

Organic Technology

R. Norris Shreve	(1930-55)

Particulates

Jennifer Sinclair Curtis	(1997-2004)
Michael T. Harris	(2002-)
James D. Litster	(2007-)

Pharmaceutical Engineering

Ron Barile	(1970-80)
William A. Weigand	(1970-75)
Nicholas A. Peppas	(1980-2002)
Sangtae Kim	(2003-10)
Gintaras V. Reklaitis	(2004-)
Venkat Venkatasubramanian	(2005-)
Ramki Ramkrishna	(2006-)
James D.Litster	(2007-)
Stephen P. Beaudoin	(2008-)
Michael T. Harris	(2010-)

Polymers and Materials

R. Norris Shreve	(1945-55)
Ralph A. Morgen	(1954-59)
Alden H. Emery	(1954-70)
Leslie C. Case	(1956-62)
Brage Golding	(1959-66)
Lyle F. Albright	(1960-70)
Roger E. Eckert	(1964-90)
Nicholas A. Peppas	(1976-02)
James M. Caruthers	(1977-)
George T. Tsao	(1980-2005)
Ronald P. Andres	(1981-2004)
Hilary S. (Hampsch) Lackritz	(1991-98)
Gil U. Lee	(2000-06)
You-Yeon Won	(2003-)
Stephen P. Beaudoin	(2003-)
Arvind Varma	(2004-)
Bryon Pipes	(2004-)
Julie Liu	(2008-)
Yue Wu	(2009-)
Brian Boudouris	(2011-)

Semiconductor Processing & Microelectronics

Christos Takoudis	(1981-96)
Stephen P. Beaudoin	(2003-)

Separation Science

Buford D. Smith	(1958-65)
Phillip C. Wankat	(1970-)
George T. Tsao	(1974-93)
Linda N.H. Wang	(1980-)
Rakesh Agrawal	(2004-)
Elias I. Franses	(2005-)

Simulation, Optimization and Design

John M. Woods	(1965-77)
Lowell B. Koppel	(1966-85)
Gintaras V. Reklaitis	(1970-)
Venkat Venkatasubramanian	(1988-)
Joseph F. Pekny	(1990-)
Gary E. Blau	(1998-2006)

Thermodynamics

Joe M. Smith	(1945-56)
Dysart G. Holcomb	(1946-48)
Edward W. Comings	(1951-58)
Hendrick C. Van Ness	(1952-57)
Lowell B. Koppel	(1961-65)
K.C. Chao	(1968-93)
Robert A. Greenkorn	(1965-2001)
David S. Corti	(1998-)

Unit Processes

Harry C. Peffer	(1920-34)
R. Norris Shreve	(1930-55)
J. Clarence Lottes	(1949-51)
Samuel C. Hite	(1951-57)
Brage Golding	(1959-66)
Lyle F. Albright	(1955-70)

Unit Operations (Note: Separation Science can be considered a continuation.)

Harry C. Peffer	(1920-34)
Clifton L. Lovell	(1934-46)
Dysart G. Holcomb	(1946-48)
Thomas C. Doody	(1947-70)
Carroll 0. Bennett	(1949-59)
Edward W. Comings	(1951-59)
W. Henry Tucker	(1953-69)
Stanford W. Briggs	(1956-66)

Appendix W

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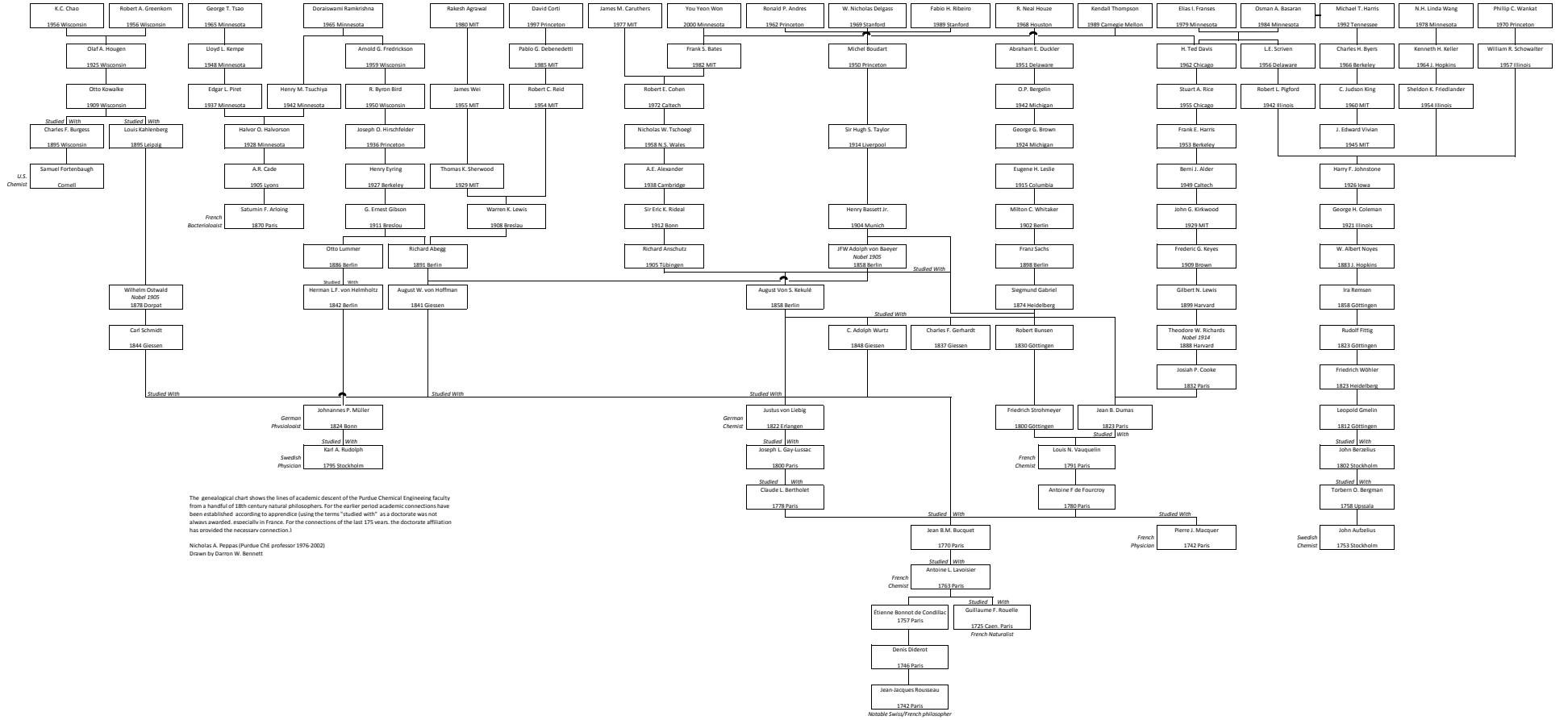
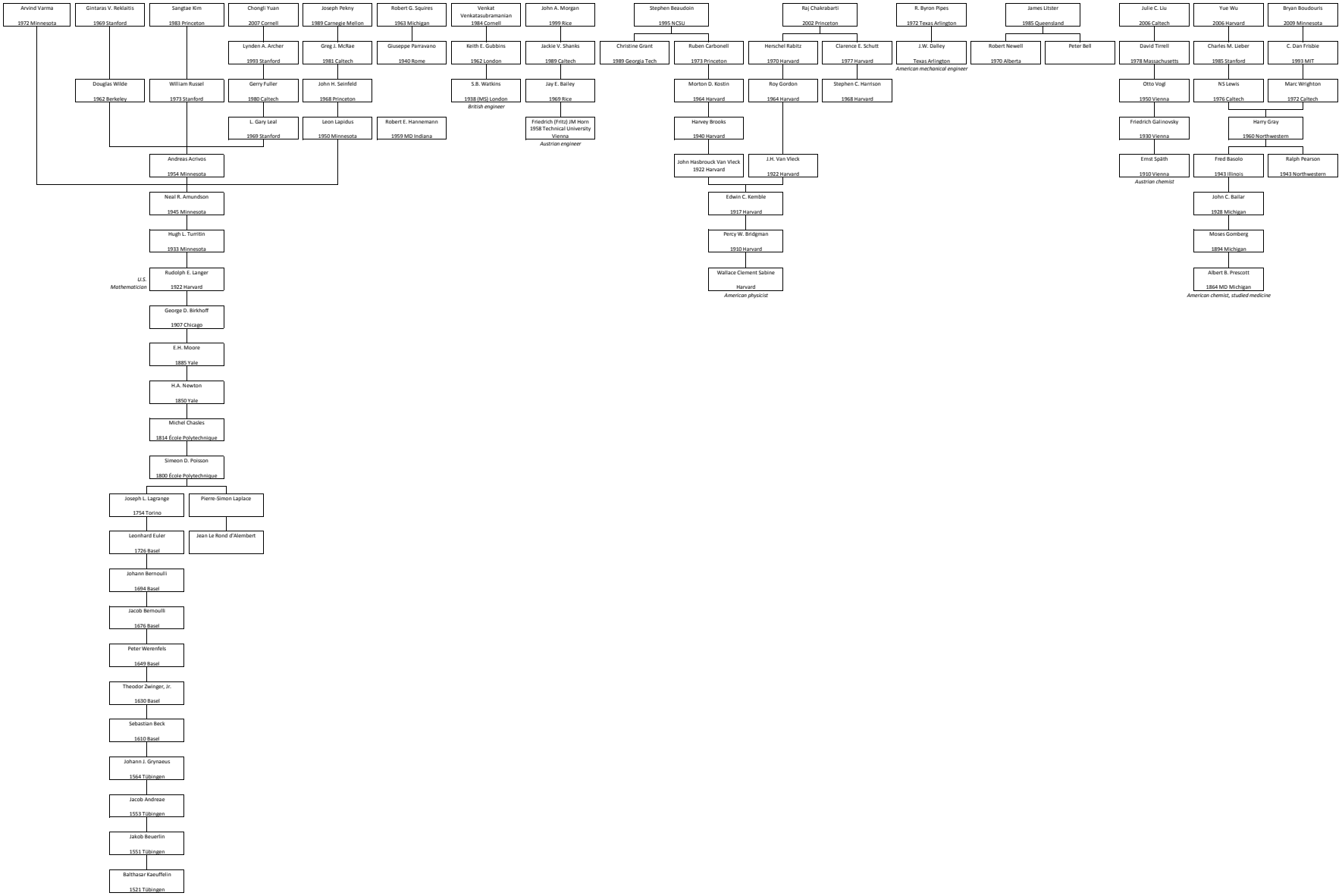
Wankat, P. C., "Pedagogical Training and Research in Engineering Education," *Chem. Engr Educ., 42*, 203-210 (Fall 2008).

Wankat, P. C., "The Role of Chemical Engineering in Engineering Education Research," *Proc. ASEE 2009 Annual Conf.*, Austin, TX, June 2009, CD paper 852.



The genealogical chart shows the lines of academic descent of the Purdue Chemical Engineeing faculty from a handful of 18th century natural philosophers. For the earlier period academic connections have been established according to apprendice (using the terms "studied with" as a doctorate was not always awarded. especialy in France. For the connections of the last 175 years. the doctorate affiliation has orovided the necessary connection.)

Nicholas A. Peppas (Purdue ChE professor 1976-2002)
Drawn by Darron W. Bennett


Arvind Varma
1972 Minnesota
Gintaras V. Reklaitis
1969 Stanford
Douglas Wilde
1962 Berkeley
Sangtae Kim
1983 Princeton
William Russel
1973 Stanford
Andreas Acrivos
1954 Minnesota
Neal R. Amundson
1945 Minnesota
Hugh L. Turritin
1933 Minnesota
U.S. Mathematician
Rudolph E. Langer
1922 Harvard
George D. Birkhoff
1907 Chicago
E.H. Moore
1885 Yale
H.A. Newton
1850 Yale
Michel Chasles
1814 École Polytechnique
Simeon D. Poisson
1800 École Polytechnique
Joseph L. Lagrange
1754 Torino
Leonhard Euler
1726 Basel
Johann Bernoulli
1694 Basel
Jacob Bernoulli
1676 Basel
Peter Werenfels
1649 Basel
Theodor Zwinger, Jr.
1630 Basel
Sebastian Beck
1610 Basel
Johann J. Grynaeus
1564 Tübingen
Jacob Andreae
1553 Tübingen
Jakob Beuerlin
1551 Tübingen
Balthasar Kaeuffelin
1521 Tübingen
Pierre-Simon Laplace
Jean Le Rond d'Alembert
Chongli Yuan
2007 Cornell
Lynden A. Archer
1993 Stanford
Gerry Fuller
1980 Caltech
L. Gary Leal
1969 Stanford
Joseph Pekny
1989 Carnegie Mellon
Greg J. McRae
1981 Caltech
John H. Seinfeld
1968 Princeton
Leon Lapidus
1950 Minnesota
Robert G. Squires
1963 Michigan
Giuseppe Parravano
1940 Rome
Robert E. Hannemann
1959 MD Indiana
Venkat Venkatasubramanian
1984 Cornell
Keith E. Gubbins
1962 London
S.B. Watkins
1938 (MS) London
British engineer
John A. Morgan
1999 Rice
Jackie V. Shanks
1989 Caltech
Jay E. Bailey
1969 Rice
Friedrich (Fritz) JM Horn
1958 Technical University Vienna
Austrian engineer
Stephen Beaudoin
1995 NCSU
Christine Grant
1989 Georgia Tech
Ruben Carbonell
1973 Princeton
Morton D. Kostin
1964 Harvard
Harvey Brooks
1940 Harvard
John Hasbrouck Van Vleck
1922 Harvard
Edwin C. Kemble
1917 Harvard
Percy W. Bridgman
1910 Harvard
Wallace Clement Sabine
Harvard
American physicist
Raj Chakrabarti
2002 Princeton
Herschel Rabitz
1970 Harvard
Roy Gordon
1964 Harvard
J.H. Van Vleck
1922 Harvard
Clarence E. Schutt
1977 Harvard
Stephen C. Harrison
1968 Harvard
R. Byron Pipes
1972 Texas Arlington
J.W. Dailey
Texas Arlington
American mechanical engineer
James Litster
1985 Queensland
Robert Newell
1970 Alberta
Peter Bell
Julie C. Liu
2006 Caltech
David Tirrell
1978 Massachusetts
Otto Vogl
1950 Vienna
Friedrich Galinovsky
1930 Vienna
Ernst Späth
1910 Vienna
Austrian chemist
Yue Wu
2006 Harvard
Charles M. Lieber
1985 Stanford
N.S Lewis
1976 Caltech
Harry Gray
1960 Northwestern
Fred Basolo
1943 Illinois
John C. Ballar
1928 Michigan
Moses Gomberg
1894 Michigan
Albert B. Prescott
1864 MD Michigan
American chemist, studied medicine
Bryan Boudouris
2009 Minnesota
C. Dan Frisbie
1993 MIT
Marc Wrighton
1972 Caltech
Ralph Pearson
1943 Northwestern

Appendix Y

MS and PhD Theses Issued by the School of Chemical Engineering with the Title Metallurgical Engineering

The following MS (Appendix Y-1) and Ph.D. (Appendix Y-2) theses in Metallurgical Engineering were issued by the School of Chemical Engineering between 1930 and 1959. The name of the thesis supervisor appears to the right of the thesis title. Professors in charge of Ph.D. theses have been established according to the official documents of the libraries and the School, and according to the designations chairman or professor in charge of the Graduate School forms.

Appendix Y-1. MS Theses in Metallurgical Engineering

Charles G. Dryer	A metallographic study of failures in boiler plate.	Maxwell	1930
Arthur P. Himes	A study of effect of cold work on the recrystallization temperature of Alcoa 45 alloy.	Campbell	1934
Edward D. Rollert	The effect of iron on aluminum bronze.	Bray	1934
Harold E. Hostetter	The effect of heat treatment on the physical properties of 17% chromium stainless steel.	Campbell	1935
Maurice E. Carruthers	The coefficient of equivalence of iron with respect to aluminum in aluminum bronze.	Bray	1936
Graydon E. Holdeman	Electrolysis of zinc sulphate solutions at high current densities.	Bray	1936
Arthur G. Cass	Determination of the copper aluminum equilibrium diagram in the region of the eutectoid temperature.	Heyer	1937
Alvern V. Johnson	The corrosion resistance of 18-8 stainless steel with certain inhibitors in calcium chloride brine solutions.	Hoelscher	1937

Richard T. Myer	The effect of copper and molybdenum on malleable cast iron.	Hoelscher	1937
Giampaolo Carrara	The effect of silicon hydrides on steel surfaces at high temperatures.	Farabee	1939
Theodor L. Oberle	Calculation of liquidus temperatures of the copper-silver-zinc system. .	Farabee	1939
Orville W. Reen	Study of the age-hardening of some lead-calcium-thallium-tellurium alloys.	Bray	1939
William J. Harris, Jr.	The effect of temperature on the carbon content of the case of case carburized steel.	Eckel	1940
Robert Isebarger	Contamination of distilled spirits by metals and means of preventing such contamination.	Bray	1940
Robert E. Howard	Factors influencing the electrodeposition of bright zinc coatings.	Lovell	1941
John T. Agnew	The corrosion of unstressed and stressed alloy steels by high temperature steam.	Hawkins, Solberg	1942
Hans G. Johanessen	(Non thesis)	Enos	1947
Gerhard H. Klouman	(Non thesis)		1947
Felix J. Losson, Jr.	Ion exchange treatment of electroplating wastes.	Bloodgood	1947
Earl R. Mills, Jr.	Development of an elecrolytic copper cell.	Bray	1947
Kermit V. Smith	(Non thesis)		1947
David C. Heckard	(Non thesis)		1948
James C. Holzwarth	Relationship of hot hardness tests to time temperature transformation diagram for S. A. E. 52100 steel.	Enos	1948
John T. McCormack	(Non thesis)	Bray	1948
Richmond C. Neff	A critical evaluation of the standard test of the American Foundrymen's Association for the permeability of molding sand.	Enos	1948
George J. Peer	Correlation between hot hardness tests and isothermal transformation diagram for an oil-hardening tool steel.	Enos	1948
John F. Radavich	Electron metallography.	Enos	1948

Donald W. Hackett	A study of the operating characteristics of encrusted valves.	Bray	1949
Samuel G. Johnson, Jr.	Anomalies in the torsion test of stainless steel.	Enos	1949
Chou H. Li	Hot punch hardness test, the theory, method and application.	Enos	1949
Stuart T. Ross	Investigation of certain copper converter reactions.	Bray	1949
Ching-Lin Tang	Speculum plating.	Evers	1949
George F. Sommer	(Non thesis)	Enos	1949
Elvin L. Fritz	Some aspects of fluid flow of molten metal in sand molds.	Evers, Lindley	1950
Gerald S. Hagaman	Variables affecting chromium-nickel alloy electrodeposition.	Bray	1950
William J. Boesch	The production of silica fume.	McCormack	1951
Clayton D. Dickinson	Power requirements for the production of silica fume.	Bray	1951
Russel Heath	The use of high frequency induction heating in the sintering of magnesia crucibles.	Bray	1951
Jack M. Law	Effects of nitrogen vs. helium as a melting atmosphere for nickel-aluminum alloys.	Bray	1951
Roger A. Perkins	Collection of silica fume.	McCormack	1951
Rolland M.L. Reneau	Structure of some pure iron, high carbon alloys.	McCormack	1952
Sing-Bay Li	Thermit welding of steel pipes at right angles.	McCormack	1953
Hilto N. Rahn, Jr.	Interactions existing among arsenic, antimony, cadmium, germanium, and cobalt when preset as impurities in acid zinc electrlytes.	Hughel	1953
Edwin D. Sayre	The effects of silicon on pure iron-carbon hypereutectic alloys.	McCormack	1953
George E. Stein	Possible effects of alloy additions on the grain size of alloy N-155 (Multimet).	Hughel	1954
Donald E. Beitsch	The effect of ultrasonic energy on the transformation of austenite during continuous cooling.	Evers	1955
William F. Smith	Recovery of elemental sulphur from pyrrhotite.	Schuhmann	1955

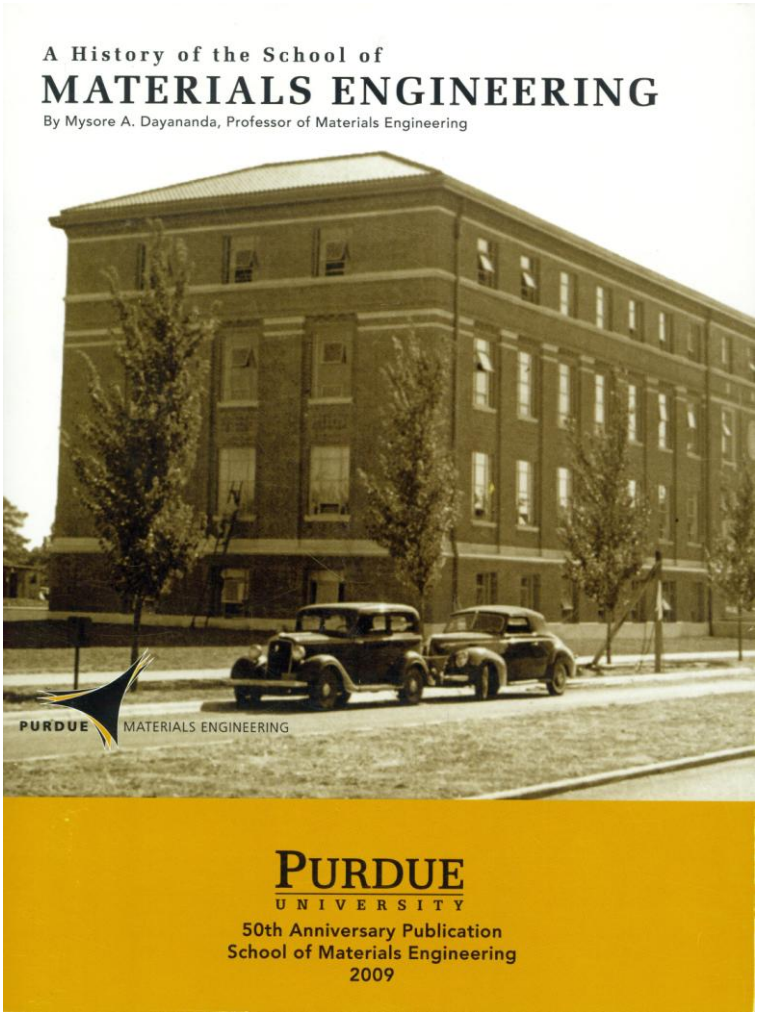
Clarence M. Wayman	A low-pressure determination of the diffusivity of hydrogen in beta-titanium.	Evers	1955
Abraham L. Eiss	Diffusion phenomena during pressure welding.	Guy	1956
Doyle Geiselman	Production of oriented single crystals of zinc and magnesium.	Hughel	1956
James R. Hornaday, Jr.	Solubility and rates of absorption of hydrogen in iron.	Parlee	1956
William C. Phelps, Jr.	The electrical conductivity of lead oxide-boric oxide melts.	Grace	1956
Thomas F. Archbold	The oxidation of liquid lead.	Grace	1957
Keith R. Bock	The solid solubility of sulfur in iron at elevated temperatures.	Parlee	1957
Donald C. Carmichael	Diffusivity of hydrogen in alpha iron.	Parlee	1957
Stan R. Seagle	Rate of the carbon-oxygen reaction in liquid iron.	Parlee	1957
Charles B. Ward	Gas pressures in green sand molds.	Marek	1958
Albert M. Barloga	The iron-carbon-sulfur system from 2100 to 2600 • F.	Parlee	1959
Barrett H. Heise	Crystallite size determination by X-ray diffraction.	Rautala	1959
Jared K. Jackson	Rates of solution of rotating zinc cylinders in liquid bismuth.	Grace	1959
Arthur E. Lord, Jr.	The missibility of lead with liquid steel.	Parlee	1959
Arthur E. Morrie	The effect of cold work and oxide films on the rate of absorption and effusion of hydrogen in alpha iron.	Parlee	1959
Manjesiwar M. Rao	Solubility of nitrogen in liquid iron-titanium alloys.	Parlee	1959
Clifton R. Seltzer	Measurement of orientation texture by x-ray diffraction.	Rautala	1959
Alvin D. Thomas, Jr.	Photographic mapping of the reciprocal lattice of aluminum-copper age hardening alloys.	Rautala	1959

Appendix Y-2. Ph.D. Theses in Metallurgical Engineering

David J. Mack	Corrosion fatigue properties of some hard lead alloys.	Bray	1944
Robert J. Raudebaugh	The impact strength of metallic arcweld metal deposits at elevated temperatures.	Eckel	1945
Fred E. Bowman	Factors affecting the beta brass super lattice transformation.	Enos	1947
Harold E. Zahn	A portion of the Pb-Ag-Ca ternary system.	Bray	1949
John T. McCormack	The silver rich portion of the silver, copper, beryllium ternary system.	Bray	1950
Stuart T. Ross	Contributions to the metallurgy of germanium.	Bray	1950
William E. Taylor	The preparation of high-purity germanium.	Bray	1950
Robert G. Ulrech	A portion of the nickel-aluminum phase diagram.	Bray	1950
Thomas J. Hughel	An investigation of the interactions present among arsenic, antimony, cadmium, cobalt, and germanium when present as impurities in zinc electrolytes.	Bray	1951
Chou H. Li	Steel chromizing and master charts for diffusion in cylindrical media.	Evers	1951
John R. Cuthill	Effect of vanadium additions to a nominal 7% silicon-iron alloy on some magnetic and physical properties.	Enos	1952
Ray W. Guard	Calcium and magnesium as steel deoxidizers.	Bray	1952
Robert Tavernier	High temperature creep-rupture properties of anstenitic stainless steels in corrosive atmospheres.	Enos	1952
Robert O. Belsheim	Delayed-yield time effects in mild steel under ainusoidally-varying axial loads.	Hancock	1953
Ralph H. Hoefs	The effect of minor alloy additions on the corrosion resistance of alpha aluminum bronze.	McCormack	1953
John F. Radavich	Metallurgical studies in the sub-microscopic range.	Evers	1953
Neill J. Carson, Jr.	The role of strontium addition agents in the electrolysis of zinc sulfate electrolytes.	Hughel	1956
Vikash C. Kashyap	Solubility of nitrogen in liquid iron and iron alloys.	Parlee	1956

James G. Morris	The effect of ultrasonic energy on austenite decompositon.	Evers	1956
Harvey W. Schadler	Diffusion in liquid zinc amalgams.	Grace	1957
Alfred S. Yue	Investigation of steady-state substitutional diffusion.	Guy	1957
Malcolm T. Hepworth	Thermodynamic properties of the titanium-oxygen-hydrogen system.	Schuhmann	1958
Charles B. Wooldridge	The effect of heater surface grain size on nucleate pool boiling.	Grosh	1958
George F. Sommer	Alloy solidification and segregation at a rotating-disk interface.	Schuhmann	1959

The degrees listed in Appendix Y and more recent degrees in Metallurgical/Materials Engineering are listed in *A History of the School of Materials Engineering*

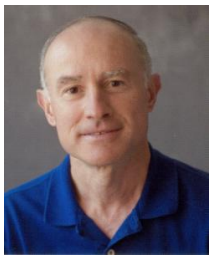


Appendix Z

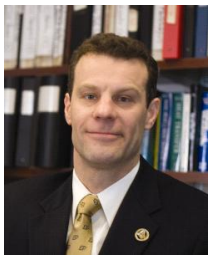
Photoaraphs of Current and Emeritus Faculty, Current and Retired Staff

Current Faculty

Rakesh Agrawal
Winthrop E. Stone Distinguished Professor



Osman A. Basaran
Burton and Kathryn Gedge Professor

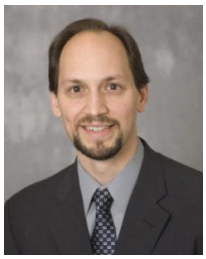


Stephen P. Beaudoin
Professor

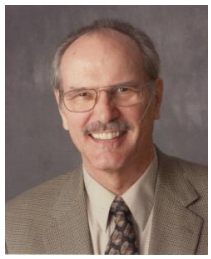
Bryan W. Boudouris
Assistant Professor

James M. Caruthers
Reilly Professor

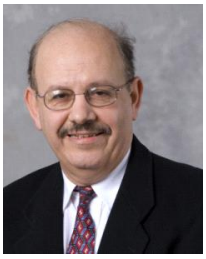
Raj Chakrabarti
Assistant Professor



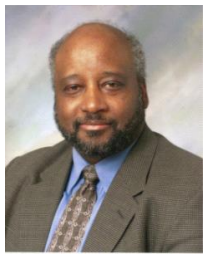
David S. Corti
Professor, Director of Undergraduate Studies



W. Nicholas Delgass
Maxine Spencer Nichols Professor



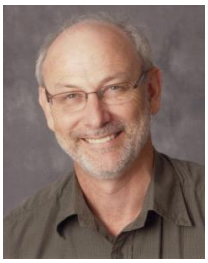
Elias I. Franses
Professor



Michael T. Harris
Professor, Associate Dean of Engineering for Undergraduate Education

R. Neal Houze
Professor

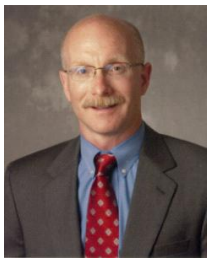
Sangtae Kim
Distinguished Professor



James D. Litster
Professor, Director, Graduate Studies

Julie Liu
Assistant Professor

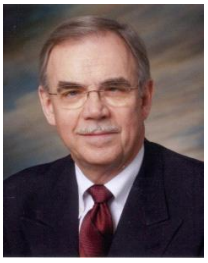
John A. Morgan
Associate Professor



Joseph F. Pekny
Professor

R. Byron Pipes
John Leighton Bray Distinguished Professor

Doraiswami Ramkrishna
Harry Creighton Peffer Distinguished Professor



Gintaras V. Reklaitis
Burton and Kathryn Gedge Distinguished Professor

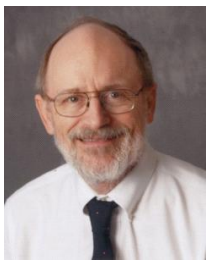
Fabio H. Ribeiro
Professor

Kendall T. Thomson
Associate Professor

Arvind Varma
R. Games Slayter Distinguished Professor and Head, School of Chemical Engineering

Venkat Venkatasubramanian
Reilly Professor

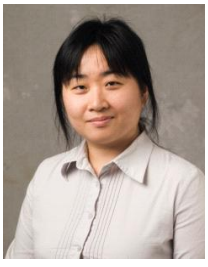
N-H. Linda Wang
Professor



Philip C. Wankat
Clifton L. Lovell Distinguished Professor

You-Yeon Won
Associate Professor

Yue Wu
Assistant Professor



Chongli Yuan
Assistant Professor

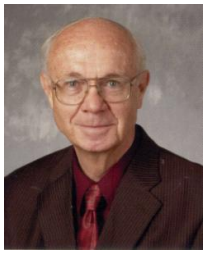
Robert Hannemann
Visiting Professor

Nancy Ho
Research Professor

Enrico N. Martinez
Visiting Professor

Jeffrey J. Siirola
Professor of Engineering Practice

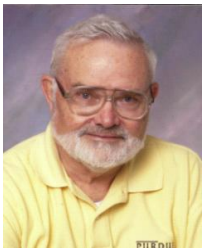
Emeritus Faculty



Ronald Andres

K.C. Chao

Robert Greenkorn



Robert Squires

George Tsao

Current Staff

Debra J. Bowman
Graduate Office Administrator

Teresa L. Cadwallader
Administrative Assistant

Jason Davenport
Shipping & Receiving Clerk

Linda S. Davis
Industrial Education Director

Steven R. Dunlop
I-Aevtech Managing Director

Cristina Famus
Administrative Director

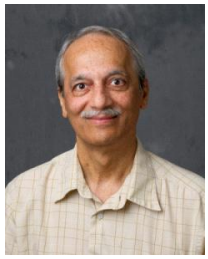
Betty L. Guerrero
Administrative Assistant

Michael P. Harrington
Computer Facilities Manager

Amy L. Hayden
Account Clerk

Karen K. Heide
Secretary

Sandra K. Hendryx
Secretary



Girish S. Joglekar
Senior Research Scientist

Diane Klassen
Director of Development

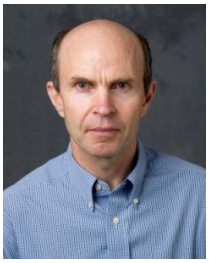
Mary Anne Madrid
Business Manager

Jennifer A. Mamph
Secretary

Rick L. McGlothlin
Laboratory Associate

Jill A. Mears
Account Assistant

Grigori Medvedev
Research Associate



Linas Mockus
Senior Research Scientist

Chrystal Murray
Assistant to the Head

Veronica A. Schirm
Undergraduate Office Administrator and Counselor

Jeffrey L. Valley
Maintenance Mechanic and Building Deputy

Danny J. White
Motor Sports Specialist

Katherine D. Yater-Henke
Secretary

Yury Zvinevich
Director of Instrumentation

Retired Staff

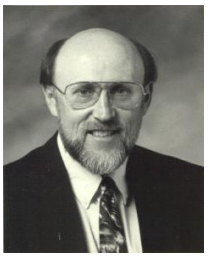
Carolyn Blue
Administrative Assistant

Larry Campbell
Shipping and Receiving Clerk

Marcella Maynard
Secretary

Kenny McGlothlin
Laboratory Associate

Wayne Muench
Director of Instructional Laboratories



Frank Oreovicz
Communication Specialist

David Taylor
Electronics Shop Coordinator