ChE Strategic Plan 2010 – 2014

• **Vision:** Be widely recognized among the premier ranks of chemical engineering programs in the world.

• **Mission:** Provide students with a rigorous and relevant education, conduct field-defining research, and enhance the School’s global impact.

• **Values:** Leadership, excellence and innovation, relevance and impact, commitment and responsibility, teamwork and partnership, diversity and respect, safety and sustainability.
ChE Strategic Plan 2010 – 2014

• **Research:** To pursue breakthrough research that extends the boundaries of chemical engineering into areas which promote sustainability and which will have the greatest positive impact on our global society.

• **Education:**
  • **Graduate Programs:** Recruit and retain high caliber graduate students from top-tier chemical engineering programs, provide challenging and relevant research programs, and a quality graduate level education.
  • **Undergraduate Programs:** Recruit and retain the most capable, motivated and diverse class of undergraduates, and help them to obtain a solid and relevant education throughout their Purdue experience.

• **Global Impact:** Educate undergraduate and graduate students who will be successful in a global environment. Cultivate and expand research relationships with prominent international research organizations.
ChE Strategic Plan 2010 – 2014

• **Development**: Secure and improve the School’s financial foundation as a means to continually improve its programs and physical facilities, while balancing short and long term goals.

• **Engagement**: Encourage faculty, students and staff to develop a sense of personal responsibility and accountability for service at both the local and national levels. Promote entrepreneurial activity, leading to intellectual property, including invention disclosures and patents. Become a leader in sustainability on the Purdue campus.

• **Professional Development and Recognition**: Encourage all faculty, staff, and students to participate in activities that will enhance their career, develop their skills, and help them become more creative and productive. Actively promote recognition by internal and external award nominations.

• **Culture and Environment**: Create an environment where faculty, staff, and students are treated with respect and where superior teamwork is achieved. Enhance and expand safety activities and safety education.
CHE School Parameters

- Founded: 1911
- 30 Faculty
- 29 Staff
- 139 Graduate Students
- 555 Undergraduate Students
- Forney Hall
  - CMET
  - 47,110 asf
  - Addition
  - 44,544 asf
- 30 Faculty
- 44,544 asf Addition
Presidential and Trustees Scholarship Information

• Although ChE students accounted only for 10% of the fall 2013 enrollment in the College of Engineering, they received 17% of the total Presidential and Trustees Scholarships in the College.

• 30% of all ChE undergraduate students receive Presidential and Trustees Scholarships (fall 2013).

• 60% of our undergraduate students have a GPA of 3.2 or higher (AY 2013-14.)
Chemical Engineering Faculty

Mahdi Abu-Omar
PhD, Iowa State, 1996

Rakesh Agrawal
ScD, MIT, 1980

Osman A. Basaran
PhD, Minnesota, 1984

Stephen P. Beaudoin
PhD, NC State, 1995

Bryan W. Boudouris
PhD, Minnesota, 2009

James M. Caruthers
ScD, MIT, 1977

David S. Corti
PhD, Princeton, 1997

Elias I. Franses
PhD, Minnesota, 1979

Raj P. Gounder
PhD, UC Berkeley, 2011

Robert E. Hannemann
MD, Indiana, 1959
Chemical Engineering Faculty

Michael T. Harris  
PhD, Tennessee-Knoxville, 1992

R. Neal Houze  
PhD, Houston, 1968

Jeffrey P. Greeley  
PhD, Wisconsin Madison, 2004

James D. Litster  
PhD, Queensland, 1985

Julie C. Liu  
PhD, Caltech, 2006

Jeffrey T. Miller  
PhD, Oregon State, 1980  
(To join Spring 2015)

John A. Morgan  
PhD, Rice, 1999

Zoltan K. Nagy  
PhD, Babes-Bolyai, 2001
Chemical Engineering Faculty

Joseph F. Pekny
PhD, Carnegie Mellon, 1989

R. Byron Pipes
PhD, Texas-Arlington, 1972

Vilas Pol
PhD, Bar-Ilan, 2005

Doraiswami Ramkrishna
PhD, Minnesota, 1965

Gintaras V. Reklaitis
PhD, Stanford, 1969

Fabio H. Ribeiro
PhD, Stanford, 1989

Kendall T. Thomson
PhD, Minnesota, 1999

Arvind Varma
PhD, Minnesota, 1972
Head
Chemical Engineering Faculty

Nien-Hwa Linda Wang
PhD, Minnesota, 1978

Phillip C. Wankat
PhD, Princeton, 1970

You-Yeon Won
PhD, Minnesota, 2000

Chongli Yuan
PhD, Cornell, 2007

Enrico N. Martinez
Visiting Professor
PhD Notre Dame, 1972

Jeffrey J. Siirola
Professor of Engineering Practice
PhD Wisconsin Madison, 1970
Ronald P. Andres  
PhD, Princeton, 1962

W. Nicholas Delgass  
PhD, Stanford, 1969

Robert A. Greenkorn  
PhD, Wisconsin, 1957

Nancy W. Y. Ho  
PhD, Purdue, 1968

George T. Tsao  
PhD, Michigan, 1960
Class of 2014 – group 1
Class of 2014 – group 2
Unit Operations Laboratory After Renovation

Fall 2013
Unit Operations Laboratory After Renovation

Fall 2013
2013 College of Engineering Staff Excellence Awards, November, 2013

Jenny Mamph, Customer Service Excellence Award
New Faculty Additions
January 2014

Carl Laird
Associate Professor

B.Sc., University of Alberta, 2000
Ph.D., Carnegie Mellon University, 2006

Research Interests: Large-scale nonlinear optimization, parameter estimation, and parallel computing.

Vilas Pol
Associate Professor

B.Sc., Pune University, India, 1996
Ph.D., University of Bar-Ilan, Israel, 2005
Post-Doctoral Research Associate, 2008-10; Research Scientist, 2010-present, Argonne National Laboratory

Research Interests: Electrochemical engineering, nanoparticle technology, materials science, energy storage devices and environmental technology
Distinguished Engineering Alumnus
February 2014

Richard Korsmeyer, MSChE '80, PhD '83
Senior Research Fellow and Head of External Technology and Collaborations for Worldwide Pharmaceutical Sciences, Pfizer Inc.
Distinguished Engineering Alumnus
February 2014

Antonios G. Mikos, MSChE '85, PhD '88
Louis Calder Professor of Bioengineering and Chemical and Biomolecular Engineering, Rice University
Pinnacle Award
February 2014

Jay (BSChE '74) and Cynthia Ihlenfeld (center) with Provost Tim Sands (left) and Arvind Varma
Presidential Safety Award
February 2014

VP and Treasurer Al Diaz (left) with the ChE Safety Committee receiving the 2014 Purdue Presidential Safety Award

Professor Fabio Ribeiro, Industrial Education Director Gabriela Nagy, Professor Robert Hannemann, Instrumentation Director Yury Zvinevich, Graduate Students Erik Sheets and Rohit Jaini, Building Deputy Jeff Valley
Chem-E Car Competition

Purdue ChE Chem-E Car Team at the Spring 2014 Regional Competition
Nicole Devlin (right), graduate student, and Yanssen Tandy (BS 2014, center), were part of the team that won the Student Soybean Product Innovation Contest sponsored by the Indiana Soybean Alliance, Purdue, 2014.
Haefa Mansour (Senior) participated in the 2014 “Posters on the Hill” event in Washington, DC
Women in ChE Seminar
April 2014

Roberta Gleiter (BSChE '56) and Ronna Robertson (BSChE '92)
Senior Banquet
May 2014
Senior Banquet
May 2014
Senior Design Project
Team Awards
May 2014
Staff Retreat
July 2014
GSO Research Symposium
August 2014
GSO Research Symposium Awards
August 2014
2014 GSO Officers

Nicole Devlin
President

Agnes Mendonca
Vice President and Treasurer

Sydney Hollingshead
First-year Representative
2014 GSO Officers

Kevin W. Brew
Student Advocacy Officer

Arthur Dysart
Inter-GSO Events Committee Representative

Yanran Cui
Purdue Graduate Student Government Representative
2014 GSO Officers

Michael Cordon
Social Events Committee Co-chairperson

John Di Iorio
Sports Events Committee Co-chairperson

Nathan J. Davis
Outreach Committee Chairperson
2014 GSO Officers

Arthur J. Shih
Co-curricular Committee Chairperson

Gautham Madenoor Ramapriya
Sustainability Committee Chairperson

Xin Zhao
Safety Committee Chairperson
Austin Tackaberry, senior Chair of the National Executive Student Committee AIChE, 2014-15

Selected for the John J. McKetta Undergraduate Scholarship Award AIChE, 2014
Society of Women Engineers

Julia Hom, senior
Chair of the Purdue SWE Organization, 2014-15
2014 Industrial Roundtables

- 4 out of the 9 organizers are ChE students
  (pictured below from left):
  - **Louis Perkins**, junior (Facilities Coordinator)
  - **Courtney Kelly**, sophomore (Student Affairs Coordinator)
  - **Lilly Myers**, junior (2014 IR Director)
  - **Hannah Cook**, sophomore (Hospitality Coordinator)

- 399 companies signed up for fall 2014 IR
- 147 companies hiring ChEs
ChE Student Ambassadors

Class of 2015

Isaura Frost

Elizabeth Geller

Krystopher Jochem

Katherine Loehr
ChE Student Ambassadors

Class of 2016

Alex Muller
Lilly Myers
Andrew Parker
Beata Strubel
Katherine Tomera
Chelsey Wallace
ChE Student Ambassadors

Class of 2017

Kirsten Ivkovic

Devin Zuck
BP Whiting Refinery Tour
September 2014
2014 OChE Awards

Rob Crane (MSChE '94, PhD '97)
Planning Executive
ExxonMobil Research & Engineering
2014 OChE Awards

Jefferson (Jeff) C. Lievense (PhD '84)
Executive Vice President of Process Technology, Genomatica
with Professor Linda Wang and Head Arvind Varma
Stephen (Steve) R. Murrill (BSChE '71, center, President and owner of Profile Plastics in Lake Bluff, Illinois With Marilyn and Robert Forney (left) and his family
Scholarship Banquet
October 2014
Scholarship Banquet
October 2014
Republic Services Recycling Tour
October 2014
Robert T. Henson (BSChE '36) Celebrates 100th Birthday
October 2014
ChE-SAC and AIChE Pancakes
November 2014
R. Byron Pipes
Faculty Careers Celebration
November 2014
Graduate Student Awards

Elcin Icten (right) received the 2014 Women & HiTech Scholarship as part of Leading Light Awards given by the Women & Hitech Organization
Graduate Student Awards

Emre Gencer
Outstanding Teaching Assistant
Grad Student Awards

From Left: Aniruddha Kelkar (Outstanding Research Award), Kaiwalya Sabnis (Magoon Teaching Award), Rohit Jaini (Magoon Teaching Award), Frank Devilbiss (Outstanding Service Award), McKay Easton (Magoon Teaching Award),
UG Student Awards

- **Haefa Mansour**, senior - received Barry Goldwater Scholarship, 2014; Donald F. & Mildred Topp Othmer Scholarship Award, AIChE, 2014
- **Jasmine Morris**, BS 2014, received the Louis Sudler Prize in the Arts, Purdue, 2014
- **Beata Strubel**, junior – received the Donald F. Othmer Sophomore Academic Excellence Award, AIChE, 2013-14
- **Kenneth Tan**, BS 2014, received the Martin C. Jischke Outstanding International Student of the Year Award, Purdue, 2014
Books

Elias I. Franses
Thermodynamics with Chemical Engineering Applications
Cambridge University Press, 2014

R. Byron Pipes
Experimental Characterization of Advanced Composite Materials
Fundamentals Lab
Fundamentals Lab
Research Focus
Corti and Franses
Research Focus Boudouris
Research Focus
Gounder
Research Focus – Ramkrishna
Research Focus
Liu
Research Focus

Pol
Research Focus
Morgan
Research Focus
Agrawal
Thank you!