# 100 Years of Chemical Engineering at Purdue University 1911-2011

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School of Chemical Engineering • Purdue University

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# History of the School of Chemical Engineering of Purdue University

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### Preface to

# 100 Years of Chemical Engineering at Purdue University 1911-2011

One hundred "years ago, the School of Chemical Engineering of Purdue University was established through a thoughtful and far-reaching initiative of then President Winthrop E. Stone, with the hiring of a single faculty member, Professor Harry C. Peffer. Since then, this School has developed into a leading educational and research institution with an impressive list of alumni and alumnae. In fact, more chemical engineers have graduated from Purdue than from any other university in the country."

With the very slight change in the number of years, this is the beginning of Professor Nicholas A. Peppas' Preface to the 1st edition of his History of the School of Chemical Engineering of Purdue University that was prepared for the 75th anniversary of the School in 1986. Professor Peppas would have been the obvious choice to write the second edition for the 100th anniversary, except after an illustrious career at Purdue University he moved to the University of Texas at Austin where his current duties prevent him from again focusing a major portion of his time on writing this history. Fortunately, he has graciously agreed to provide his immense knowledge of the history of Purdue as coauthor of this second edition.

I am a firm believer in the old adage "if it isn't broken, don't fix it." Thus, readers of Chapters 1 to 3 will notice very little change from the originals written by Peppas. Chapter 4 remains essentially Peppas' chapter although we have jointly completed the stories of the principal players who were alive in 1986 but have now passed on. Chapter 5 was "the current era" in the first edition. Many of the principal players are still alive, although many are no longer at Purdue. Since we now have 25 years of historical hindsight, certain portions of this chapter were rewritten by Wankat. Chapter 6 is the current "current era" and is, of course, brand new and was written by Wankat with some light editing by Peppas. This chapter tells the remarkable story of the long and successful Headships of Professors Gintaras (Rex) Reklaitis and Arvind Varma and the generosity of the Forneys that positioned Purdue to build for the future. Chapters 7 and 8 were

Peppas' Chapters 6 and 7 in the first edition. Based on Peppas' chapters, Wankat continued the stories of education and research at Purdue during the last 25 years in these chapters.

Most of all, we are indebted to Mrs. Cristina Farmus for her unflagging efforts to find suitable photographs, update the appendices, and properly format the book. Even more important, her perennial good cheer and enthusiasm for the 100th anniversary celebration kept us going whenever there was doubt. Without her efforts the history for the 100th anniversary would have been both incomplete and late.

We are also indebted to all our colleagues for their support of this project, to the Head of the School, Professor Arvind Varma, for his enthusiastic support and thorough and helpful review of chapters, and especially for undertaking the expenses for its publication, Professors W.N. Delgass, R. N. Houze, D. Ramkrishna and G.V. Reklaitis for helpful comments and recollections, Mr. Darron Bennett for significant help with appendices, photos and design, Mrs. Julie Paolillo for her assistance in various aspects of this project, Mrs. Elizabeth Hayes for secretarial assistance with the manuscript, and Mrs. April Fidler for design.

Celebrations are important rites of passage for people. However, properly celebrating an accomplishment such as this 100<sup>th</sup> anniversary of the School of Chemical Engineering at Purdue University does cost money. The School is pleased to thank the following companies who have generously supported this celebration: Air Liquide, Chevron Phillips, Citgo, Dow, DuPont, Eli Lilly, Evonik, ExxonMobil, GPC, Greenfield, Honeywell, Kimberly Clark, Pfizer, Polysciences, Shell, UOP, and Vantage Oleochemicals.

Phillip C. Wankat

Nicholas A. Peppas

West Lafayette, Indiana

Austin, Texas

September 2011

# History of the School of Chemical Engineering of Purdue University

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Professor of Chemical Engineering
Purdue University

with technical assistance by Ronald S. Harland, B.S., M.S.

Published by the School of Chemical Engineering Purdue University 1986

### **Previous Edition Preface**

# **Preface**

Seventy five years ago, the School of Chemical Engineering of Purdue University was established through a thoughtful and far-reaching initiative of then President Winthrop E. Stone, with the hiring of a single faculty member, Professor Harry C. Peffer. Since then, this School has developed into a leading educational and research institution with an impressive list of alumni and alumnae. In fact, more chemical engineers have graduated from Purdue than from any other university in the country.

I started collecting material for the History of the School of Chemical Engineering at Purdue in the summer of 1978, fascinated with the reading of J.L. Bray's history. For the past two years I have read all the archives of the School and various other archives found in the special libraries of Purdue University, and in the Goss room of the Engineering library. I have contacted a large number of pre-1940 alumni and I have talked to former professors and staff members. While writing the history of our School I have not only concentrated on the post-1950 years that J.L. Bray's work did not cover, but I have gone back to the sources and carefully checked the pre-1950 history as well. Thus, many interesting, not previously reported items have been discovered.

The presentation of the history is divided into Chapters following roughly the administrative periods of the various Heads of the School. This is only natural for this work, since at Purdue the Head has traditionally had significant power so that his philosophy of education and research is mirrored in the achievements of the faculty members.

I am especially indebted to my graduate student Ronald S. Harland (B.S. '83, M.S. '85, Ph.D. candidate) who during the four months of the final writing did significant research for me either "discovering" rare copies of theses and educational material, or tabulating and analyzing the information collected, especially that presented in the Appendices. It is because of Ron's contributions that we can offer a definitive piece of work on the history of the School of Chemical Engineering, where all the facts, names, dates, numbers and events have been carefully checked and verified. This is important because many of the School records were poorly kept or maintained, and in many cases incomplete.

I am also indebted to my colleagues for their support of this project, to the Head of the School, Professor Ronald P. Andres for undertaking the expenses for its publication, Dr. Frank S. Oreovicz for reading and correcting the text, Professors D. Ramkrishna, W.N. Delgass and G.V. Reklaitis for helpful comments, Ms. Betty C. Harvey for her assistance in various aspects of this project, and Ms. Janet L. Taylor, Eleanor J. Yeoman, Carolyn L. Blue, Janet E. Bonwell, Donna L. Newsome; Debra J. Bowman, and Patricia L. Wendt for typing the manuscript. Finally, Professor Alden H. Emery was kind enough to provide many of his photographs from his long stay at Purdue and to rephotograph many other rare pictures from the Debris and other Purdue publications.

With such a long and rich history, there is no doubt that we have seen both good and bad days. As a historian, I have tried to present the facts without taking sides. I take the responsibility for any failure to be impartial. And I hope that our alumni, alumnae and friends of the School will enjoy this book as much as I have in researching it and writing it.

Nicholas A. Peppas
West Lafayette, Indiana
February 1986