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2008 Purdue Outstanding Chemical Engineers (left to right): Gary Poehlein, Roberta Gleiter, and Antonios Mikos

Outstanding Chemical Engineers

ChE alums help redefine the word 'outstanding'

Purdue chemical engineering has a tradition of recognizing alumni who have achieved distinction as leaders in their careers and who have shaped the chemical engineering profession. Over the years, only 119 of the school's 9,000 alumni have been named Outstanding Chemical Engineers. The 2008 OChE event took place in October; profiles of the honorees are below.

Gary Poehlein (BSCHE '58, MSChE '63, PhD '66) retired in 2002 after a distinguished career of service to academe, industry, and his local communities.

He began teaching at Lehigh University in Bethlehem, Penn., in 1965, establishing new courses in polymers, pollution control, and other topics. He initiated research in emulsion polymerization and latex technology and still participates in a successful short course he established in this area that takes place at Lehigh as well as in Davos, Switzerland.

Poehlein helped form and lead the Emulsion Polymers Institute at Lehigh until 1978, when he became director of the School of Chemical Engineering at the Georgia Institute of Technology in Atlanta. During his tenure, the ChE faculty doubled, and graduate student enrollment and external funding both increased tenfold. He was later named associate vice president for research, graduate dean, vice president for interdisciplinary programs, and executive assistant to the president.

He also served on the board of Flexible Products Co., and as director of the National Science Foundation's Chemical and Transport Systems Division.

Roberta Gleiter (BSCHE '60) is an engineering consultant at The Aerospace Corp., whose Global Positioning System Program Office recently honored her. She is

also CEO of the Global Institute for Technology and Engineering, a non-profit organization dedicated to elevating the status of women working in technology and engineering.

With a master's degree in systems management from the University of Southern California and several certifications, Gleiter also was the first woman engineer certified as a hazardous materials manager. She has had a wide range of managerial responsibilities supporting spacecraft design/development, ground launch, and communication systems. She also helps the U.S. Air Force identify and resolve critical engineering and management problems. She oversaw the development, testing, and activation of the Fuel Vapor Scrubber System for Department of Defense payloads on the space shuttle and the joint NASA/Air Force development of a propellant handler's ensemble.

Gleiter also has served on the National Science Foundation's federal advisory committee.

Antonios Mikos (PhD '88), the J.W. Cox Professor of Bioengineering and professor of chemical and biomolecular engineering at Rice University, has contributed to a host of novel orthopedic, dental, cardiovascular, neurologic, and ophthalmologic biomaterials. His research has shown that implanted carbon nanotubes can increase density in new bone growth and that unique scaffolds can repair broken facial bones typically deemed beyond repair.

Through synthesis, processing, and evaluation of innovative biomaterials, Mikos is developing new means of tissue engineering, drug delivery, and nonviral vectors for gene therapy. As a member of the Armed Forces Institute of Regenerative Medicine university consortia, Mikos is helping to regrow severed fingers, recreate shattered bones, rebuild maimed faces, and provide genetically matched skin to burn victims. ■ **A.R.**