

## CACHE Elects New Officers to Executive Committee

By: Joe Golab



Marianthi Ierapetritou is a Professor and Chair of the Department of Chemical and Biochemical Engineering at Rutgers University in Piscataway, New Jersey. She obtained her BS from National Technical University in Athens, Greece (magna cum laude), her PhD from Imperial College (London, UK) in 1995 and subsequently completed post-doctoral research at Princeton University (Princeton, NJ) before joining Rutgers University in 1998. Prof. Ierapetritou's expertise is in the area of process systems engineering. Her research interests consider the development of methodologies for the efficient modeling and optimization of process design and operations problems. She considers a variety of applications of systems engineering and she currently has activities in the areas of (a) pharmaceutical manufacturing, (b) biomass conversion to chemicals, (c) integration of scheduling and control; and (d) supply chain management. She has published more than 180 papers and presented in national and international conferences (160 presentations). Among her accomplishments are the Teaching Excellence Award this year voted by the students at Rutgers School of Engineering, the Outstanding Faculty Award in 2012, the Rutgers Board of Trustees Research Fellowship for Scholarly Excellence in 2004, and the prestigious NSF CAREER award in 2000. Prof. Ierapetritou is an active member of AIChE where she is currently the chair of the CAST division and she has been in the scientific committee of more than 12 international conferences. In 2008 she was the chair of the FOCAPO 5<sup>th</sup> international conference. She is an active educator both in the classroom teaching graduate and undergraduate classes in the Chemical Engineering department and as an advisor currently supervising the Ph.D. of 7 students and 1 postdoctoral fellow. She is also currently acting as a president of CACHE, a not-for-profit organization that promotes cooperation among universities, industry, and government in the development and distribution of computer-related educational aids for the chemical engineering profession.



Michael Henson was elected to the CACHE Executive Committee as Vice-President. Dr. Henson is a Professor of Chemical Engineering at the University of Massachusetts in Amherst, MA. He also holds positions as the Director of the Center for Process Design and Control and Co-director of the Institute for Massachusetts Biofuels Research. He obtained the B.S. degree in chemical engineering from the University of Colorado in Boulder, CO (1985), the M.S. degree in chemical engineering from the University of Texas in Austin, TX (1988), and the Ph.D. degree in chemical engineering from the University of California in Santa Barbara, CA (1992) and subsequently completed post-doctoral research at DuPont in Wilmington, DE (1992-1993) before joining the Chemical Engineering Department at Louisiana State University in 1994. He joined the University of Massachusetts in 2002. His research focuses on systems level modeling and analysis of complex biological systems and chemical processes with applications to microbial production of renewable chemicals, emulsion and nanoparticle processing, and circadian timekeeping. Among his accomplishments are the NSF Career Award (1995), the Alexander von Humboldt Fellowship (2001) and the UMass College of Engineering Outstanding Senior Faculty Award (2008). He has a deep commitment to education, as exemplified by his role as Trustee (2005-present), Secretary (2012-2014) and Vice-President (2014-2016) of CACHE. He is particularly interested in the integration of biological systems content into the undergraduate chemical engineering curriculum.



Edward Maginn serves as the newly elected Secretary on the Cache Executive Committee. In addition to serving as the chair of the Department of Chemical and Biomolecular Engineering, Dr. Maginn is recognized for his teaching and research accomplishments. His research focuses on computational statistical thermodynamics, in which atomistic-level computational methods are developed and utilized to obtain a fundamental understanding of the link between the physical properties of materials and their chemical constitution, with a particular focus on the development of the new materials related to energy applications. He has been the principal investigator or co-principal investigator for more than 45 externally funded grants totaling approximately \$20 million. He holds two patents and is the author of more than 100 peer-reviewed articles and several book chapters. He has also graduated 16 Ph.D. students and mentored 12 postdoctoral associates during his tenure at Notre Dame. This is in addition to the numerous awards he has won for teaching.



Thomas F. Edgar holds the Abell Chair in Chemical Engineering at the University of Texas at Austin and is Director of the UT Energy Institute. Dr. Edgar received his B.S. degree in chemical engineering from the University of Kansas and a Ph.D. from Princeton University. For the past 40 years, he has concentrated his academic work in process modeling, control, and optimization, with over 400 articles and book chapters. Edgar has co-authored two leading textbooks: *Optimization of Chemical Processes* (McGraw-Hill, 2001) and *Process Dynamics and Control* (Wiley, 2010). He has received major awards from AIChE and ASEE and is a member of the National Academy of Engineering. He serves as the director of the Texas Wisconsin California Control Consortium (TWCCC) and is also the co-founder of the Smart Manufacturing Leadership Coalition (SMLC). Dr. Edgar was the 1997 President of AIChE and he has served as Executive Director of CACHE since 2001.