

New CACHE Trustees Elected

Welcome Kristen Fichthorn and Salvador Muñoz

Kristen Fichthorn is the Merrell Fenske Professor of Chemical Engineering, the John and Jeanette McWhirter Graduate Program Coordinator in Chemical Engineering, and a Professor of Physics at the Pennsylvania State University. She received a B.S. in Chemical Engineering from the University of Pennsylvania in 1985 and a Ph.D. in Chemical Engineering from the University of Michigan in 1989. She spent one year as an IBM Postdoctoral Fellow in the Department of Chemical Engineering at the University of California at Santa Barbara before joining the Department of Chemical Engineering at Penn State as an Assistant Professor in 1990.



Professor Fichthorn's research is primarily in multiscale simulation of fluid-solid interfaces, in which she applies theoretical techniques ranging from quantum density functional theory to molecular dynamics, Monte Carlo methods, and continuum theories to a diverse array of applications in nanoscale materials, thin-film and crystal growth, colloidal assembly, and wetting. In addition to being recognized by Penn State for her outstanding research and teaching, she is the recipient of the NSF Presidential Young Investigator Award (1990), an Alexander von Humboldt Research Fellowship (1998), she is a Fellow of the American Physical Society (2011), and a Fellow of the American Institute of Chemical Engineers (2017).



Salvador Muñoz received his B.S. in Chemical and Computer Systems Engineering and his M.S. in Chemical Engineering from Monterrey Tech. He started his career at Aspen Technology where he spent 4 years working as a consultant for the Polymer, Petrochemical and fine chemical manufacturing industry. His work focused on the application of modelling and simulation solutions and the implementation of real time data management systems. He left Aspentech to pursue his Ph.D., conducting research in the area of Multivariate Latent Variable Models under the supervision of Prof. John MacGregor. After earning his Ph.D. from McMaster University, he joined Pfizer R&D where he spent 9 years as a modelling and simulation scientist actively participating in the development activities for new medicines and the improvement of commercial manufacturing operations using model based tools.

In 2013 Dr. Muñoz joined Eli Lilly Research Laboratories where he is currently employed as a senior technology leader for Digital Design. His current responsibilities span the drug substance and drug product areas with particular focus on the usage of systems engineering tools in regulatory documents and the transfer of modelling technology to manufacturing. His research interests include the theory and application of multivariate statistical methods, optimization, thermodynamics and advanced control.