

Award Recipients

Tom Adams wins David Himmelblau award.

Congratulations to Tom Adams who has received the 2021 David Himmelblau award, which is a CACHE-sponsored award.

The David Himmelblau Award for Innovations in Computer-Based Chemical Engineering Education recognizes an individual or group making new and novel contributions to computer aids for chemical engineering education. Specifically, the nomination and the citation for the award must refer to a significant contribution to computer-based chemical engineering education within the past decade.

Dr. Thomas Adams II is an Associate Professor and Associate Chair in the Department of Chemical Engineering at McMaster University in Hamilton, Ontario, Canada. He received dual bachelor's degrees from Michigan State University in 2003, one in Chemical Engineering, and the other in Computer Science. He received his PhD in 2008 from the University of Pennsylvania under the supervision of Prof. Warren D. Seider and completed a postdoctoral appointment under Prof. Paul Barton at the Massachusetts Institute of Technology. He is also a licensed Professional Engineer, and is an Associate Editor of the Canadian Journal of Chemical Engineering, Frontiers in Energy Research, and Chemical Product and Process Modeling. His primary educational contributions concern undergraduate and graduate course development concerning flowsheet synthesis and simulation, energy systems engineering, and computer-aided chemical engineering tools (most of which are available to the public), and the development of the book Learn Aspen Plus in 24 Hours. He is also the creator of PSEcommunity.org which hosts LAPSE: the Living Archive for Process Systems Engineering, which is the leading digital repository for PSE education, journal article preprints, and research materials.

Prof. Adams' research focuses on the design and simulation of sustainable energy conversion systems, including areas such as synthetic fuels, alternative fuels, biofuels, fuel cells, waste-to-energy, integrated community energy, polygeneration, and process intensification. The primary goal of his research is to create new chemical process systems and devices which will lead to worldwide global change in the way we make and use energy, following the principles of the triple-bottom-line of sustainability.

Prof. Adams has received numerous awards for his research and service, including the Canadian Journal of Chemical Engineering's Lectureship Award, the Canadian Society for Chemical Engineering's Emerging Leader of Chemical Engineering Award, membership in Industrial & Engineering Chemistry Research's 2018 Class of Influential Researchers, an Ontario Early Researcher Award, a Joseph Ip Distinguished Engineering Fellowship, the President's Award for Excellence in Graduate Supervision, and is now honored as a University Scholar at McMaster University. His research has been featured in the popular media such as in Bloomberg TV, Wired, Scientific American, the Discovery Channel, and on various TV and radio programs in the US, Canada, and Europe. But he is much more proud of the accomplishments of his graduate students, who include a Vanier Scholar, an Ontario Trillium Scholar, a Governor-General's

Medal recipient, and who are active researchers and engineers all over the world.



Thomas Adams II

John Falconer wins ASEE Thomas & Donna Edgar award.

Congratulations to John Falconer, a current CACHE trustee, who has received the American Society for Engineering Education (ASEE) 2021 Thomas & Donna Edgar CACHE Award for Excellence in Chemical Engineering Education.

This award is given by the American Society for Engineering Education for significant contributions in the development of computer aids for chemical engineering education. Specifically, this year's award was given in recognition of leading the development of online interactive simulations for LearnChemE. These simulations are freely available for chemical engineering educators and students around the world.

John Falconer is the Mel and Virginia Clark Professor Emeritus in Chemical and Biological Engineering and a University of Colorado President's Teaching Scholar, the university's highest teaching recognition. Falconer joined the faculty in 1975 and served as department chair in Chemical and Biological Engineering from 2007-11. A recipient of numerous awards for teaching, research and service, Falconer also led development of the LearnChemE.com website, which offers screencasts, interactive simulations, interactive self-study modules, and ConcepTests to teach chemical engineering principles. His lab has published more than 235 papers in refereed journals on inorganic membranes, heterogeneous catalysis, and applications of atomic and molecular layer deposition to catalysts and received 21 patents for its research. Falconer earned his PhD from Stanford University.



John Falconer