2007 CAST Awards Winners

The CAST Division Awards Committee is pleased to announce the winners of the 2007 CAST Division Awards.

The **Computing Practice Award** recognizes outstanding contributions in the practice or application of chemical engineering to computing and systems technology.

This year's winner of the Computing Practice Award is **Dr. Lionel O'Young** of ClearWaterBay Technology Inc. He earned his Chemical Engineering B.Sc. and Ph.D. degrees in 85 and 89 respectively from the University of Manchester of Science and Technology. He worked at Union Carbide Chemical and Plastic Inc., Linnhoff March Inc. and Mitsubishi Chemical Corporation. Within these various positions, he has been involved in the development of various process system engineering software packages such as ADVENT, SPLIT, AXSYS, etc. In 2002, he co-founded ClearWaterBay Technology Inc., a company that focuses on chemical process development and design, and has produced innovative chemical engineering commercial software packages such as SLEEK and AzeoDESK. Moreover, he has been practicing the technology and has been credited with five process patents.

The **W. David Smith, Jr. Graduate Publication Award** (formerly the Ted Peterson Student Paper Award) recognizes an individual for published work on the application of computing and systems technology to chemical engineering. The work must have been done by the individual while pursuing graduate or undergraduate studies.

This year's winner of the W. David Smith, Jr. Graduate Publication Award is **Dr. Christopher V. Rao**, Assistant Professor in the Department of Chemical & Biomolecular

Engineering at the University of Illinois. He received the B.S. degree from Carnegie Mellon University and the Ph.D. degree from the University of Wisconsin, Madison, both in chemical engineering, in 1994 and 2000, respectively. From 2000 to 2004, he was a research associate with the Howard Hughes Medical Institute and Lawrence Berkeley National Laboratory. In 2005, he moved to the University of Illinois at Urbana-Champaign, where he is currently an assistant professor in the Department of Chemical and Biomolecular Engineering. In 2007, he was the recipient of the National Science Foundation CAREER Award. He is currently serving as an associate editor for PLoS Computational Biology. His current research focuses cellular regulation with specific interests in Salmonella pathogenesis, innate immunity, Bacillus subtilis chemotaxis, and synthetic biology.

The **CAST Outstanding Young Researcher Award** recognizes an individual under the age of 40 for outstanding contributions to the chemical engineering computing and systems technology literature. The individual must be age 39 or less on December 31st of the Award year. An individual age 40 or over will be eligible for this Award if, on December 31st of the Award year, 12 years or less have elapsed since the individual received the Ph.D. degree.

This year's winner of the Outstanding Young Researcher Award is **Dr. Mayuresh Kothare**, Associate Professor of Chemical Engineering at Lehigh University. Mayuresh Kothare is currently holds the the R. L. McCann Professorship in Chemical Engineering at Lehigh. He received his B.Tech. in Chemical Engineering (1991) from the Indian Institute of Technology, Bombay; M.S. (1995) and Ph.D. (1997) both in Chemical Engineering from the California Institute of Technology. He held a one year postdoctoral appointment with Mobil Oil Corporation in Paulsboro, NJ before joining Lehigh in 1998. His interests are in the areas of robust model predictive control, microchemical systems, embedded predictive control and convex optimization using semi-definite programming. In recognition of his research at Lehigh, he was appointed a P. C. Rossin Assistant Professor (2001-2003) and a Frank Hook Assistant Professor (2002-2003) and received the Alfred Nobel Robinson Award (2002) "for outstanding contributions in service of the university and unusual promise of professional accomplishments". He is an Associate Editor of the IEEE Transactions on Automatic Control, Automatica and the IEEE Control Systems Society's Conference Editorial Board.

The "**CAST Directors' Award**," established in 1997, is given for the best poster presentations at the AIChE Annual Meeting. The First Place award consists of a plaque

with citation and an honorarium of $500. The winners are selected by majority vote of CAST Directors, who attend the poster session. The results are announced as soon as possible after the meeting and a formal presentation of the plaque and honorarium for the First Place winner will be made at the CAST Award Dinner to author(s) attending the next AIChE Annual Meeting.

On behalf of CAST, we are delighted to announce the winners of the tenth annual CAST Directors' Award for the 2006 AIChE Annual Meeting in Cincinnati. Kapil Mukati, Babatunde A. Ogunnaike, Erten Eser, Shannon Fields, and Robert W. Birkmire of the University of Delaware and Institute of Energy Conversion for their poster “Source Scale-up for Physical Vapor Deposition of Cu(Inga)Se2 on Flexible Substrates”.

The **Computing in Chemical Engineering Award** recognizes outstanding contributions in the application of computing and systems technology to chemical engineering.

This year’s winner of the Computing in Chemical Engineering Award is **Dr. B. Erik Ydstie**, Professor of Chemical Engineering at Carnegie Mellon University. Erik Ydstie is currently Professor of Chemical Engineering at Carnegie Mellon University and Professor II of Electrical Engineering at NTNU. He earned his B.S. degree in Chemistry at NTNU and a PhD in Chemical Engineering at Imperial College. From 1982 till 1992 he was professor of Chemical Engineering at UMass. From 1999 and 2000 he was Director of R&D for Elkem Metals in Norway. In 2005 he founded iLS Inc. to commercialize nonlinear adaptive and passivity based control systems. From 2007 he was President and CEO of iLS. Prof. Ydstie holds consulting agreements with Elkem, ALCOA and REC Silicon, he is on the advisory boards of the American Chemical Society, Petroleum Research Fund and the Worcester Polytechnic Institute. He has held visiting positions at Imperial College, ENSMP in Paris and UNSW in Australia. He has authored over 100 articles in the area of process control.

Aside from his many appointments, publications and honors, those of you who know Erik will also know that he is one the best artists in the field, so we will hopefully see evidence of that in his presentation.

Professor Ydstie will give a presentation titled "Model!".