### Keynote Speaker's Biographical Sketch

#### David T. Allen, Ph.D.

Dr. David Allen is the Gertz Regents Professor of Chemical Engineering, and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. He is the author of six books and over 170 papers in areas ranging from coal liquefaction and heavy oil chemistry to the chemistry of urban atmospheres. For the past decade, his work has focused primarily on urban air quality and the development of materials for environmental education. Dr. Allen was a lead investigator for the first and second Texas Air Quality Studies, which involved hundreds of researchers drawn from around the world, and which have had a substantial impact on the direction of air quality policies in Texas. He has also developed environmental educational materials for engineering curricula and for the University's core curriculum. The quality of his work has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship), the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering), and the State of Texas (through the Governor's Environmental Excellence Award). He has won teaching awards at UCLA and the University of Texas.

Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

### Keynote Speaker's Biographical Sketch

#### Cliff Davidson, Ph.D.

Cliff Davidson received his B.S. in Electrical Engineering from Carnegie Mellon University, and his M.S. and Ph.D. degrees in Environmental Engineering Science from California Institute of Technology. His main field of research is measurement and modeling of airborne particles, especially air toxics. He served as President of the American Association for Aerosol Research during 1999-2000. He has written and edited several books, and has over 100 refereed journal publications. He is currently a Professor in the Department of Civil and Environmental Engineering and the Department of Engineering and Public Policy, and is the founding director of the Center for Sustainable Engineering at Carnegie Mellon University.

## Keynote Speaker's Biographical Sketch

E. Sahle-Demessie, Ph.D.

Dr. Sahle-Demessie is a senior researcher at the US Environmental Protection Agency, National Risk Management Research Laboratory. His research interest includes advanced oxidation technologies for water and hazardous waste treatments, environmental catalysis and environmentally benign chemical processes, and cleaner solvents. In the past 12 years he has been a Lead scientist in the area of Green Chemistry and advanced oxidation technologies.

Sahle-Demessie, has received his MS and PhD from Oregon State University in chemical engineering. He has received numerous awards for the quality of research work and contribution including six times recommendation for recognition of Science and Technology Achievement Awards by the EPA Science Advisory Board. Sahle-Demessie has published more than 60 peer reviewed journal articles and have been awarded three U.S. patents.

### Keynote Speaker's Biographical Sketch

Jay J. Cheng, Ph.D.

Jay J. Cheng received his B.S. in Chemical Engineering from Nanchang University in China in 1982, his M.S. degree from St. Cyril & Methodius University in Macedonia in 1987, and his Ph.D. degree from University of Cincinnati in USA in 1996; Worked as Assistant and Associate Professor at North Carolina State University from 1997 to 2008 and recently promoted to Professor; Won several academic awards including US Fulbright Scholarship in 2005; Published 79 technical papers on scientific journals and conference proceedings; Served as Associate Editor for Journal of Environmental Engineering from 2000 to 2005 and on 12 International and US National Technical Committees.