

Xiao-Dong Zhou

Associate Professor, Department of Chemical Engineering University of South Carolina

Education:

B.S., Chemical Engineering, East China Univ. Sci. & Tech. (1994) M.S., Chemical Engineering, East China Univ. Sci. & Tech. (1997) Ph.D., Mater. Sci. & Eng., Missouri Univ. Sci. & Tech. (2001)

Experience:

Dr. Zhou is an Associate Professor in Chemical Engineering Department at the University of South Carolina. Prior to that, he was a Senior Research Scientist at Pacific Northwest National Laboratory, a US-DOE Lab in Washington, which he joined in August 2005 after two-year experience as an Assistant Research Professor at Missouri University of Science and Technology (MS&T). At MS&T, as an associate faculty member, he led research programs and supervised graduate students. At PNNL, Dr. Zhou was leading research on energy materials, including cathode for solid oxide fuel cells, thermoelectric oxides and photoelectrochemical cells. Since 2001, his early career has been highlighted by 80 peer-reviewed articles that span the areas of structural, transport and magnetic properties of condensed matters; nonstoichiometric chemistry; advanced processing and device physics. In addition, he has published 8 invited book chapters, contributed to over 100 presentations; and received 6 US patents/disclosures.

Professional Service/Recognition:

Dr. Zhou received J. B. Wagner Jr. Young Investigator Award in 2007 from the Electrochemistry Society (ECS) - High Temperature Materials (HTM) Division. He received Outstanding Performance Award from PNNL in 2007. He is as a Secretary and an Executive Committee member of HTM Division of ECS; and organized several symposia for the ECS. He has served on NSF program review panel, reviewed proposals for National Science Foundation, Petroleum Research Foundation, Basic Energy Science-DOE, SECA-DOE and University of Missouri Research Board; and reviewed manuscripts for numerous journals. Dr. Zhou served as a judge for South Carolina Junior Academy Annual Meeting (2010), Washington State University Student Competition for National Chemistry Week of American Chemical Society and Mid-Columbia Science Fair (2007-2009).

Dr. Zhou was selected by the National Academy of Engineering to participate in the Indo-American Frontiers of Engineering held in Agra, India (2010). He was an invited presenter at the US-Korea Forum on Nanotechnology as one of the four USA Early Career Participants (2007); invited speaker at H2EXPO in Hamburg, Germany (2007, 2010); 53rd Midwest Solid State Physics Conference (2006), MRS Spring Conference (2007); ECS Fall Conference (2007), and many invited lecturers at various universities.

Research Interests

Fundamental multiscale physics and electrochemistry of materials and interfaces for energy systems, including batteries, fuel cells, capacitors, thermoelectrics, and photoelectrochemistry and gas separation membranes