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Education and Training

<i>Institution</i>	<i>Major / Area</i>	<i>Degree & Year</i>	
Hamburg University of Technology	Chemical Engineering	Diplom:	2000
Hamburg University of Technology	Chemical Engineering	Ph.D.:	2005
University of Minnesota	Theoretical Chemistry	Postdoc:	2006-2007

Research and Professional Experience

2018 – present	Professor	Dept. of Chem. Eng., University of South Carolina
2016 – present	Graduate Director	Dept. of Chem. Eng., University of South Carolina
2015	Sabbatical at FIFC	Keiji Morokuma Group, Kyoto University, Japan
2014 – 2017	Associate Professor	Dept. of Chem. Eng., University of South Carolina
2007 – 2014	Assistant Professor	Dept. of Chem. Eng., University of South Carolina

Publications (<https://scholar.google.com/citations?user=DpefkU4AAAAJ&hl=en&oi=ao>)

Synergistic Activities

- Developed highly efficient algorithms for finding transition states on high-dimensional potential energy surfaces, molecular dynamics codes for mixed resolution systems, Monte Carlo codes to study adsorption, and methods for calculating rates of reactions occurring at solid-liquid interfaces. Transition state search algorithms are available upon request and are used in industry (e.g., Evonik Degussa GmbH) and academia. Programs developed have been implemented into Q-Chem, ChemShell, TURBOMOLE, and VASP, four widely distributed electronic structure program packages.
- Session chair and co-chair at scientific meetings. Co-Organizer of the 2010 Southeast Theoretical Chemistry Association (SETCA 2010) Annual Meeting. Participant at DOE workshops and reviews.
- Highly active journal and proposal reviewer. Top 2% and 1% reviewer of the ACS Catalysis journal in 2015 and 2014, respectively.

Graduate and Postdoctoral Advisors and Advisees

Ph.D. Advisors	Prof. Frerich J. Keil, Hamburg University of Technology, Germany Prof. Alexis T. Bell, University of California, Berkeley, USA
Postdoctoral Advisor	Prof. Donald G. Truhlar, University of Minnesota, USA
Graduate Advisees	Asif J. Chowdhury, Charles Fricke, Subrata Kundu, Md. Shamsus Saleheen, Wenqiang Yang, Kyung-eun You, Mehdi Zare (current students at USC), Dr. Sara Aranifard (unknown), Dr. Sina Behtash (Sealed Air Corp.), Prof. Dr. Md. Faheem (University of Engineering & Technology Lahore, Pakistan), Prof. Dr. Suwit Suthirakun (Suranaree University of Technology, Thailand), Dr. Eric Walker (University of Michigan), Dr. Md. Osman Mamun (Stanford University)
Postdoctoral Advisee	Res. Prof. Dr. Salai Cheettu Ammal (USC), Dr. Biplab Rajbanshi (USC), Dr. Yongie Xi (USC), Dr. Jong Hyuk Park (UNIST, South Korea), Dr. Jianmin Lu (Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China), Prof. Dr. Vijay Solomon (Madras Christian College, India), Dr. Supriya Saha (CSIR-NEIST, Jorhat, India)