

Slate for 2014-2015 Southwest Catalysis Society Officer Elections

Chair Elect Candidate

Teng Xu

Research Associate, Global Chemical Research
ExxonMobil Chemical, 4500 Bayway Drive
Baytown, TX 77520

Teng is currently a Research Associate with Global Chemical Research at ExxonMobil Chemical with 20+ years of experience in heterogeneous catalysis. His primary interest includes direct methane conversion to chemicals, coal conversion to fuels and chemicals, methanol to chemicals, and heavy hydrocarbon conversion. He is co-inventor on 50+ patent and patent applications. Teng got his Bachelor degree from Zhejiang University of Technology in 1985 and his Ph.D. from Texas A&M University in 1996. Teng been a long time member of SWCS since his graduate school days.

The world is going through a transformational phase in terms of feedstock for petrochemicals and meeting our energy needs. Catalysis plays a key role in this change from crudes to a more diversified base including crudes, shale gas, coal, and biomass. This is an exciting time for researchers working in catalysis field, and SWCS is right at the center where demand for catalysis research is among the greatest. As an officer of SWCS, I will do my best to help increase our membership, and to ensure that SWCS continues to be a great forum for networking, sharing information, and promoting interactions between academe and industry.

Director Candidates (in alphabetical order, VOTE FOR TWO)

Siva Chinta

Staff Scientist
SABIC Technology Center, 1600 Industrial Blvd
Sugar Land, TX 77478

I (Sivadinarayana Chinta) received my Ph.D. from National Chemical Laboratory (University of Poona; Pune India) in 1998 and, after a BP-sponsored postdoctoral fellowship at Department of Chemical Engineering at Cambridge University, UK, was employed at Texas A&M University in the Center for Catalysis (Prof. Wayne D Goodman and Prof. Jack H. Lunsford) for four years on surface science, heterogeneous catalysis and inelastic neutron scattering (Los Alamos and Oakridge). From 2005-2007, I worked as a senior research scientist at SASOL North America, then as Supervisor for basic chemicals research (2007-2013) at Total Petrochemicals and Refining USA, and presently am working as a Staff Scientist at SABIC Americas USA.

I have worked in heterogeneous catalysis and surface science to understand the fundamentals of catalysis and try to bridge the material and pressure gap using many surface science tools. I have worked extensively in C-1 chemistry and Au nanoparticle chemistry, in both oxidation and hydrogenation catalysis.

Lars Grabow

Assistant Professor of Chemical and Biomolecular Engineering
University of Houston, S335 Engineering Building 1
Houston, TX 77204-4004



Dr. Lars Grabow joined the Dept. of Chemical and Biomolecular Engineering at the Univ. of Houston as tenure-track Assistant Professor in Fall 2011 and accepted a joint appointment with the Dept. of Chemistry in Feb. 2014. He received his PhD in Chemical Engineering under the guidance of Manos Mavrikakis from the University of Wisconsin in 2008 and continued his research between 2008 and 2011 in the group of Jens Nørskov at the Technical Univ. of Denmark and Stanford Univ. His expertise is the application of electronic structure calculations (Density Functional Theory) and kinetic modeling to problems in heterogeneous catalysis, electrocatalysis and surface science. His main areas of interest are methane upgrade, the identification of unifying principles in hydrotreating catalysis, environmental catalysis, and fundamental studies of active catalytic sites at metal/metal-oxide interfaces.

Dr. Grabow has received the U.S. Department of Energy (DOE) Early Career Award (2014), the Teaching Excellence Award of the Cullen College of Engineering at the Univ. of Houston (2014), and the Young Scientist Award of the 15th International Congress on Catalysis (2012). He has given 20 invited lectures, published 28 peer-reviewed papers in journals such as *Science*, *Angewandte Chemie* and *JACS*, and recently published a book chapter on “Computational Catalyst Screening”. He is a member of the American Institute of Chemical Engineers (AIChE), the American Chemical Society (ACS), the American Association for the Advancement of Science (AAAS), the North American Catalysis Society (NACS), and the Southwest Catalysis Society (SWCS).

Xianghong (Kelly) Hao

Affiliation: Chevron-Phillips Chemical

Kelly was formerly Director of Research at Nanostellar Inc. in Redwood City, CA (until 2012), but is now a Catalyst Team Leader at Chevron-Phillips Chemical in the Houston area. She received her Ph.D. in 2004 from the Univ. of Illinois at Chicago. Kelly will be glad to serve the Southwest Catalysis Society.

Lin Luo

Affiliation: Hydrocarbons R&D

The Dow Chemical Company, 2301 N. Brazosport Blvd, B251
Freeport, TX 77541

Lin has over 17 years of heterogeneous catalysis experience in the petrochemical and refining areas. Currently a technical leader in the Commercial Technology Group, Lin and her team provide technical support, define most effective technology, and identify/ qualify/ implement new catalyst and process technology to improve profit for 30+ plants in Hydrocarbons Business of Dow and Dow’s affiliates. Prior to this current role, she worked on catalysis projects ranging from concept shaping, concept analysis to process development and commercialization. Lin has 15 journal publications, patent/patent applications, and 50+ internal research reports. She is the primary inventor of Dow’s On-Purpose Propylene Technology.

Lin obtained her M.S. in Physical Chemistry from University of Chicago and Ph.D. in Chemical Engineering from Caltech. She was an active member of SWCS and served as director from 2010-2012.



Nikolaos Soultanidis

Senior Engineer, Global Process Research, ExxonMobil Chemical Company
4500 Bayway Drive
Baytown, TX 77575

Dr. Nikolaos Soultanidis began his research on catalysis, specifically on Ru/Ce catalysts for DeNOx applications while completing his undergraduate studies in chemical engineering at the Aristotle University in Greece (2005). After completing his studies he joined the Chemical Process Engineering Research Institute (CPERI) in Greece and worked in the area of FCC as a research engineer. Subsequently (2006), he joined the group of Prof. Michael Wong at Rice University, where he received his PhD in field of supported metal oxide catalysis and nanotechnology.

Dr. Soultanidis joined ExxonMobil Chemical Research after completing his PhD in 2011 and worked in numerous catalysis projects with a focus on the field of heavy feed catalytic conversion. Today, he is a technical program leader and a member of the heterogeneous catalysis group. His hometown was Thessaloniki, Greece, and he currently lives in the Rice Village / Medical center neighborhood of Houston.

John Super

President, Cobroko Solutions
Houston, TX 77219

John Super's technical innovation and leadership has very often involving scale up with new catalysts over four decades. With DuPont, that included new products and new processes with innovative catalysts, and recently new catalysts discovered using high throughput screening at Rennovia as VP Process Development and found in collaboration with a major catalyst company at BioAmber as VP Catalysis, both new renewable to chemicals firms. John continues to provide his expertise today as a consultant in commercialization of new technologies through Cobroko Solutions. He works tirelessly to advance new technologies. John's volunteer service contributions to the profession continue today, as an active member of the University of Houston Chemical and Biomolecular Industrial Advisory Board and past chair for four years. He was recently a Director of the Organic Reactions Catalysis Society (ORCS) and greatly improved the fund raising methodology and tripled support from industry. He developed the first four-hour short course to increase the offerings at the biannual ORCS meeting. And in 2007, he co-chaired the North American Catalyst Society poster sessions, for 900 posters over three nights.

I see this as an exciting time for catalysis in the energy and petrochemical sectors, and the SWCS needs to continue enabling catalysis science in our universities and companies. The Houston 2014 Spring Symposium was outstanding due to the hard work of SWCS leadership. I would continue that strong leadership. Our Chair has the goal of increasing the number of events SWCS organizes beyond the annual meeting of the Spring Symposium. As a new Director I would support that goal, work to grow our society's activities throughout the region, and help find sponsors for new events and activities, including lunches or networking events at the symposiums.

Secretary Candidates

Travis Conant

Sr. Manager, CRI-Future Feedstocks Technology and Innovation
SABIC Technology Center

1600 Industrial Blvd
Sugar Land, TX 77478

Including my graduate years, I have been working and studying in the field of catalysis for nearly 10 years. My experiences in catalysis have ranged from catalyst incorporation in microreactors to nanoscale characterization of bimetallics to industrial process catalyst development. I have been with SABIC for 5 years and in my current role within the company since the start of this year. As a Technical Manager, I lead the Reaction Technology group which focuses on catalysis and reaction engineering for the utilization of novel hydrocarbon feedstocks. Although my role has shifted to a leadership one, I do keep roots in electron microscopy and catalyst characterization by helping on various projects within SABIC.

I have found that the NAM is one of the most technically applicable and significant meetings one in the catalysis field can attend. Along those same lines, the local club meetings are great for fostering interactions between colleagues and helping expose graduate students to industry. I found the latter to be especially true during my graduate years as a member of the Western States Catalysis Club. I would appreciate the opportunity to facilitate these important networking opportunities as Secretary of the Southwest Catalysis Society.

Jeffrey Rimer

Ernest J. and Barbara M. Henley Assistant Professor
University of Houston, Department of Chemical and Biomolecular Engineering
4800 Calhoun Road, S222 Engineering Building 1
Houston, TX 77204-4004

Jeffrey Rimer is the Ernest J. and Barbara M. Henley Assistant Professor of Chemical Engineering at the University of Houston. Rimer received his Ph.D. in Chemical Engineering from the University of Delaware in 2006. Prior to joining the Department of Chemical and Biomolecular Engineering at Houston in 2009, he spent two years as a postdoctoral fellow at New York University's Molecular Design Institute within the Department of Chemistry. Rimer's research in the area of crystal engineering focuses on the rational design and characterization of materials with specific applications in the synthesis of zeolite catalysts. Rimer has been the recipient of several awards, including a Welch Foundation fellowship, the ACS Doctoral New Investigator Award, and the NSF CAREER Award. He was also a recent recipient of the Junior Faculty Research Excellence Award from the Cullen College of Engineering and the 2014 Award for Excellence in Research and Scholarship from the University of Houston.

Since joining UH in 2009, Rimer and his research group have been very active in the Southwest Catalysis Society. He served as a Director from 2012 – 2014 and helped coordinate the 2014 SWCS Symposium at UH. Rimer is eager to continue his involvement in the SWCS as Secretary.

Treasurer Candidate

Victor Johnston

R&D Fellow, Celanese Ltd.
Pasadena, TX

I have over 20 years industrial experience in R&D, catalyst sales, licensing, manufacturing and leadership roles with much of that time focused on catalysis. I am co-inventor on over 200 US patents and numerous

foreign equivalents which as of June 2013 include 168 published US applications and 38 granted US patents, and I was recently honored to be named 2013 Inventor of the Year by the State Bar of Texas. Currently R&D Fellow, I have been with Celanese for the past ten years. Most recently I have been leading a 25+ cross-functional R&D team to develop a new technology to produce ethanol from coal, natural gas or biomass called TCX[®] Ethanol Technology (<http://celanesetcx.com>). The project has received international recognition, contributed to >\$400 million higher market value of the company, and resulted in the creation of a new business line, Celanese Advanced Fuels Technology. The earnings potential of the technology has been reported to be in the billions of dollars annually as the technology reaches full commercial deployment beginning in 2013. Previous to Celanese I spent about 10 years in the Vinyl Chloride Monomer business working in R&D and manufacturing with a focus on fluidized bed catalysis.

I have enjoyed participating in the North American Catalyst Society and the Southwest Catalyst Society on and off during my career. I believe the SWCS is an excellent forum for networking, developing the interest of newer members of our community, and building relationships between engineering and chemistry and industry and academia. I will be happy to serve the organization and will work to continue in this mission.