



SEMINARS IN CHEMICAL AND BIOMOLECULAR ENGINEERING



Friday, Nov. 09, 2018 | 10:00am-11:00am
Boelter Hall 3400

Presented By: Mark A. Barteau

Vice President for Research, Texas A&M University
Halliburton Professor in Engineering
Professor of Chemical Engineering
Professor of Chemistry

“Tackling Carbon Dioxide Removal and Conversion: Experiences from Leadership Roles to the Lab”

Carbon dioxide removal (CDR) from the atmosphere has become a critical component of virtually every scenario to keep average global temperature increases below 2°C. Conversion of captured CO₂ to valuable products offers the prospect of making economics more favorable. This talk will explore the author’s experiences in this space, from launching the “Beyond Carbon Neutral” initiative at the University of Michigan, to recent National Academies’ reports on research agendas for CDR and for utilization of waste carbon, to laboratory studies of tandem catalytic processes for CO₂ capture and conversion. A recurring theme is the need for a portfolio of strategies and solutions to address this pressing global problem.

Mark Barteau serves as the Vice President for Research of Texas A&M University. He holds the Halliburton Chair in Engineering, with appointments in the Department of Chemical Engineering and the Department of Chemistry. He received his BS degree in Chemical Engineering from Washington University in St. Louis, and his MS and PhD from Stanford. He was an NSF Post-doctoral Fellow at the Technische Universität München. He previously served as the Director of the University of Michigan Energy Institute and prior to that as the Senior Vice Provost for Research and Strategic Initiatives at the University of Delaware. Barteau brings extensive experience as a researcher, inventor, academic leader, and consultant for both US and international organizations. His research, presented in more than 250 publications and a similar number of invited lectures, focuses on chemical reactions at solid surfaces and their applications in heterogeneous catalysis and energy processes. He has been a frequent contributor of perspectives on energy and environment to *The Conversation*, *Fortune*, and NPR, among other media outlets. He was elected to the National Academy of Engineering in 2006 and currently serves on the Board on Chemical Sciences and Technology. Barteau was named in 2008 as one of the “100 Engineers of the Modern Era” by the American Institute of Chemical Engineers. He is the recipient of numerous awards from the American Chemical Society and national and international catalysis societies. He is a fellow of both the American Institute of Chemical Engineers and the American Association for the Advancement of Science.