Applying Chemical Engineering towards a Green Economy

13AIChE
Annual Meeting, San Francisco, CA

Chair:
Debalina Sengupta
Co-chairs:
Alessandra Carreon
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The Environmental Division of AIChE is proud to present the first session on "Applying Chemical Engineering towards a Green Economy". This session promotes the idea of a green economy through chemical engineering applications. The session has been designed to be interactive with panel discussions and case studies that show recent progress towards the goals of a greener economy.

Please help us make this session a success by participating in this interactive session and help us understand the transition for chemical engineering practitioners. The session highlights include three featured speakers from the government, industry, and academia.

Invited Speakers:

John Leazer is the Director of the Sustainable Technology Division in the USEPA's Office of Research and Development. John has responsibility for the Division's research portfolio and sustainability advances. Before EPA, John worked as a process chemist for 22 years at Merck, where he is credited with being one of the founders of their green chemistry program. His green chemistry leadership there resulted in two Presidential Green Chemistry Challenge Awards and an Astra Zeneca IChemE Award for Excellence in Green Chemistry.

Joe Powell is an AIChE Fellow and Shell's Chief Scientist, Chemical Engineering. He joined the Process Development Department at Shell's Westhollow Technology Center (Houston) in 1988, where he has led major R&D programs in new chemical processes, biofuels, and enhanced oil recovery. Dr. Powell has been granted forty-five U.S. patents and several industry awards, including the A. D. Little Award for Chemical Engineering Innovation (AIChE 1998). He is co-editor and chapter author for the book ***Sustainable Development in the Process Industries: Cases and Impact***, John Wiley & Sons, New York, April 2010.

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 has developed educational materials on sustainability for engineering curricula and for the University's core curriculum, as well as engineering education materials for high school students. He has served on a variety of governmental advisory panels and currently chairs the Environmental Protection Agency's Science Advisory Board. He is the founding editor of the journal ACS Sustainable Chemistry and Engineering, published by the American Chemical Society.

Introductory Remarks

"Green Chemistry, Green Engineering, Green Economy At US EPA 's Sustainable Technologies Division"

- John Leazer

"Sustainability Practice in Industry"

- Joseph B. Powell

"Green Engineering and Sustainability in the Chemical Engineering Curriculum"

- David Allen

Panel Discussion

"Driving Private Sector Adoption of Greener Processes and Technologies"- Abby Lindsay

"Minimization of the GHG Emissions At the Macroeconomic Level Via a Multi-Objective Input-Output Approach: A Case Study of the EU-25 Economy"- Daniel Cortés, Antonio Ruiz-Hernández, Gonzalo Guillén-Gosálbez, Maria Llop, Roger Guimerá and Marta Sales-Pardo

"Economic Analysis and Optimization of Carbon Capture Storage Pipeline Transport Network System" - Seungkyu Dan, Byung Joon Kang, Seonghyun Cho and En Sup Yoon

"Economic Development Through Entrepreneurship and Technology Innovation: Bringing Together Industry, Academia, and Government"- Nada Marie Anid

Discussion

Monday, November 4, 2013
8:30 AM

Plaza B (Hilton)