

# AMERICAN INSTITUTE OF CHEMICAL ENGINEERS ENVIRONMENTAL DIVISION

## NEW DIVISION LEADERSHIP

**Chair:** Leslie Shor

**1<sup>st</sup> VC:** Debalina Sengupta

**2<sup>nd</sup> VC:** Nga Lee (Sally) Ng

### **Past Chairs:**

Pagajiotis (Peter) Smirniotis (2017)

V. Faye McNeill (2016)

Kurt Rindfusz (2015)

### **Secretary:**

Robert Peters

### **Treasurer:**

Larry Erikson

### **Directors:**

Ted Heron (2016-2018)

Kristina Wagstrom (2016 – 2018)

Steven T Coleman (2017-2019)

Armin Sorooshian (2017-2019)

Alexander Orlov (2018-2020)

Fengqi You (2018-2020)

**Programming:** Jeff Seay



Page 1 – New Division  
Leadership

Page 2 – 2017 Award  
Announcement

Page 3 – Student Paper  
Award

Page 4- 2018 Spring  
Meeting Program

Page 5- 2018 Fall  
Meeting Sessions

Editors: Profs. Alexander  
Orlov and Kristina  
Wagstrom

Design: Bryanna White

---

## 2017 DIVISION AWARDS ANNOUNCEMENT

### Cecil Award for Environmental Chemical Engineering

JoAnn Slama Lighty, Dean of the College of Engineering, Boise State University



Dr. JoAnn Slama Lighty serves as the Dean of the College of Engineering at Boise State University, where she is also a Professor of Mechanical and Biomedical Engineering. Prior to this appointment at Boise State University, she was on faculty in the Department of Chemical Engineering at the University of Utah for almost 29 years. During her tenure as a professor, she was Chair of the department and held several other leadership positions. Since October 2013 until her move to Boise State in July 2017, she served as the Division Director for Chemical, Bioengineering, Environmental, and Transport Systems at the National Science Foundation.

Lighty earned her B.S. and Ph.D. degrees, both in Chemical Engineering, from the University of Utah.

### Early Career Award

Fengqi You, Roxanne E. and Michael J. Zak Professor, Cornell University



Fengqi You is the Roxanne E. and Michael J. Zak Professor at Cornell University, and is affiliated with the Smith School of Chemical and Biomolecular Engineering, the School of Operations Research and Information Engineering, and the Systems Engineering Program. He has published over 100 peer-reviewed journal articles with an h-index of 40. Some of his research results on sustainability have been featured on journal covers (e.g. Energy & Environmental Science, ACS Sustainable Chemistry & Engineering, and Industrial & Engineering Chemistry Research), and covered by many major media outlets. He has received several awards, including the 2011 W. David Smith, Jr. Graduate Publication Award from CAST Division of AIChE, the 2013 Northwestern-Argonne Early Career Investigator Award, an NSF CAREER Award in 2016, and the 2017 AIChE Sustainable Engineering Forum Research Excellence Award, as well as a number of best paper awards

and most-cited article recognitions. He is currently an Associate Editor of "Computers & Chemical Engineering", and also serves on the Editorial Boards of "ACS Sustainable Chemistry & Engineering" and "AIChE Journal". His research focuses on the development of novel computational models, optimization algorithms, statistical machine learning methods, and systems analysis tools for process manufacturing, infrastructure, energy systems, and sustainability.

### Student Paper Awards

1st Place: Sijie Ge

2nd Place: Won Jun Jo, MIT

---

## AWARDS NOMINATIONS

The Environmental Division is currently accepting nominations for three awards.

### **Lawrence K. Cecil Award in Environmental Chemical Engineering**

This is the most prestigious environmental award within AIChE and is given by the Environmental Division in recognition of an individual's outstanding chemical engineering contribution and achievement in the preservation or improvement of the environment. This award recognizes an individual's outstanding chemical engineering contribution and achievement in the preservation or improvement of the environment. The recipient must be a member of AIChE, have 15 years of chemical engineering experience in the environmental field, and demonstrate leadership in research, teaching, engineering, or regulatory activities in either the public or private sector.

Deadline: May 4, 2018

More Information: <https://www.aiche.org/community/awards/lawrence-k-cecil-award-environmental-chemical-engineering>

### **Early Career Award**

This award is intended to honor an individual with outstanding contributions in environmental chemical engineering in the early stages of the recipient's career.

Deadline: May 4, 2018

More Information: <https://www.aiche.org/community/awards/environmental-division-early-career-award>

### **Graduate Student Poster Award**

This award recognizes an outstanding original research paper that contributes to environmental protection through the application of chemical engineering.

Deadline: August 1, 2018

More Information: <https://www.aiche.org/community/awards/environmental-division-graduate-student-paper-award>

## AICHE 2018 SPRING MEETING PROGRAM

Tuesday, April 24th, 2018

### **1:30 PM - 3:00 PM**

105 Advanced Technologies for Reduction of Atmospheric Emissions in the Petrochemical and Refining Industries I Vikas Khanna, Civil & Environmental Engineering, University of Pittsburgh, Pittsburgh, PA Orlando World Center Marriott - San Antonio

116 Industrial Strategies for Sustainability Sipho C. Ndlela, Owens Corning, Granville, OH Orlando World Center Marriott - Chicago

---

**3:30 PM - 5:00 PM**

130 Advanced Technologies for Reduction of Atmospheric Emissions in the Petrochemical and Refining Industries II Vikas Khanna, Civil & Environmental Engineering, University of Pittsburgh, Pittsburgh, PA Orlando World Center Marriott - San Antonio

Wednesday, April 25<sup>th</sup>, 2018

**08:00 AM - 09:30 AM**

168 YP Tutorial: Environmental Issues and Controls in Select Industrial Sectors Joseph Cramer, Program Development, AIChE, Hendersonville, NC Orlando World Center Marriott - San Antonio

**08:00 AM - 11:00 AM**

171 Ethylene Plant General Environmental Session Mark Schmidt, E.I. DuPont de Nemours & Co., Orange, TX, Mark Ulrich, Linde, Houston, TX and Ted Heron, The Catalyst Group, Spring House, PA Orlando World Center Marriott – Sago

**10:15 AM - 11:45 AM**

179 Greenhouse Gas Reduction Technologies I Joseph Cramer, Program Development, AIChE, Hendersonville, NC and Sunil Hangal, Environmental Compliance Assurance Management (ECAM), Bedminster, NJ Orlando World Center Marriott - San Antonio

**01:30 PM - 03:00 PM**

194 Greenhouse Gas Reduction Technologies II Sunil Hangal, Environmental Compliance Assurance Management (ECAM), Bedminster, NJ and Jeffrey Seay, Chemical and Materials Engineering, University of Kentucky, Paducah, KY Orlando World Center Marriott - San Antonio

**01:30 PM - 05:00 PM**

208 Water Solutions Quan Yuan, Core R&D, Engineering and Process Sciences, The Dow Chemical Company, Freeport, TX, Eberhard Lucke, CH2M Oil, Gas & Chemicals, Houston, TX and Ted Heron, The Catalyst Group, Spring House, PA Orlando World Center Marriott - Grand Ballroom 3

## **AICHE 2018 FALL MEETING SESSIONS (DEADLINE APRIL 18)**

### **Environmental Division (09)**

09000 Environmental Division Awards and Honors (Invited Talks) - Oral Session -

09001 Poster Session: Environmental Division

09002 Rapid Fire Session: Environmental Division

### **Air (09A)**

09A00 Atmospheric Chemistry and Physics - Oral Session

09A01 Novel Materials for Environmental Applications - Oral Session

---

### **Water (09B)**

- 09B00 Advanced Oxidation Processes - Oral Session
- 09B01 Advanced Treatment for Water Reuse and Recycling - Oral Session
- 09B02 Community-Based Water Treatment Innovations - Oral Session

### **Solid and Hazardous Waste (09C)**

- 09C00 Environmental Advances in Nuclear and Hazardous Waste Treatment - Oral Session
- 09C01 Fundamentals and Applications for Hazardous Waste Treatment - Oral Session
- 09C02 Fundamentals and Applications for Municipal Solid Waste Treatment & Valorization - Oral Session

### **Process Development (09D)**

- 09D00 Advances in Life Cycle Optimization for Process Development - Oral Session

### **Fundamentals (09F)**

- 09F00 Fundamentals of Environmental Kinetics and Reaction Engineering - Oral Session
- 09F01 Fundamentals of Food, Energy, and Water Systems - Oral Session
- 09F02 Fundamentals of Sustainability Science and Engineering - Oral Session

### **Sustainability (09G)**

- 09G00 CO<sub>2</sub> Industrial, Engineering and R&D Approaches - Oral Session
- 09G01 Going to a Decision Point in Sustainability Analysis - Oral Session
- 09G02 Sustainability Metrics at the Process and Product Level - Oral Session
- 09G03 Sustainable Fuel from Renewable Resources - Oral Session

### **Climate Change (09H)**

- 09H00 Carbon Dioxide Capture Technologies and Their Use - Oral Session