# **Technical and Engineering Challenges of Addressing the United Nations**



## November 1-2, 2018 | David L. Lawrence Convention Center, Pittsburgh, PA

This workshop will bring together engineering disciplines to develop a unified response and path forward for fostering the successful implementation of the 17 UN Sustainable Development Goals.

The United Nations recently published 17 Sustainable Development Goals1. Many of these goals pertain to the engineering community including clean water and sanitation, affordable and clean energy, industry, innovation and infrastructure, sustainable cities and communities, responsible consumption and production, climate action, etc.

The implementation phase for the targets embodied in these goals will need to begin soon. While the policy component of the goals is reasonably well established, and while some of the goals may be outside the purview of engineering, successful implementation of many of these goals will require substantial new engineering, reengineering, and retrofitting across all engineering disciplines.

The goal of this workshop is to formally frame the discussion that must take place across all of engineering so that the requisite actions become possible and successful. This is directly supporting UEF mission to advance engineering arts and science for the welfare of humanity.

### The workshop has the following three specific goals:

- Establish the new engineering, reengineering, and retrofitting of production systems for goods and energy.
- Establish the new engineering, reengineering, and retrofitting of infrastructure.
- Establish the changes that are necessary in the education and professional training of engineers across disciplines.

#### **Steering Committee**

- Heriberto Cabezas, US EPA, AIChE
- Lucy Alexander, AIChE
- Randy Over, AAES
- Melissa Prelewicz, AAES
- Bill Kelly, ASCE
- Dele Ogunseitan, UC Irvine, TMS
- Linda Battalora, Colorado School of Mines, SPE
- Dick Wright, ASCE
- Reggie Vachon, ASME

### **Preliminary Workshop Schedule**

Thursday, November 1, 2018	
8:30 AM - 9:00 AM	Opening Remarks and Workshop Agenda
9:00 AM - 12:30 PM	Session 1: Edu. and Professional Training of Engineers
12:30 PM -1:30 PM	Lunch
1:30 PM -5:00 PM	Session 2: Production Systems for Goods and Energy
5:00 PM -6:00 PM	Networking Reception

Friday, November 2, 2018	
8:45 AM - 9:00 AM	Introductory Remarks and Agenda
9:00 AM - 12:30 PM	Session 3: Infrastructure
12:30 PM -1:00 PM	Recap and End of General Workshop
1:00 PM -3:00 PM	Organizing Committee Workshop - by invite only



This workshop was possible thanks to a generous grant from the United Engineering Foundation. The United Engineering Foundation does not endorse results or recommendations from this workshop.