



**MEDIA ALERT**

**FOR IMMEDIATE RELEASE**

September 12, 2012

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**CHEMICAL ENGINEERING CONFERENCE IN PITTSBURGH TO FEATURE  
CONTRIBUTIONS TO CLEANER ENERGY, A STRONGER ECONOMY AND  
BETTER LIVING**

14th National College Chem-E-Car Competition to be held Sunday, October 28

**WHO:** American Institute of Chemical Engineers (AIChE)

**WHAT:** AIChE's Annual Meeting is expected to draw more than 5,000 engineers and undergraduates with plenary lectures, 16 topical conferences, approximately 800 technical sessions and special events. The national Chem-E-Car Competition will feature teams from colleges across the country racing small cars powered by alternative fuels that the students have created.

**WHERE:** David L. Lawrence Convention Center, 1000 Fort Duquesne Boulevard,  
Pittsburgh

**WHEN:** Sunday, October 28 - Friday, November 2, 2012

**HIGHLIGHTS:** Presentations cover all aspects of chemical engineering, from sustainable water supplies, to pharmaceuticals, to bioengineering, to nanotechnology. The second International Congress on Energy will feature more than 100 sessions related to energy technologies, markets, business strategies and policies covering natural gas, solar, nuclear, lignocellulosics, biorefineries, hydrogen production and storage, and green innovation.

AIChE will update its social media channels throughout the meeting. News, photos, videos, special events and keynote speeches will be available at [www.chenected.com/annual](http://www.chenected.com/annual). Facebook ([www.facebook.com/chenected](http://www.facebook.com/chenected)) and Twitter feeds (@chenected) will be updated regularly. The official hashtag for the meeting is #AIChEAnnual.

AIChE is also kicking off its new "Sustainable Meeting" initiative, reducing the event's environmental impact by decreasing waste generated and resources consumed. The Institute has developed a number of benchmarks to monitor the meeting's environmental, economic and social impacts.

## **Sunday, October 28**

**2:00PM - 4:00 PM** Chem-E-Car Competition: College teams race shoebox-size cars powered by alternative fuels in carefully calculated chemical reactions. The cars must carry a small payload a certain distance. Adding to the tension of the competition, the weight of the payload and distance are not revealed to the competitors until one hour before the contest begins. Teams must quickly make calculations about their fuel use.

## **Monday, October 29**

**9:15 AM – 11:40 AM** Clinically Realized Drug Delivery Technologies: This session will focus on new drug delivery technologies which, after originating in laboratories, have reached the clinic or are close to it. Some of the new techniques to be discussed include: using nanoparticles to fight cancer; the development and first clinical demonstration of an implantable, wireless, multi-reservoir drug therapy for osteoporosis; advancements in applying drugs to the skin; and new approaches to brain tumor therapy, which include thermo-sensitive gel, biodegradable controlled release beads, and intracranial delivery using microchips.

**12:30 PM – 3:00 PM** 2012 Annual Meeting Plenary: This year's plenary session focuses on energy, with an emphasis on hydraulic fracturing, natural gas, and shale gas. Charles McConnell, Assistant Secretary for Fossil Energy at the US Department of Energy, will speak on CO<sub>2</sub> Capture, Utilization and Storage, and Natural Gas/Oil Recovery. David Porges, President & CEO of EQT Corporation, will discuss "North American Manufacturing and the Shale Gas Century." Greg Babe, President and CEO of Bayer Corporation, will speak on the historic link between chemistry and energy. Aris Candris, former President & CEO of Westinghouse Electric, will discuss the future of nuclear energy.

## **Tuesday, October 30**

**8:30AM – 9:45 AM** Handling of Contaminated Fluids Associated with Gas Production from Marcellus Shale: This session deals with proper handling of contaminated fluids associated with gas production from Marcellus shale.

**11:15AM – 12:15PM** Professional Progress Award Lecture: "Clicking Polymers Together: Assembly of Complex, Controlled Polymer Structures from Efficient Chemistries." Each year, AIChE invites a chemical engineer who has made fast-paced progress in the profession to deliver a featured lecture. Christopher N. Bowman, Patten Professor and Department Chair of Chemical and Biological Engineering at the University of Colorado will deliver this year's address.

**12:30 PM – 1:00 PM** James K. Cecil Award Lecture: “The Globalization of Air Pollution: Implications for the Quality of the Air We Breathe, the Water We Drink, and the Food We Eat.” The award recognizes an individual's outstanding chemical engineering contribution and achievement in the preservation or improvement of the environment. Greg Carmichael, Chemical and Biochemical Engineering Department/ Center for Global and Regional Environmental Research, at the University of Iowa will deliver this year's Award Lecture.

**6:00 PM – 7:00 PM** James E. Bailey Award Lecture, sponsored by the Society for Biological Engineering, “Natural Products and the Chemical Engineer.” The award is presented to an individual who has had an important impact on bioengineering and whose achievements have advanced this profession in any of its aspects. Eleftherios T. Papoutsakis, Department of Chemical Engineering & Delaware Biotechnology Institute of University of Delaware is this year's recipient and lecturer.

### **Wednesday, October 31**

**8:30 AM – 10:30 AM** Nanomaterials for Thermal-to-Electric Conversion: More than eighty percent of current world energy needs are met through fossil fuels and more than sixty percent of this energy is released as "waste heat." Recent efforts to convert either solar-thermal or waste heat energy into electricity will be presented along with challenges and opportunities.

**11:15AM – 12:15PM** 64th AIChE Institute Lecture, “Multiblock Polymers: Panacea or Pandora's Box?” Each year, AIChE invites a distinguished chemical engineer to present a comprehensive review of his or her specialty. This year's Institute Lecturer is Frank S. Bates, Regents Professor and Department Head, Department of Chemical Engineering and Materials Science at the University of Minnesota. This lecture will highlight several commercially successful examples of creating new materials and products presented by this emerging class of polymers.

**12:30 PM – 3:00 PM** AIChE-ICHEME Joint Session I – Energy & Sustainability: AIChE and IChemE (the UK-based chemical engineering organization) are sponsoring a joint session to explore the challenges of Energy and Sustainability in a global context. The session will explore the future energy landscapes with perspectives on current and evolving energy technologies, the energy-water nexus, the roles governments will play, and sustainability related to energy systems. These energy and sustainability challenges are global and present opportunities for professional societies to collaborate in addressing these challenges.

## **Thursday, November 1**

**8:30 AM – 11:30 AM** Alternative Fuels I: The research & development and production of alternative fuels from diversified sources including oil shale, coal, synfuels, as well as biobased alternative fuels such as ethanol, biobutanol, dimethyl ether, biodiesel, renewable diesel and green diesel, will be discussed.

**11:15 AM – 12:15 PM** Corning – A Long Tradition of Innovation That Matters, the 5<sup>th</sup> AIChE Corporate Innovation Award Lecture. The Corporate Innovation Award recognizes a company for outstanding innovation. This year, Marc Giroux of Corning will discuss Corning's 160-year history of innovation.

**12:30 PM – 3:30 PM** Appropriate Water Technology for the Developing World. Chemical engineering skills are being used in the developing world for the treatment of water. Innovative technologies for water treatment, such as improved water disinfection technology from varied materials such as chitosan (made from the exoskeleton of crustaceans), banana peels, biochar from corn and the seeds of the Moringa oleifera tree, will be described.

## **Friday, November 2**

**8:30 AM – 11:00 AM:** Sustainable Electricity: Generation, Transmission and Storage II. This session will highlight challenges and solutions related to improving the sustainability of electricity, in particular electricity generated by wind and solar energy. Energy transmission, storage, and distributed generation of renewable energies will be discussed.

More information on all of the activities surrounding the AIChE Annual Meeting is available at [www.aiche.org/annual](http://www.aiche.org/annual).

### **About AIChE**

*AIChE is a professional society of more than 40,000 chemical engineers in 92 countries. Its members work in corporations, universities and government using their knowledge of chemical processes to develop safe and useful products for the benefit of society. Through its varied programs, AIChE continues to be a focal point for information exchange on the frontiers of chemical engineering research in such areas as nanotechnology, sustainability, new energy sources, biological and environmental engineering, and chemical plant safety and security. More information about AIChE is available at [www.aiche.org](http://www.aiche.org).*