



The American Institute of Chemical Engineers
and the Illinois Institute of Technology



WELCOMES PRE-COLLEGE STUDENTS
January 31, 2013 and February 1, 2013

Being an Engineer—Creating A World That Works!

- 8:30 AM TECH TOURS**
Smart Grid Center – Mohammad Shahidehpour, Ph.D., Director of Robert W. Galvin Center for Electricity Innovation, IIT
Innovation Center and Idea Shop – April Welch, Director of Business and Educational Planning and Idea Shop, IIT
Computerized Crime Prediction Demonstration – Miles N. Wernick, Ph.D., Director of Medical Imaging Research Center, IIT
- 9:30 AM WELCOME AND INTRO TO ENGINEERING PRESENTATION**
(IIT Tower Auditorium)
Marisa Haire, IIT Chemical Engineering Student
Thursday Session: Gerald Doyle, Vice Provost for Student Access, Success and Diversity Initiatives, IIT
Friday Session: Alan Zagoria, Chemical Engineer, UOP
- 10:15 AM KEYNOTE LECTURE: CHEMICAL ENGINEERING IN SPACE**
(IIT Tower Auditorium)
Albert Sacco Jr., Ph.D., ex-NASA Astronaut, Chemical Engineering Professor and Dean, Texas Tech University
- 11:30 AM LUNCH & CHAT WITH ENGINEERS AND STUDENTS** (Ballroom)
Informal conversations with professional engineers and college students
- 12:00 PM NETWORKING HOUR**
- **WHAT KIND OF ENGINEER AM I? GAME** (Alumni Lounge)
Thursday Session: Emceed by _____
Friday Session: Emceed by Alan Zagoria, Chemical Engineer, UOP
 - **ROBOTICS DEMO by Illinois Tech Robotics** (Expo Room)
 - **ELECTRIC CAR DEMO by an IIT IPRO Team**
(Meet at Registration Table in Main Lobby of Hermann Hall)
 - **ChE LAB TOUR** (Meet at Registration Table Main Lobby of Hermann Hall)
 - **IIT ADMISSIONS BOOTH** (Main Lobby of Hermann Hall)
- 1:00 PM THE ENGINEERING EXPERIENCE: A PANEL DISCUSSION**
(Hermann Hall Ballroom)
Thursday Session: Emceed by _____
Friday Session: Emceed by Alan Zagoria, Chemical Engineer, UOP
- 1:45 PM PHYSICS OF SKYDIVING** (Hermann Hall Ballroom)
John Kallend, Ph.D., Professor of Materials Engineering

PRE-COLLEGE STUDENTS PROGRAM

WELCOME!

This special high school program is being run in parallel with the American Institute of Chemical Engineers (AIChE) 5th Annual Midwest Regional Conference, whose objective is to build technical relationships between industrial practitioners and governmental and academic researchers. AIChE and IIT's goal is to expose students to the profession of chemical engineering and engineering in general, and give them the opportunity to interact with professional engineers, engineering students, and faculty. We hope you come away from this program with some idea of what chemical engineers do, how they touch your life, and whether you would like to pursue an engineering career. We encourage you to stay engaged, ask questions, and have fun!

SPECIAL GUEST

Albert Sacco, Jr. (Ph.D.)

Professor Sacco received a B.S. in Chemical Engineering from Northeastern University and a PhD in Chemical Engineering from Massachusetts Institute of Technology. He was appointed and served as the George A. Snell Distinguished Professor of Chemical Engineering at Northeastern University from 1997-2010. He was a tenured professor from 1978-1997 and department head from 1989-1997 at Worcester Polytechnic Institute before returning to Northeastern as professor and Director of the NASA-sponsored Center for Advanced Microgravity Materials Processing. He became the Dean of the Whitacre College of Engineering at Texas Tech University in 2011. He flew on the space shuttle *Columbia* in 1995, conducting 200 experiments for 130 scientists. His research focus is in the areas of carbon nano tube initiation and growth, catalysis, zeolite synthesis, biosensors development, and synthesis and device integration of quantum wires from natural materials. He has published over 200 papers and is a Fellow of the American Institute of Chemical Engineers and a full member of the International Academy of Astronautics. He has received numerous awards including three honorary doctorates (two in science, one in engineering), and was awarded the Nation's Space Flight Medal in 1995. In 2010, he received the 2010 Distinguished Chemist Award given by the New England Institute of Chemists.

ACKNOWLEDGEMENTS

2013 Conference Organizers

Conference Chair: Professor Donald J. Chmielewski (IIT)

HS Outreach Organizing Committee

Outreach Co-Chair: Carol Mak (IIT)

Co-Chair Programming: Marisa Haire (IIT)

Co-Chair Logistics: Jessica Jaskolka (IIT)

HS Outreach Organizing Committee: Alan Zagoria (UOP), Adam Kanyuh (UOP), Gerald Doyle (IIT) Alfred Nunez (IIT), Tim Lipman (IIT), Chris James (IIT)

CONFERENCE SPONSORS

We would like to thank our 2013 AIChE Midwest Regional Conference Sponsors.

This conference would not be possible without their support.



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