

Welcome

Welcome to the *19th Annual Colloquium on International Engineering Education*! The focus this year is on global work force preparation. In choosing plenary, workshop and break-out session topics we concentrated on the forum's core expertise:

- Showcasing the unique blend of academic curriculum design across the disciplines - integrating engineering with foreign language & culture
- Strategizing on best practices for effective study abroad and experiential learning opportunities in industry, both locally and globally.

We devoted ample time for interactive formats such as workshops, Cafés and networking fairs to leverage the experience of seasoned experts in program building and evaluation for new guests of the Colloquium.

At the same time, we chose keynote speakers from the realms of research, academia and industry who each bring their own unique perspective on what it means to prepare a global work force –

- How does a national research lab engage with colleagues in the field world-wide to optimize its own knowledge production by exploring international synergies and technology transfer?
- How must universities change to become major players in building the knowledge economy in their states, and what can they do to help opening global markets?
- What are the dynamics behind corporations whose changed manufacturing needs propel them to reach beyond familiar territory and demand a kind of workforce that is prepared to cross foreign borders, languages, and cultures?

I very much hope that the stimulating exchange of ideas in Newport may lead some of you to further refine your thoughts and reflections and submit an extended version of your presentation to the *Online Journal for Global Engineering Education* (OJGEE), co-edited by Damon Rarick, Brent Jesiek and myself. OJGEE will thus serve both as an archive for our collaborative exchange and as its extension on the research level.

Many thanks to all of you for giving this Colloquium your consideration, to our corporate, government and academic sponsors for their generous support, and especially to the dedication of the IEP team and our Colloquium Steering Committee:

Melissa Armstrong, Northern Arizona University
Ilka Balk, University of Kentucky
Chris Cooper, University of Cincinnati
Gayle Elliott, University of Cincinnati
John Grandin, University of Rhode Island
Eckhard Groll, Purdue University
Amy Henry, Georgia Institute of Technology
Mark Rectanus, Iowa State University
Gregg Warnick, Brigham Young University

I hope you enjoy this year's annual meeting!

Sigrid Berka

Presented By

THE UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

Since 1987, the International Engineering Program has provided an unmatched global engineering experience for students looking to leave their mark on society. Jointly administered by the College of Engineering and the College of Arts & Sciences, the program marries engineering and foreign language during a seamless five-year experience that includes a study and internship year abroad and ends with students earning degrees in both a foreign language and an engineering discipline. The Colloquium has been a staple of the program since its inception in 1998.

The University of Rhode Island
61 Upper College Road
Kingston, RI 02881 USA
+1.401.874.4283 • uri.edu/iep

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19th Annual Colloquium on International Engineering Education

PREPARING THE
GLOBAL WORK-
FORCE

November 3-4, 2016
Newport,
Rhode Island



Daily (Ballroom)		II. Preparing Students To Go Abroad: Cross-Cultural Training for Engineers Salon A/D Led by: Amy Henry & Jennifer Evanuiik Baird, Georgia Institute of Technology		III. Languages for Special Purposes – New Approaches Salon A/D Christian Stehr, Oregon State University Lars Erickson, University of Rhode Island Xiaoyan Hu, Chinese Language Flagship Program at URI Renate Kärchner-Ober, University of Duisburg-Essen Moderator: Norbert Hedderich, University of Rhode Island	
6:45 a.m. - 7:45 a.m. Continental Breakfast		6:00 p.m. Welcome Reception- (Saltwater Lounge)		12:30 p.m. Lunch & Keynote by William J. Murray, President, Teknor Apex Buffet (Saltwater Lounge) & Seating (Ballroom) Introduction by Raymond Wright, Univ. of Rhode Island	
7:00 a.m. - 5:00 p.m. Registration		7:00 p.m. Dinner & Keynote by David M. Dooley, President, University of Rhode Island Ballroom Introduction by Karen de Bruin, Univ. of Rhode Island		2:30 p.m. Plenary IV: Distinguished Alumni Panel 4:00 p.m. Ballroom Becky Byler, Georgia Institute of Technology /Yale Univ. Erich Haratsch, DAAD Scholar/ Seagate Technology Sarah Koenig, URI (IEP)/ Pratt & Whitney Mickey Clemon, USC (Berkeley)/ Sandia National Labs Ricardo Peterson, Northern Arizona Univ./ Stanford Univ. Moderator: John Grandin, University of Rhode Island	
Thursday, November 3		Friday, November 4		4:00 p.m. Coffee Break Marine Suite	
8:00 a.m. Plenary I: University/Industry Roundtable		8:00 a.m. Plenary III: How Do Universities Across the		4:30 p.m. Plenary V: Round Table on Trends in	
9:30 a.m. Ballroom Gale Spak, New Jersey Institute of Technology (NJIT) Christine Benz, Trumpf, Inc. Zachary Cobb, Hexagon Manufacturing Intelligence, Inc. Sean Randall, Shimadzu Scientific Instruments, Inc. Greg Case, Taco Comfort Solutions, Inc. Moderator: Mark Rectanus, Iowa State University		9:30 a.m. Globe Internationalize to Educate the Global Engineering Work Force? Ballroom Jeffrey Cross, Tokyo Institute of Technology Hiroshi Takamatsu, Kyushu University Peter Rosenbaum, University Alliance Ruhr New York Jana Freihöfer, Technische Universität Darmstadt Moderator: Manfred Philipp, (CUNY)		5:15 p.m. International (Engineering) Education – Lessons Learned – Looking Ahead to 2017 Ballroom Nina Lemmens, German Academic Exchange Service (DAAD) Dan Kramer, Institute for International Education (IIE) Eckhard Groll, Purdue University Melissa Armstrong, Northern Arizona University Sigrid Berka, University of Rhode Island Moderator: Laura Beauvais, University of Rhode Island	
9:45 a.m. Parallel International Cafés (coffee break at 9:30)		9:30 a.m. Coffee Break (Sponsored by The Asia Institute) Saltwater Lounge		5:30 p.m. Reception with Concurrent Poster/Info Fair Saltwater Lounge Closing Remarks by URI Provost & Vice President of Academic Affairs, Donald DeHayes Remarks by Courtney Kenny, The Asia Institute	
10:45 a.m. Ballroom International Café I: What Does it Take to Launch an International Engineering Program? International Café II: How Do We Evaluate International Engineering Experiences and Programs?		10:00 a.m. Three Parallel 60 Min. Break-Out Sessions			
11:00 a.m. Plenary II: Assessing International		12:00 p.m. (Pick 2; One Repeat, Switch at 11:00 a.m.)			
12:30 p.m. Engineering Experiences (Ballroom) Brent Jesiek, Purdue University Cheryl Matherly, Lehigh University, Mary Besterfield Sacre, Larry Shuman, University of Pittsburgh, Gisele Ragusa, University of Southern California Brian Mitchell, Council of Graduate Schools/ Tulane Univ. Shannon Miner, Iowa State University Moderator: Gregg Warnick, Brigham Young University		I. Engaging Africa, Asia, Australia, the Middle East and Latin America Marine Suite Mary Anne Walker, Michigan State University Javier Paez, Universidad del Norte Leslie Calman, Engineering World Health Dena Lang, Andrew Erdman, Meg Handley, Andras Gordon, Penn State University/Wim Van Petegem KU Leuven Moderator: Ilka Balk, University of Kentucky			
12:45 p.m. Lunch & Keynote by Arthur Carty, Executive Director, Waterloo Institute for Nanotechnology Ballroom Introduction by Winifred Brownell, Univ. of Rhode Island		II. Sourcing and Sustaining Internships in Various World Regions Salon B/C Jennifer Evanuiik Baird, Georgia Institute of Technology Friedemann Weidauer, Brian Schwarz, UCONN Masanobu Abe, Okayama University Aaron Sakulich, Worcester Polytechnic Institute (WPI) Rüdiger Kukral, Furtwangen University & Guida Bendrich, University of New Brunswick Moderator: Melanie Mala Ghosh, MIT			
2:30 p.m. Parallel Workshops I and II (with coffee break)					
5:30 p.m. I. How to Get Started with International Engineering and Work Abroad Programs Salon B/C Led by: Gayle Elliott & Chris Cooper, Univ. of Cincinnati Ilka Balk, University of Kentucky Sigrid Berka, University of Rhode Island Kathleen Condray, University of Arkansas Eckhard Groll, Purdue University Liliane Palm, Northern Arizona University				End of Colloquium	