Successful STEM Education



AGENDA

10:00–10:30 am	Registration (coffee served) LOBBY OUTSIDE OF RMs C202, C203, C204
10:30–10:50	 Welcome and Opening Remarks RMs C202, C203, C204 Janice Earle, Program Director, National Science Foundation Ashok Agrawal, Managing Director for Professional Development and Director of Outreach and Engagement, American Society for Engineering Education
10:50–11:45	 The Role of Engineering in Successful K–12 STEM Education—Plenary Presentation RMs C202, C203, C204 Moderator: Darryl Williams, Associate Dean of Recruitment, Retention, and Community Engagement, and Director of the Center for STEM Diversity, Tufts University Panelists: Greg Pearson, Senior Program Officer, National Academy of Engineering; Cary Sneider, Associate Research Professor, Portland State University; Marion Usselman, Principal Research Scientist and Associate Director, CEISMC, Georgia Institute of Technology
11:45 am–12:00 pm	Break
12:00-1:00	 Focusing on the "E" in STEM—Breakout Sessions Design Squad: Inspiring a New Generation of Engineers: David Peth, WGBH RM C207 Engineering High School Biology into the 21st Century: Christian Schunn, University of Pittsburgh RM C208 Engineer Your World: Engineering Design and Problem Solving for High Schools: Cheryl Farmer, University of Texas at Austin RM C210 Integrating Engineering and Literacy: David Hammer and Jessica Watkins, Tufts University RM C211 Making a Difference in the World: Engineering in Middle School Math and Science Classrooms: Amy Wendt, University of Wisconsin-Madison; Amy Schiebel, Edgewood College RM C212 What Does It Mean to "Engineer" in Engineering is Elementary?: Erin Fitzgerald, Museum of Science, Boston RM C213
1:00-1:15	Break

1:15–2:15	Networking (lunch served) RMs C202, C203, C204
	 The Joy of STEM: Engineering Is at the Heart of It—Plenary Presentation Pramod Khargonekar, Assistant Director, National Science Foundation
2:15–2:30	Break
2:30-3:30	 Focusing on the "E" in STEM—Breakout Sessions CAPSULE: How to Use Engineering-Based Learning (EBL) in High School STEM Teaching: Jessica Chin, Northeastern University RM C207 Elementary Engineering Teacher Professional Development: Initiation to Integration: Heidi Diefes-Dux, Purdue University RM C208 Engaging Youth through Engineering (EYE) Modules: Integrating and Bringing Relevance to Core Middle Grades Mathematics and Science Content: Susan Pruet, Melissa Dean, and Judy Duke, Mobile Area Education Foundation RM C210 Implementing K-12 Engineering Standards through STEM Integration: Tamara Moore, Aran Glancy, Forster Ntow, and Kristina Tank, University of Minnesota, Twin Cities RM C211 Learning Science through Engineering Design: An Effective Approach to STEM Integration at the Elementary School Level: Brenda Capobianco and Chell Nyquist, Purdue University RM C212 Mathematics Instruction Using Decision Science and Engineering Tools: Robert Young and Karen Keene, North Carolina State University RM C213
3:30–3:45	Break
3:45–4:30	 K–12 and Higher Education: Why Collaboration Is Vital—Plenary Presentation RMs C202, C203,C204 Joseph Cocozza, Co-Director of Education and Outreach Programs, Biomimetic MicroElectronic Systems, Engineering Research Center; Assistant Professor of Research, Ophthalmology, University of Southern California

• Adah Leshem, Program Director of Pre-College Education, NSF Engineering Research Center for Biorenewable Chemicals

