Day 1: Tuesday, March 27, 2018

Themes of the day: Definition, Management, Decision-Making, Technology, and Applications

7:30 AM – 7:45 AM  Refreshments  The Inn at Ole Miss

7:45 AM – 8:10 AM  Welcome  Ballrooms A/B
  • Jeffrey S. Vitter, the 17th Chancellor of the University of Mississippi.
  • Josh Gladden, Vice Chancellor for Research and Sponsored Programs.
  • Alexander Cheng, Dean of Engineering, UM.

8:10 AM – 8:15 AM  Introductions  Ballrooms A/B
  Ahmed Al-Ostaz and Mohammed Ettouney

8:15 AM – 9:15 AM  Keynote Session I  Ballrooms A/B
  • Eric Letvin, PE, Esq., Deputy Associate Administrator, Mitigation Directorate, Federal Insurance & Mitigation Administration (FIMA).
    “A Sector-Based Approach to Recovery Operations”
  • Jason Averill, Chief of the Materials and Structural Systems Division (MSSD) of the Engineering Laboratory (EL) at the National Institute of Standards and Technology (NIST).
    “Community Resilience”

9:15 AM – 9:30 AM  Break

9:30 AM – 10:30 AM  Keynote Session II  Ballrooms A/B
  • Ryan M. Colker, J. D., Vice President of the National Institute of Building Sciences (NIBS).
    “National Institute of Building Sciences: Community Infrastructure Resilience, a Holistic Approach”
  • Amar Chaker, Ph.D., F.AEI., F.EMI., F. ASCE, Director, Engineering Mechanics Institute of ASCE.
    “From Civil Engineering Systems Safety and Reliability to Complex Systems Objective Resilience.”

10:30 AM – 11:45 AM  Plenary Session I  Ballrooms A/B

Overview

  • Dr. Simos Gerasimidis, M.EMI, M. ASCE, Assistant Professor of Civil Engineering, University of Massachusetts, Amherst.
    Definitions: “On the Definition of Resilience”
  • Dr. Mohammed M. Ettouney, PE, MBA, M.EMI, M.SEI, F.AEI, Dist. M. ASCE, Principal & Founder, Mohammed Ettouney LLC.
    Management: “Resilience Management”
• Dr. E. A. Elsayed, F. ASME, F. IIE, Dist. Professor of Industrial and Systems Engineering, Rutgers, The State University of New Jersey
  **Paradigms:** “Reliability and Resilience Modeling and Quantification”

• Dr. Chris Mullen, PE, M.SEI, M.EMI, M. ASCE, Associate Professor, Department of Civil Engineering, University of Mississippi
  **Applications:** “Infrastructure Asset Resilience – Role of Simulation”

• Roger Waxler, Senior Research Scientist II and Research Associate Professor of Physics and Astronomy, National Center for Physical Acoustics, University of Mississippi.
  **Technology:** “Infrasonic Monitoring of Violent Weather”

11:45 PM – 12:00 PM  QA Period to all speakers    Ballrooms A/B

12:00 PM – 1:00 PM  Poster session / Lunch    Ballrooms C

• Hatem Almasaied, Hashem Almashaqbeh, Hunain Alkhateb and Ahmed Al-Ostaz, Department of Civil Engineering, University of Mississippi. "Developing In-Situ Materials for 3D Printing Infrastructure Under Extreme Environments: Vision and Mission."

• Ahmed Al-Ostaz, Department of Civil Engineering, University of Mississippi. “Graphene Research and Innovation Center: The Role of Advanced Materials in Infrastructure Resilience.”

• Ahmed Al-Ostaz, Department of Civil Engineering, University of Mississippi. “Disaster Resilience Flagship Constellation.”

• Mustafa Altinakar, Marcus McGrath, and Vijay Ramalingam, National Center for Computational Hydroscience and Engineering, University of Mississippi. “Supporting Dams Sector Resilience in the USA”

• Greg Davidson, Department of Geology and Geological Engineering, University of Mississippi. “Mississippi River Levee Risk Assessment Using Sand-Boil Chemistry.”

• Elizabeth K. Ervin, Civil Engineering, The University of Mississippi. “Structural Health Evaluation™ for Infrastructure Resilience.”

• Craig Hickey, Leti Wodajo, Leonardo Macelloni, National Center for Physical Acoustics, University of Mississippi. “Geophysical Methods to Assess and Monitor Critical Watershed Infrastructures (i.e. Dams, Levees).”

• Kristy Alley Swain, School of Journalism, University of Mississippi. “Risk Attenuation of Serious Freight Spills in the U.S.”
• Feng Wang, Dan Wang, Jiangchuan Liu and Zhonghui Wang, Department of Computer Science and Engineering, University of Mississippi.  
"Wireless Sensor Data Collection for High-Rise Structure Health Monitoring: Design, Optimization, and Case Study”.

• Lance D. Yarbrough, Department of Geology and Geological Engineering, University of Mississippi.  
“Use of Small Unmanned Aerial Systems (sUAS) in Disaster Planning and Recovery: Temporal Resolution Next Grand Challenge.”

• Louis G. Zachos, Univ. Mississippi; Charles T. Swann, Southern Geological Services, LLC; and Devin Thomas, Golder.  
“Flood Vulnerability of Critical Infrastructure, Yazoo Basin, Mississippi.”

1:00 AM – 1:15 PM  Welcome  Ballrooms A/B
• Noel Wilkin, Provost and Executive Vice Chancellor, UM

1:15 PM – 2:30 PM  Plenary Session II  Ballrooms A/B
Technology / Applications

• Dr. Jerome P. Lynch, M.EMI, M. ASCE, Professor and Chair of Civil and Environmental Engineering, University of Michigan  
Technology: “Adaptive Resiliency through Connected and Autonomous Infrastructure”

• Dr. Ahmed Al-Ostaz, M. EMI, M. ASCE, Professor and Brevard Chair of Civil Engineering and Director for the Graphene Research and Innovation Center, University of Mississippi  
University of Mississippi.  
Technology: “The Role of Advanced Materials on Infrastructure Resilience”

• Mr. John Cross, PE, M. AISC, M. ASCE, Vice President of Special Projects, American Institute of Steel Construction (AISC)  
Technology: “The Role of Steel in Enhancing Infrastructure Resilience”

• Dr. Mustafa S. Altinakar, M. ASCE, M. IAHR, M.ASFPM, M.ASDSO, Director and Professor of National Center for Computational Hydroscience & Engineering, University of Mississippi.  
Applications: “A Web-Based Decision Support System for Critical Infrastructure Protection, Safety and Resilience in Dams Sector”

• Dr. Hamid Adib, P.E., MBA, M.EMI, M.SEI, F. ASCE. Sr. Vice President, ARCADIS, Inc.  
Applications: “Construction and Resilience in Infrastructure”

2:30 PM – 2:45 PM  QA Period for All Speakers  Ballrooms A/B
2:45 PM – 3:00 PM  
Break

3:00 PM – 4:30 PM  
Breakaway Sessions I, II, and III  
- **Definitions, Management, Decision-Making**  
  Ballroom A  
  #1 Moderator: Chris Mullen  
  #1 Scribe: Hunain Alkhateb  
- **Applications**  
  Ballroom B  
  #2 Moderator: Jerry Lynch  
  #2 Scribe: Maureen Corcoran  
- **Technology**  
  Ballroom C  
  #4 Moderator: Ahmed Al-Ostaz  
  #4 Scribe: Grace Rushing

4:30 PM – 5:00 PM  
Summation for the Day  
Ballrooms A/B

5:00 PM  
Adjourn
6:00 PM – 7:30 PM  
Reception  
Rafters

**Day 2: Wednesday, March 28, 2018**

**Themes of the day: Community, and Interrelation between Paradigms**

7:30 AM – 7:45 AM  
Refreshments

7:45 AM – 8:00 AM  
2nd Day Introductions  
Ballrooms A/B  
- Ahmed Al-Ostaz and Mohammed Ettouney

8:00 AM – 9:30 AM  
Keynote Session III  
Ballrooms A/B  
- Norma Jean Mattei, Ph.D, PE, F.SEI, M.COPRI, M.ASCE, 2017 President of the American Society of Civil Engineers (ASCE).  
  “The Importance of Maintaining and Modernizing our Aging Infrastructure”  
- David Pittman, Director U. S. Army Engineer Research and Development Center, Vicksburg, Mississippi; and Director of R&D and Chief Scientist, US Army Corps of Engineers  
  “Civil Works Resilience.”  
  “Critical Infrastructure Resilience and Security”

9:30 AM – 10:15 AM  
Plenary Session III  
(Community/ Sustainability)  
Ballrooms A/B  
- Dr. Stefan Schulenberg, Director and Professor of Clinical Psychology, University of Mississippi, Oxford
**Community:** “Community Resilience: An Integrated Approach for Disaster Mental Health Research, Training, and Service”

- Mr. Kyle Pfeiffer, National Preparedness Analytics Group Leader, Risk and Infrastructure Science Center, Argonne National Laboratory

**Application:** “An Approach to Building Near-Real-Time Situational Awareness of Local Supply Chains Following a Disaster”

- Dr. Fariborz Tehrani, PE, ENV SP, PMP, SAP, Associate Professor of Sustainable and Resilient Structural Engineering, Mechanics, and Materials (SR-SEMM), California State University, Fresno.

**Paradigms:** “From Sustainability to Resilience: A journey through the ISI ENVISION”

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