

# MPACT WEEK

MULTI-HAZARD RESILIENCE | COASTAL INFRASTRUCTURE | OCTOBER 22, 2014

## RESEARCH POSTERS

Posters are in order of easel number/position.

1. An Investigation of Thermally-Induced Failure of Lithium Ion Batteries. Xuan Liu, Stanislav I. Stoliarov, Matthew Denlinger, Alvaro Masias and Kent Snyder.
2. Prediction of Flame to Surface Heat Feedback and Vertical Flame Spread in Wall Fire. Isaac T. Leventon and Stanislav I. Stoliarov.
3. Solar-Powered Membrane System for Emergency Drinking Water Supply. Catherine Birney, Vincent Fiedler, Michael Lee, Elizabeth Manzi, and Baoxia Mi.
4. A Standard Methodology to Characterize Composite Materials for Pyrolysis Models. Mark McKinnon and Prof. Stanislav Stoliarov.
5. Regional Evacuation Planning with General Purpose Computing on Graphics Processing Units. David Prentiss and Elise Miller-Hooks.
6. Design of Evacuation and Shelter Systems in Buildings. Reza Faturechi, Lei Feng, Elise Miller-Hooks and Shabtai Isaac.
7. Evaluating and optimizing resilience of airport pavement and freight transportation networks. Reza Faturechi, Eyal Levenberg and Elise Miller-Hooks.
8. Travel Time Resilience of Passenger Traffic in Roadway Networks. Reza Faturechi and Elise Miller-Hooks.
9. A Mathematical Framework for Quantifying and Optimizing Protective Actions for Civil Infrastructure Systems. Reza Faturechi and Elise Miller-Hooks.
10. NSF RIPS II: Quantifying Disaster Resilience of Critical Infrastructure-based Societal Systems with Emergent Behavior and Dynamic Interdependencies. Elise Miller-Hooks, Judith Mitrani-Reiser, Elizabeth Petrun, Matthew Green, Joanne Nigg, Rachel Davidson, Helaine Rutkow, Thomas Kirsch and Jonathan Links.
11. Resource Deployment in Urban Search and Rescue. Mercedeh TariVerdi, Elise Miller-Hooks and Matti Adan.
12. Supporting Mobility-Impaired Populations in Emergency Evacuation. Lei Feng, Neža Vodopivec and Elise Miller-Hooks.
13. Objective Decision-Making Tools for Transportation Infrastructure Investment to Combat the Impacts of Sea Level Rise and Climate Change. Ali Asadabadi and Elise Miller-Hooks.
14. Resilience: An Indicator of Recovery Capability in Intermodal Freight Transport. Lichun Chen, Rahul Nair, Hakob Avetisyan and Elise Miller-Hooks.
15. Characterizing Properties for Pyrolysis Modeling of Fiberglass Reinforced Polyester Composites. Geraldine E. Martin, Mark B. McKinnon and Stanislav I. Stoliarov.
16. Milligram-scale Flaming Calorimeter: A New Tool For Flammability Assessment of mg-scale Pyrolyzable Solid Samples. Xi Ding, Fernando Raffan and Stanislav Stoliarov.
17. Resilient Communities Enabled by Sustainable Buildings. Jelena Srebric, Mohammad Heidarinejad, Nicholas W. Mattise and Matthew Dahlhausen. Department of mechanical Engineering, Center for Sustainability in the Built Environment, University of Maryland.
18. Pathways to Fire Spread in the Wildland-Urban Interface. Raquel Hakes, Sara Caton, Kyle Kohler and Michael J. Gollner.
19. Understanding the Dynamics of Wildland Fire Spread: Colin Miller, Wei Tang, Daniel Gorham and Michael J. Gollner.
20. WIFIRE: A Scalable Data-Driven Monitoring, Dynamic Prediction and Resilience Cyberinfrastructure for Wildfires. Cong Zhang, Mickael Durand, Wei Tang, Arnaud Trouve and Michael Gollner.
21. Legal and Technical Issues Affecting Command and Control in Emergency Evacuations. Lei Feng, Elise Miller-Hooks and Vince Brannigan.
22. Urban Resiliency through Green Infrastructure. Sara Igielski, Mehrdad Mohtadi and Allen Davis. Department of Civil and Environmental Engineering, University of Maryland, College Park.