

TOPICS AND SUBTOPICS

Blast & Impact Loading & Response of Structures
Blast and Impact Load Characterization
Computational Methods
Non-structural components
Post blast issues
Progressive Collapse
Risk Assessment
Robustness/Resilience/Redundancy of Structures
Special Structures
Structural Engineer as Innovator in Terrorism Protection
Bridges, Tunnels and other Transportation Structures
Analysis and Material Issues
Design Practice, Code & Standards
Solutions to Societies Transportation Issues
Construction & Rehabilitation
Design & Extreme Loads
Foundations and Substructures
Inspection, Assessment, and Evaluation
Monitoring, Serviceability and Structural Health Monitoring
Resilience and Sustainability
Buildings
Codes and Standards -Buildings
Connection Detailing and Design
Constructability/Erection/Fabrication Issues and Techniques
Construction & Varied Building Types
Damping, Isolation and Smart Structures
Design for Serviceability
Extreme Load Issues (fire, seismic, flood and wind)
<u>Disproportionate Collapse</u>
Foundations and Substructures
Lateral Design and Analysis
Resilience and Sustainability
Restoration and Repair of Existing Structures
Seismic Retrofitting
Structural Innovations--Materials, Analysis or Design
Business and Professional Practice
Sharing Claim and near miss experiences (Priority) **
Risk Reduction and Claims Management
Trial Designs & Design Examples
Law and Ethics
Licensing and Certification
Professional Practices Lessons Learned
BIM in Business Practice
Project Delivery Systems
Engineer's Role in Leading Social Change
Globalization
Risk Management
Education
ABET Accreditation
Capstone Projects
Educating the Global Engineer
Leadership and Nontechnical Education
Learning and Education Reform
Structural Engineering Curriculum

Forensic
Accidents and accident investigation methods
Collapses and collapse investigation methods
Failure case studies and investigation methods
Failures due to design errors and omissions
Failures due to product or material defects
Natural Disasters
Climate Change
Earthquake
Hurricane
Storm surge
Tornado
Tsunami
Nonbuilding and Special Structures
Analysis procedures for loads other than seismic
Application of Seismic Isolation and Supplemental Damping to Nonbuilding ST
Codes and Standards Nonbuilding
Design Loads for Nonbuilding Structures and Special Structures
Foundations for Nonbuilding and Special Structures
Performance & Loading of Nonbuilding Structures in Past earthquakes
Practical Design and Detailing
Nonstructural Components and Systems
Interior Architectural Components
Exterior Architectural Components
Loads on Nonstructural Components and Systems other than seismic
Ceiling Systems, Curtain Walls and Cladding
Codes and Standards-Nonstructural Components and Systems
Design Loads for Nonstructural Systems and Components
Anchorage in Nonstructural Component Design
Mechanical, Electrical and Plumbing Components and Systems
Performance of Nonstructural Components in Past Events
Practical Design and Detailing
Seismic Qualification of Equipment to Meet ASCE 7-10 Certification
Research
Structural 3D Printing
Hybrid Simulation
New Research
Computational Methods of Analysis
Novel Structural Materials
Resilience
Risk and Reliability Analysis
Structural Control
Structural Health Monitoring
Structural Optimization Methodology & Applications
Structural Testing