

TOPICS AND SUBTOPICS

Blast & Impact Loading & Response of Structures
Blast and Impact Load Characterization
Computational Methods
Non-structural components
Post blast issues
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
Construction & Rehabilitation
Design & Extreme Loads
Design Practice, Code & Standards
Foundations and Substructures
Inspection, Assessment, and Evaluation
Lessons learned from recent failures
Monitoring, Serviceability & Structural Health Monitoring
Performance Based Design
Resilience and Sustainability
Solutions to Societies Transportation Issues
Buildings
Case Studies
Codes and Standards -Buildings
Connection Detailing and Design
Constructability/Erection/Fabrication Issues & Techniques
Damping, Isolation and Smart Structures
Design for Serviceability
Disproportionate Collapse
Extreme Load Issues (fire, seismic, flood and wind)
Foundations and Substructures
Lateral Design and Analysis - Wind
Lateral Design and Analysis - Seismic
Resilience and Sustainability
Restoration and Repair of Existing Structures
Seismic Retrofitting
Structural Innovations--Materials, Analysis or Design
Performance Based Design
Tall Building Design
Business and Professional Practice
Sharing Claim and Near Miss Experiences (Priority) **
Accounting and Finance Management
BIM in Business Practice
Conflict Resolution and Claims Management
Contracts and Project Delivery Systems
Engineer's Role in Leading Social Change
Globalization
Trial Designs & Design Examples
Law and Ethics
Licensing and Certification
Marketing and Business Development
Ownership and Leadership Transition
Professional Practices Lessons Learned
Risk Management
Career Development
Communication
Negotiation skills
Networking
Working in teams

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 & Supplemental Damping to
Codes and Standards Nonbuilding
Design Loads- Nonbuilding Structures & Special Structures
Foundations for Nonbuilding and Special Structures
Performance & Loading of Nonbuilding Structures in Past Earthquakes
Practical Design and Detailing
Nonstructural Components and Systems
Anchorage in Nonstructural Component Design
Ceiling Systems, Curtain Walls and Cladding
Codes and Standards-Nonstructural Components and Systems
Design Loads for Nonstructural Systems and Components
Exterior Architectural Components
Interior Architectural Components
Loads on Nonstructural Components & Systems other than seismic
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
Computational Methods of Analysis
Connection design
Fire Impact to Structure
Hybrid Simulation
Load Evaluations
Structural 3D Printing
New Research
Novel Structural Materials
Resilience
Risk and Reliability Analysis
Structural Control
Structural Health Monitoring
Structural Optimization Methodology & Applications
Structural Testing