



2005 NEW YORK, NY STRUCTURES CONGRESS

Mark Your Calendar Today –

METROPOLIS & BEYOND
APRIL 20-24, 2005
New York Hilton & Towers

With over 90 technical sessions, this Congress is designed to maximize learning opportunities for structural engineers.

Structural Engineering Institute of ASCE

Structural Columns

THURSDAY, APRIL 21, 2005 – AM PRELIMINARY SCHEDULE OF SESSIONS				
FIRE Overview of Materials and Systems for Structural Fire Protection	BRIDGES New Tacoma Narrows	OPTIMIZATION Optimal Structural Design for Practicing Engineers	SEISMIC ANALYSIS Incremental Dynamic Analysis in Performance-Based Earthquake Engineering	TECHNICAL COUNCIL ON FORENSIC ENGINEERING
THURSDAY, APRIL 21, 2005 – PM				
FIRE Fire Behavior of Steel and Concrete Composite Structures	BRIDGES Pedestrian Bridges: Aesthetics in Design	STRUCTURAL MONITORING Advances in Structural Monitoring and Rapid Damage Assessment	SEISMIC DESIGN Restrained Frames; Artificial Accelerograms; Dynamic Response; Design Provisions	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Building Envelope I
THURSDAY, APRIL 21, 2005 – PM				
FIRE Bridge Vulnerability; Defining Design Fires; Perimeter Columns & Fire; Steel Columns & Fire	BRIDGE COMPONENTS Waldo Hancock Bridge; Orthotropic Steel Deck; Prestressed Concrete; Suspenders Replacement	STRUCTURAL MONITORING Real Time Structural Monitoring & Data Analysis	SEISMIC DESIGN CCQ3 Method; Floor Acceleration Demands; Fatigue	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Building Envelope II
FRIDAY, APRIL 22, 2005 – AM				
TALL BUILDINGS Redundancy & Robustness in the Design of Tall Buildings	BRIDGES Bracing for Steel Bridges I – I-Girders	GEOTECHNICAL Pile Raft Foundation; Prestressed Concrete Piling; Soil Interaction; Excavation Support	SEISMIC DESIGN NYC-Specific Earthquake Engineering	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Collapse I – Lessons Learned
FRIDAY, APRIL 22, 2005 – AM				
SUSTAINABLE DESIGN The Structural Engineer's Role in Sustainable Design of Tall Buildings	BRIDGES Bracing for Steel Bridges II – Box Girders	SOIL-STRUCTURAL INTERACTION Recent Analysis & Design Issues in Buildings & Bridges	SEISMIC CONTROL Semi-Active Control of Civil Structures	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Collapse II – Lessons Learned
FRIDAY, APRIL 22, 2005 – PM				
BUILDING CASE STUDY 48-Story Steel & Concrete; 58-Story Concrete Building; Shanghai World Financial Center; Long-Span Roof	BRIDGES Lessons Learned: Fractures Steel Bridges	COMPOSITE STEEL & CONCRETE Secondary Moments; Confinement Patterns; Retrofit Concrete with Steel; Shrinkage Composite Concrete	SEISMIC CONTROL Friction-Damped Concrete; Decentralized Systems; Damper Configurations; Concrete Viaduct	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Collapse III – Investigation Methodology
FRIDAY, APRIL 22, 2005 – PM				
WIND EFFECTS Across Wind Response on Slender Towers; Wind-Induced Response; Motion-Dependent Forces	BRIDGES Emerging Technology for Timber Bridges	COMPOSITE STEEL & CONCRETE High Strength Steel Concrete Columns; Hybrid Coupled Walls; Concrete-Filled Steel Tubes & Stainless Steel Columns	SEISMIC DESIGN Decision-Making for Seismic Risk	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Non-Destructive Testing
SATURDAY, APRIL 23, 2005 – AM				
NYC BUILDINGS 731 Lexington; NY Times Building; Bank of America; Freedom Tower	NYC BRIDGES Rebuilding NYC's Landmark Bridges	COMPOSITE MATERIALS FRP Membrane & Shell; Repair & Retrofit; Lightweight Structures; HSC & Fiber Reinforcement	STEEL DESIGN New Approaches for Steel Flexural & Compression Members	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Education
SATURDAY, APRIL 23, 2005 – AM				
NYC BUILDINGS The Rose Center of Earth & Space; Times Square Tower; Time Warner Center	BRIDGES Covered Bridges	DYNAMIC ANALYSIS Vibration Design & Studies	COMPUTATION METHODS Dowel-Jointed Concrete; Nonlinear Restoring Forces in Shear Buildings; Foundation Vibrations	TECHNICAL COUNCIL ON FORENSIC ENGINEERING Repair Methodology

WEDNESDAY, APRIL 20, 2005				
BRIDGE SEMINAR • 2:00 PM - 5:00 PM Bridge Scour and the Structural Engineer		TECHNICAL COUNCIL ON FORENSIC ENGINEERING 7:00 PM - 10:00 PM		
ASCE 7 • 2:00 PM - 5:00 PM Workshop		World Trade Center Special Session		
THURSDAY, APRIL 21, 2005 – AM PLENARY SPEAKER				
THURSDAY, APRIL 21, 2005 – AM				
EDUCATION Wood Engineering Education – Needs and Goals	HARDENING Design Guidance for Physical Security and Blast I		BPAD	CONSTRUCTION St. Luke's Center; Risk & Reward – WTC; Self-Shoring Method; Reconstruction
THURSDAY, APRIL 21, 2005 – PM				
EDUCATION Innovative Courses in Structural Engineering	HARDENING Design Guidance for Physical Security and Blast II	ACI ACI Building Code: Recent & Coming Changes	BPAD	ISTRUCIE Structures for the 21st Century
THURSDAY, APRIL 21, 2005 – PM				
EDUCATION Wind Engineering Education: New Opportunities	HARDENING Local Explosions; Cost of Retrofits; DOD Standards; Cost-Effective Decisions	ACI Designing & Specifying FRP for Concrete Structures	BPAD Standard of Care; Design & Construction Process; Owners' Perspective; Bridge Design to Drawings	ISTRUCIE Taking Structural Engineering Forward Globally
FRIDAY, APRIL 22, 2005 – AM				
CONCRETE RESEARCH Biaxial Shear – Beams; Self Compacting Concrete Crack Diagnosis; Damping Treatments	PROGRESSIVE COLLAPSE Redundancy & Robustness; Multi-Story Steel Frames; Rapid Rates of Loading; Nonlinear Analysis	AISC AISC Manuals – New 2005 Steel Construction; New 2005 Seismic Manual	TAD SEI TAD Funded Special Projects	IABSE Engineering Around the World: Case Studies I – Buildings
FRIDAY, APRIL 22, 2005 – AM				
STEEL RESEARCH Shear Lag Test Data; Slotted Connections; Shear Lag Tube Frame Yield Capacity Curve	PROGRESSIVE COLLAPSE Steel Moment Frames Methodology; Multi-Hazard Approach; Flat Slab Vulnerability	AISC 2005 AISC Specifications (AISC & SEI LRFD Committee)	CSAD Seismic Rehabilitation of Existing Buildings with FEMA 356	IABSE Engineering Around the World: Education for Structural Engineers
FRIDAY, APRIL 22, 2005 – PM				
BRIDGE MANAGEMENT Non-Destructive Testing	ABNORMAL LOADING Mitigating Risk; Connections-Increasing Punching & Ductility; Progressive Failure	CASE Inspection Quality Assurance Role of SER	CSAD New/Innovative Structural Systems from Research to Codification	IABSE Engineering Around the World: Monitoring, Testing and Sustaining
FRIDAY, APRIL 22, 2005 – PM				
BRIDGE MANAGEMENT In-Service Evaluation	CABLE STRUCTURES History of Cable Net Structures	NYAIA	CSAD Updated and New SEI/ASCE Standards	IABSE Engineering Around the World: Case Studies II – Bridges
SATURDAY, APRIL 23, 2005 – AM				
BRIDGE MANAGEMENT Field-Monitored Fatigue	CABLE STRUCTURES Long Span Cable Net Glass Curtainwalls; Post Tensioned; Spatial Cable Structures	 		
SATURDAY, APRIL 23, 2005 – AM				
BRIDGE MANAGEMENT Corrosion in Bridges	CABLE STRUCTURES Updating ASCE - 19-96; Elongation & Creep; Suspension Nets; Jeju Stadium	 <div style="background-color: #0056b3; color: white; padding: 10px; text-align: center;"> <p>For additional information, visit the conference web site at www.seinstitute.org</p> </div>		

