

CALL FOR ABSTRACTS & SESSION PROPOSALS

**ASCE**<sup>®</sup>

# FORENSIC ENGINEERING 8th CONGRESS

Austin, Texas | November 29 – December 2, 2018

*Forging Forensic Frontiers*



Call for Papers: [ww.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv](http://ww.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv).



## FORENSIC ENGINEERING 8th CONGRESS

### Forensic Engineering

Forensic engineering is the application of engineering principles to the investigation of failures or other performance problems. Forensic engineering also sometimes involves testimony on the findings of these investigations before a court of law or other judicial forum. Failures are not all catastrophic, such as when a building or bridge collapses, but include facilities or parts of facilities that do not perform as intended.

Organized by ASCE's Forensic Engineering Division (FED), formerly the Technical Council on Forensic Engineering (TCFE). For more information, please visit the Congress website at **[www.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv](http://www.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv)**.

### Target Audience

- Structural Engineers
- Geotechnical Engineers
- Building Technology Specialist
- Transportation Engineers
- Architects
- Attorneys and Insurance Adjusters



# Suggested Topics

Forensic Engineering Division (FED) is pleased to collaborate with ASCE Institutes and Committees, the legal and insurance communities, and other cooperating organizations on the Forensic Engineering 8th Congress. Our goal is to develop practices and procedures to reduce the number of failures, to disseminate information on failures and their causes, to provide guidelines for conducting failure investigations, and to provide guidelines for the professional performance of forensic engineering.

Together, we invite submissions on the following suggested topics related to the performance of constructed facilities. Additional relevant topics are encouraged.

## Building Envelope

- Building facades
- Masonry and stone
- Curtainwall and windows
- Balconies
- EIFS and low-rise systems
- Roofing
- Foundation and plaza waterproofing
- Thermal Performance
- Water Intrusion and Moisture Management

## Infrastructure

- Bridges
- Tunnels
- Highways
- Railroads
- Retaining Walls
- Pipelines
- Dams
- Treatment Plants
- Structural Health Monitoring
- Inspection and Evaluation
- Remote Sensing

## Natural Disasters

- Hurricanes
- Flooding
- Earthquakes
- Tsunami
- Tornadoes
- Risk Management
- Emergency Response

## Education

- Historical failures
- Use of case studies in forensic engineering education
- Teaching the investigation process
- Forensic engineering course content

## Failures During Construction

- Cranes
- Scaffolding
- Shoring
- Loads during construction
- Instability during erection
- During Demolition

## Forensic Investigations

- Emerging Technologies (e.g. LiDAR, drones, non-destructive testing)
- Investigation Methodology and Approach
- Sampling and Statistical Analysis
- Rapid Response Investigation

## Geotechnical

- Soil Stability
- Retaining Walls
- Foundation Settlement/Failure
- Underpinning
- Adjacent Construction
- Vibrations
- Dewatering
- Legal

## Professional Practice

- Case Studies in Ethics
- Code of Ethics, Conduct, and Violations
- Conducting the Right Investigation for your Client
- Marketing a Forensic Engineering Practice
- Standard of Care and Engineering Judgment
- Working with Attorneys
- Working with Insurance Adjusters

## Repairs and Remediation

- Innovative Approaches (e.g. chloride extraction, carbon fiber)
- Structural repair
- Strengthening
- Repair-induced problems

## Texas Topics

- Hurricanes (Effects, emergency response, flood maps, rebuilding)
- Posttensioning durability, troubleshooting, and repairs
- Threshold Inspections
- Glazing resistance to impact
- Balcony design and construction issues
- Effect of climate change
- Durability of infrastructure
- Disaster resilience
- Green building issues

## Blast and Extreme Loading

- Blast
- Impact
- Fire
- Progressive Collapse Special Topics
- Performance of Green Buildings
- Building Information Modeling (BIM)
- Flooring Problems
- Concrete Strength Issues
- Stages and Entertainment Structures
- Lifelines Engineering
- Wind-Turbine Failures
- Roof Failures due to snow loads
- Progressive Collapse
- Vibrations Performance of Special Structures
- Parking Structures
- Stadiums/Arenas
- Temporary Structures
- Industrial Structures
- Metal Buildings
- Wood Structures
- Glass/Cable/Fabric Structures
- Supertall Structures



## Performance of Materials

- Durability
- Corrosion
- Degradation
- Fatigue
- Maintenance Issues
- Steel/Concrete/Masonry/Terra Cotta/Glass/Pavement/Roofing/ Sealant/ Flooring/ Repair Materials
- Connections: fasteners/welds

## Panel Discussions

FED has a particular interest in panel discussions on these topics

### Legal

- Contractual Issues (e.g. terms, rates, retainers)
- Conflicts of Interest
- Ethical Issues
- Preservation of Evidence
- Fundamental Legal Principles and Processes
- Curriculum Vitae and Expert Qualifications
- Discovery Phase
- Role of the Expert (mediation, arbitration, trial)
- Federal Rules of Civil Procedure
- Expert Reports
- Depositions
- Trial Preparation
- Daubert Hearing
- Courtroom Exhibits, Demonstrative Evidence
- Trial Testimony

### Insurance Related Issues

- Cause and Origin Investigations
- Construction Defect Cases
- Professional Errors & Omissions
- Damage Assessment
- Wind vs. Water Damage
- Pre-existing vs. Covered Event Damage
- Role of the Expert (e.g. first party claim,
- Subrogation, builders risk, performance bond default)
- Client Type Considerations (e.g., insured, public adjusters, claims preparation firms, carriers independent adjusters, third party administrators, surety)

## Deadlines and Important Dates

Abstract Deadline	January 11, 2018
Authors Notified of Acceptance	January 23, 2018
Draft Papers Deadline	March 14, 2018
Review Comments Due	May 30, 2018
Comments Due to Authors	June 13, 2018
Author Registration Deadline*	July 18, 2018
Final Manuscripts and Deposit Fee Due	July 18, 2018

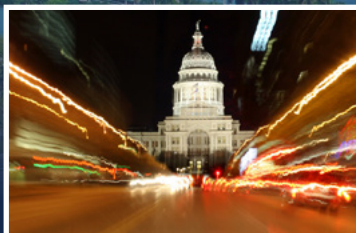
*\*Authors must register for the conference by this date or their paper(s) will be removed from the proceedings, and they will not be permitted to present their paper(s).*

# DESTINATION Austin, Texas

## KNOWN FOR MUSIC. AND SO MUCH MORE.

Years ago when people talked about Austin they would quickly mention the music. But that's just the beginning of what they're saying these days. Austin is also home to a wonderful ballet, world-class museums, one-of-a-kind shopping, and beautiful outdoor spaces. You can just as easily spend your morning paddling the lake as you can strolling through a celebrated history museum.

- **Live music** can be enjoyed in more than 250 venues throughout Austin. Multiple entertainment districts are located within its walkable downtown area.
- Austin is surrounded by **Texas Hill Country**, where historic towns and more than two dozen vineyards meet a laid-back and soulful lifestyle.
- **Get Outdoors.** Hike and bike the trail around Lady Bird Lake, kayak, canoe, paddle board, or ride a water bike on the clear calm waters of Lady Bird Lake, and catch a great view of the downtown Austin skyline.
- **Heritage and History** – Texas Capitol Building, Bullock Texas State History Museum, The Driskill Hotel, LBJ Presidential Library and many National Historic Districts
- **Arts and Culture** – Blanton Museum, Harry Ransom Center, Mexic-Arte Museum, Long Center for the Performing Arts, Thinkery, ZACH Theatre, Paramount Theater and more.



# Submission Requirements

You are invited to submit abstracts for technical papers, technical sessions, and panel discussions for the Forensic Engineering 8th Congress. Session proposals should be consistent with the conference topics listed in this announcement.

Prospective authors and session organizers are invited to submit a one-page abstract in English not to exceed 250 words, outlining the scope of the paper or session and how they believe it would benefit the professional community.

**Abstracts for papers** should include names, titles, credentials, and affiliations of authors and coauthors. The complete mailing address, telephone, and e-mail address of the primary author also should be included. Any special comments, such as session, track, or topic for which the paper is best suited, should be written at the bottom of the abstract page.

**Abstracts for sessions** should include the session title, session abstract, name of the proposed session chair and contact information, including an e-mail address.

**Abstracts for panel discussions** should include the panel discussion title, an abstract, the name/title/affiliation of the proposed moderator and contact information, including an e-mail address. The names/titles/affiliations of the proposed panel members should also be included.

**Abstract Preparation.** Abstracts must be prepared in Microsoft Word and submitted electronically before the deadline via the congress website at [www.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv](http://www.conferenceabstracts.com/cfp2/login.asp?eventkey=zbatojgv).

## Paper Deposit Fee

Authors whose abstracts or draft papers are selected will be requested to submit a final paper along with the paper deposit fee of \$150 by the prescribed deadline. Submitting a paper for the conference constitutes an agreement that, if the paper is accepted, the author will register for the conference at the appropriate fee(s), attend the conference, and make the presentation in person.

The deposit fee will be credited toward the conference registration for the author submitting the final paper. Upon acceptance of the paper, the registration discount code and instructions will be forwarded to the author. Authors uploading more than one paper will pay only one deposit fee. If an individual uploads a paper but a substitute author will present the paper, please note the deposit fee will not apply to the substitute's registration fee.

All paper deposit fees are nonrefundable and nontransferable, and payment of the deposit fee does not guarantee the author a copy of the proceedings. Authors must attend the conference to receive the proceedings. Should an individual pay the deposit fee but fail to register for the conference by the prescribed deadline, the individual's abstract/paper will be removed from the conference program and proceedings, and the deposit will not be refunded. All expenses associated with the preparation, submission, and presentation of abstracts and papers are the responsibility of the authors.

**Proceedings** will be supplied to registrants as electronic files in a USB drive. Only full papers will be considered for publication.

## Expenses

All expenses associated with the preparation, submission and presentation of abstracts are the responsibility of the authors and co-authors. All attendees are required to pay conference registration fees.



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