

Calls for Papers

Recent Developments in High Strain Rate Mechanics and Impact Behavior of Concrete

Meeting: Technical session on “Recent Developments in High Strain Rate Mechanics and Impact Behavior of Concrete” during The ACI Concrete Convention and Exposition – Spring 2020, March 29-April 2, 2020, Chicago/Rosemont, IL; sponsored by ACI Committee 370, Blast and Impact Load Effects.

Solicited: The proposed Special Publication will highlight recent developments in high strain rate mechanics and behavior of concrete subject to impact loads. This effort is intended to support the mission of ACI Committee 370 to develop and report information on the design of concrete structures subjected to impact, as well as blast and other short-duration dynamic loads. Concrete structures can potentially be exposed to accidental and malicious impact loads during their lifetimes, including those caused by ballistic projectiles, vehicular collision, impact of debris set in motion after an explosion, falling objects during construction, and floating objects during tsunamis and storm surges. Assessing the performance of concrete structures to implement cost-effective and structurally efficient protective measures against these extreme loads necessitates a fundamental understanding of the high strain rate behavior of the constituent materials and of the characteristics of the local response modes activated during the event.

The objectives of the Special Publication are to present state-of-the-art research on concrete subjected to high strain rate impacts, including ballistic, vehicle collision, falling loads, and debris set in motion by explosions or tsunamis; present current methodologies and new developments in testing, computation, and analysis; present knowledge to ACI audiences on the possible use of emerging material and computational technologies to improve penetration and impact resistance of concrete structures; and highlight ongoing research and identify future research and manufacturing needs.

Presentations will highlight the high strain rate behavior of a broad range of concrete types, including high-strength and ultra-high-strength materials, reactive powder concrete, fiber-reinforced concrete, and externally bonded cementitious layers and other coatings.

Requirements: 1) presentation and paper title; 2) author/speaker name(s), job title, organization, mailing address, telephone number, and e-mail address; and 3) abstract of up to 300 words on the topic selected, discussing issues pertinent to the session topic.

Deadlines: Abstracts are due by February 7, 2019; final papers are due by June 14, 2019.

Send to: Eric Jacques, Virginia Tech, ejacques@vt.edu.

Unlocking Workability Issues of UHPC

Meeting: Technical session on “Unlocking Workability Issues of UHPC” during The ACI Concrete Convention and Exposition – Spring 2020, March 29-April 2, 2020, Chicago/Rosemont, IL; co-sponsored by ACI Committees 238, Workability of Fresh Concrete, and 239, Ultra-High Performance Concrete.

Solicited: Ultra-high-performance concrete (UHPC) is attracting increasing interest worldwide due to its superior mechanical properties (very high strength and ductility) and excellent durability. However, most studies on UHPC have focused on achieving and assessing mechanical properties and durability, and limited studies have elucidated workability aspects of UHPC. In fact, the difficulty in handling of UHPC has been recognized as a major problem during construction because significant workability reduction occurs due to very low water-binder ratio (w/b) and very high dosages of fine powders (for example, silica fume). It is well understood that mixing methods and procedures have more substantial effects on workability of UHPC than on that of conventional concrete. Ultra-high performance may not be achieved if required workability of UHPC is not met.

Requirements: 1) presentation title; 2) author/speaker name(s), job title, organization, mailing address, telephone number, and e-mail address; and 3) abstract of up to 300 words on a topic discussing the issues, challenges, factors, evaluation methods, performance monitoring, case study, and overviews related to the workability of UHPC.

Deadline: Abstracts are due by March 1, 2019.

Send to: Kejin Wang, Iowa State University, kejinw@iastate.edu; and Kamal Khayat, Missouri S&T, khayatk@mst.edu.

Conceptual Design of Structures

Meeting: *fib* Symposium on Conceptual Design of Structures, September 26-28, 2019, Torroja Institute, Madrid, Spain; co-sponsored by the Spanish Association of Structural Engineering (ACHE).

Solicited: The technical program of the symposium will feature four sessions, each corresponding to a stage in the conceptual design process: Inspiration, Data Collection,

Calls for Papers: Submission Guidelines

Calls for papers should be submitted no later than 3 months prior to the deadline for abstracts. Please send meeting information, papers/presentations being solicited, abstract requirements, and deadline, along with full contact information to: Keith A. Tosolt, Managing Editor, *Concrete International*, e-mail: keith.tosolt@concrete.org. Visit www.callforpapers.concrete.org for more information.

Creativity, and Materialization. Each session will comprise a keynote lecture, plenary presentations of selected papers, an open debate with the audience, and a series of hands-on workshops leveraging state-of-the-art tools and methods.

Requirements: Authors are invited to submit original contributions on any topic related to the conceptual design of structures. Visit <http://37.35.109.41/conceptualdesign/introduction/> for more information.

Deadline: Abstracts are due by March 15, 2019.

Ultra-High-Performance Concrete

Meeting: Fifth International Symposium on Ultra-High-Performance Concrete and High-Performance Construction Materials (HiPerMat 2020), March 10-12, 2020, Centre University of Kassel, Kassel, Germany.

Requirements: Prospective authors are invited to submit a detailed abstract of up to 300 words through the online submission system at www.hipermat.de.

Deadline: Abstracts are due by April 30, 2019.

Contact: hipermat@uni-kassel.de.

Notable Concrete in Cincinnati and Vicinity

Document: Compendium of notable concrete in Cincinnati and vicinity for e-publication at The ACI Concrete Convention and Exposition – Fall 2019, October 20-24, 2019, Cincinnati, OH; compiled by ACI Committee 124, Concrete Aesthetics. The document also will be available as an electronic file on the ACI website and may be excerpted in *Concrete International*. Images submitted may be stored and available as electronic files on the ACI website and may be used in ACI educational and promotional materials. Exceptional images may merit placement on the cover of *Concrete International*.

Solicited: Image and brief description of notable concrete (including cast-in-place, precast, post-tensioned, masonry, and tilt-up) in all types of uses—buildings, monuments, pavement, silos, bridges, crypts, furniture, retaining walls, utility poles, tanks, sculpture, culverts, plazas, and whatever else has caught your attention. Significance may be historical, aesthetic, sustainable, functional, structural, construction-related, unusual use or application, or simply personal affection.

Requirements: 1) project name and location, including postal code; 2) image (photograph, drawing, or sketch) that is not copyrighted; 3) brief description that establishes significance and lists credits; and 4) submitter's name, title, organization, city, province or state, telephone, and e-mail address. Submit all information in electronic format: image as JPG or TIF file at least 1 MB (but no more than 4 MB); text in e-mail or as MS Word document (120 words maximum). No PDF files, please.

Deadline: Materials are due by July 1, 2019.

Send to: Michael J. Paul, Larsen & Landis, 11 W. Thompson St., Philadelphia, PA 19125, mpaul@larsenlandis.com.

Bond and Development in New Types of Concrete and Reinforcement

Meeting: Technical session on “Bond and Development in New Types of Concrete and Reinforcement” during The ACI Concrete Convention and Exposition – Spring 2020, March 29-April 2, 2020, Chicago/Rosemont, IL; sponsored by Joint ACI-ASCE Committee 408, Bond and Development of Steel Reinforcement.

Solicited: Recent developments in concrete technology and reinforcement materials have improved the structural performance, durability, and sustainability of reinforced concrete. The use of alternative types of concrete and/or reinforcement may affect the bond characteristics of reinforcing bars and, consequently, their development and lap-splice requirements. This session will present recent advances in the characterization of bond and development in new types of concrete and reinforcement, which may include (but are not limited to) ultra-high-performance concrete, fiber-reinforced concrete, self-compacting concrete, high-strength steel, corrosion-resistant reinforcement, and shape-memory alloy bars. The committee is soliciting presentations on experimental and analytical studies on this topic.

Requirements: 1) presentation title; 2) author/speaker name(s), job title, organization, mailing address, telephone number, and e-mail address; and 3) abstract of up to 250 words, and optionally one relevant figure.

Deadline: Abstracts are due July 15, 2019.

Send to: Juan Murcia-Delso, University of Texas at Austin, murcia@utexas.edu; and Remy Lequesne, University of Kansas, rlequesne@ku.edu.

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