

CALL FOR ABSTRACTS



10th International Conference on Scour and Erosion (ICSE-10)



Arlington, Virginia, USA | November 15-18, 2020

Understanding Scour and Erosion Processes and Improving Countermeasure Design through Integration of Hydraulics and Geotechnics



Conference Overview

Join Us for ICSE-10

Prospective authors are invited to submit abstracts for papers up to 300 words, which should include the title of the article, name(s) and affiliation(s) of the author(s), postal and electronic addresses, intended topic track, and at least three keywords. All submitted papers will go through a rigorous peer review process and only successful papers will be published in the conference proceedings. The 3.5-day conference will include short courses, keynote and podium presentations, and a field trip.

To submit your abstract, please visit

<https://icse2020.submittable.com/submit>

Topics

The conference invites you to submit abstracts that address scour and erosion related to the following topics:

- **Track A: Mechanics of Internal Erosion.** Including sub-topics such as mechanisms, field studies and observations, theoretical assessment of internal erosion mechanisms.
- **Track B: Sediment Transport: Grain Scale and Continuum Scale.** Including sub-topics such as advancement in sediment transport theories, tools, and new data sets for the understanding of sediment particle motion at both grain scale and continuum scale, and the implications for scour.
- **Track C: Effects of Geology on Internal Erosion.** Including sub-topics such as anisotropy, heterogeneity, random field analysis, field investigations versus actual conditions.
- **Track D: Rock Scour.** Including sub-topics such as theoretical, computational, laboratory, and field studies on rock scour processes. Spillway and stilling basin erosion.
- **Track E: Erosion and Structures.** Including sub-topics such as bridge scour, internal erosion along structures, erosion around foundations, physical processes controlling the local scour around structures; interactions among fluid flow, sediment, and structures; new techniques and designs to alter the flow and scour processes.
- **Track F: River, Coastal, Estuarine and Marine Scour and Erosion.** Including sub-topics such as scour and erosion research and case studies specific for the riverine, coastal, estuarine and marine environments.
- **Track G: Numerical Modelling of Scour and Erosion.** Including sub-topics such as advanced computing techniques, numerical schemes, novel approaches for data assimilation, uncertainty quantification and analysis. Field and laboratory scale.

- **Track H: Physical Modelling of Scour and Erosion.** Including sub-topics such as scale models, flume tests for internal and surficial erosion, centrifuge testing, small and large-scale testing.
- **Track I: Erosion Monitoring and Measurement.** Including sub-topics such as novel sensors and instruments, subsurface monitoring, underwater monitoring, innovative techniques, interpretation methods and data processing techniques for monitoring and measuring scour and erosion across spatial and temporal scales.
- **Track J: Watershed Scale Soil Erosion, Restoration, and Conservation.** Including sub-topics such as technology, management, and policy for the control of soil erosion at watershed scale including effect of land use change, riparian buffer construction to reduce sediment input, reservoir sedimentation and management.
- **Track K: Scour and Erosion Countermeasures and Mitigation.** Including sub-topics such as applications of both traditional and emerging countermeasures to scour and internal erosion problems.
- **Track L: Geo-Hazards Induced by Scour and Internal Erosion.** Including sub-topics such as debris flows, landslide, bank erosion, river meandering, and their impact to infrastructure.
- **Track M: Erosion Risk Assessment.** Including sub-topics such as assessment methods, risk assessment methods, mitigation methods, monitoring.
- **Track N: Case Histories, Lessons Learned, and General Practice.** Including practical aspects and lessons learned on technical topics in Tracks A through K such as success and failures related to innovative solutions, construction experience, field observations, etc.
- **Track O: Impact and Adaptation: flooding, drought, and scour in a changing climate.** Including sub-topics such as changing patterns of flooding and drought due to changing climate, potential effects of changing climate on scour prediction.

Key Dates

- Abstract Submission Due:
September 15, 2019
- Notification of Acceptance:
September 30, 2019
- Manuscripts Due:
December 31, 2019
- Final Publication-Ready Manuscripts Due:
April 30, 2020





Location

Crystal City is an urban community in Arlington, Virginia, that is located along the Potomac River, with dramatic views of Washington, D.C. A unique network of underground shops and walkways attracts visitors to Crystal City from around the region. With its close proximity to Ronald Reagan National Airport, this area is a popular place for visitors to stay with convenient access to the nation's capital. You'll also be strategically located near the Crystal City Metro station, giving you easy access to downtown Washington, D.C., and its many upscale hotels, retail stores, and restaurants.

Sponsorship & Exhibits

Companies and organizations interested in sponsoring ICSE-10 events or participating in the Exhibit Hall are invited to contact Drew Caracciolo at **(703) 295-6087** or dcaracciolo@asce.org or Trevor Williams at **(703) 295-6349** or twilliams@asce.org.

Venue

The DoubleTree Washington DC – Crystal City will serve as the headquarters hotel for ICSE-10. All sessions will take place at the hotel. A block of rooms will also be available. Booking your nightly accommodations at this hotel will make you eligible for a discount on your entire stay. You'll also be conveniently located near the Pentagon, Arlington National Cemetery, Jefferson Memorial, and Lincoln Memorial.

For more information please visit

<https://doubletree3.hilton.com/en/hotels/virginia/doubletree-by-hilton-hotel-washington-dc-crystal-city-DCAAEDT/index.html>

www.2020icse.org

Conference Committee

Chair: Ming Xiao, Pennsylvania State University

Co-Chair: Peggy Johnson, Pennsylvania State University

Technical Committee Chair: John Rice, Utah State University

Technical Committee Vice-Chair: Xiaofeng Liu, Pennsylvania State University

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Special Consultants: Catherine Avila, Avila and Associates; Beatrice Hunt, AECOM; Jean-Louis Briaud, Texas A&M University