Scour and Erosion

Proceedings of the Fifth International Conference on Scour and Erosion



SCOUR AND EROSION

PROCEEDINGS OF THE FIFTH INTERNATIONAL CONFERENCE ON SCOUR AND EROSION (ICSE-5)

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The Environmental and Water Resources Institute of the American Society of Civil Engineers

International Society for Soil Mechanics and Geotechnical Engineering

EDITED BY Susan E. Burns Shobha K. Bhatia Catherine M. C. Avila Beatrice E. Hunt







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Preface

Scour and erosion represent some of the most critical threats to maintaining infrastructure and quality of life throughout the world. As the human population expands, the responsibilities of engineers, scientists, and designers continue to increase, and the demands for a creative approach to effective control of scour and erosion also becomes more pressing, requiring cross-disciplinary synthesis of information from the fields of hydraulic and geotechnical engineering. The papers presented at this conference focus on critical issues in the scour and erosion of hillside, fluvial, estuarine, and coastal environments, at the interface of water, soil, and rock.

Following the first four highly successful international conferences on scour and erosion, which were held in College Station, Texas, USA (2002), Singapore (2004), Amsterdam, The Netherlands (2006), and Tokyo, Japan (2008), the fifth international conference was commissioned to continue the tradition of presenting state of the art information on the most pressing issues in scour and erosion. The conference was co-sponsored by the ASCE GeoInstitute and ASCE Environmental and Water Resources Institute, and the resulting conference themes of scour of foundations, erosion of soils, bridge scour, scour and erosion of dams and levees, scour of offshore platforms and underwater pipelines, and rock scour reflect the truly interdisciplinary nature of the subject matter.

All papers in the proceedings were reviewed, re-reviewed, and accepted for publication by at least two reviewers who were selected by the proceedings editors. All papers included in these proceedings are eligible for ASCE awards. The editors would like to thank the reviewers listed below who spent many hours and great care reviewing and commenting on the manuscripts. The time they donated to ASCE is greatly appreciated, and it is through their contributions that the quality and integrity of these manuscripts is maintained.

> S.E. Burns, S.K. Bhatia, C.M.C. Avila, and B.E. Hunt San Francisco, CA, 07-10 November 2010

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