ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE

Your Name: Somdutt Pathak	***Your Organization:*** Indian Institute of Technology Roorkee	***Date of report:*** 31-12-25
Conference Title: 17th international conference of the International Association for Computer Methods and Advances in Geomechanics (IACMAG).	***Location of Conference:*** Hong Kong Polytechnic University, Hong Kong	***Dates of Conference:*** December *18-21, 2025*

What you learned:

Participation in IACMAG 2025 significantly enhanced my understanding of seismic stability assessment of geotechnical systems. The keynote lecture on reliability-based design improved my understanding of uncertainty quantification and probabilistic evaluation of stability, which is directly relevant to landfill safety under seismic loading. In addition, technical sessions on geomechanics of waste materials, multiphysics coupling, and soil–structure interaction under dynamic loading provided valuable insights applicable to the stability analysis of expanded MSW landfills with engineered berms. Overall, the conference strengthened the technical basis of my ongoing doctoral research and supported the development of more reliable seismic design methodologies for landfill expansion.

People you met:

The conference provided valuable opportunities for interaction with leading international researchers and experts in geotechnical engineering.

- Prof. John Carter (The University of Newcastle, Australia)
- Prof. Richard J. Bathurst (Royal Military College of Canada)
- Prof. Lidija Zdravkovic (Imperial College London, UK)
- Prof. Jidong Zhao (Hong Kong University of Science and Technology)
- Prof. Buddhima Indraratna (University of Technology Sydney, Australia)
- Prof. D.N. Singh (Indian Institute of Technology, Bombay)
- Prof. Bal Krishna Maheshwari (Indian Institute of Technology, Roorkee)
- Prof. Zhengshou Lai (Sun Yat-sen University Guangzhou, China)
- Prof. Giang D. NGUYEN (University of Adelaide, Australia)

Main features of conference:

The conference emphasized recent advances in computational geomechanics and brought together researchers, engineers, and academics from across the world. IACMAG 2025 featured keynote lectures by internationally recognized experts, technical paper presentations, and thematic sessions addressing numerical modeling, seismic and dynamic analysis, soil–structure interaction, and multiphysics processes in geotechnical engineering.

Dedicated sessions on the geomechanics of waste materials and reliability-based approaches were particularly relevant to stability assessment of expanded MSW landfills. The conference also provided valuable opportunities for technical discussions, networking, and collaboration, enabling participants to exchange ideas, obtain feedback on their research, and establish international academic connections.

Your comments on the conference:

It was a privilege to participate in IACMAG 2025. The conference provided an excellent platform to interact with internationally recognized researchers and experts in geotechnical engineering. The keynote lectures were highly informative and offered valuable perspectives on emerging developments in geomechanics. I also presented my research work and received constructive and encouraging feedback from the session chair and co-chair, which will help strengthen my ongoing research. Overall, the conference enhanced the quality of my work and facilitated meaningful professional interactions that will support my future research activities journey.

Please attach short report (maximum 400 words) suitable for publication in the ISSMGE Bulletin:

The 17th International Conference of the International Association for Computer Methods and Advances in Geomechanics (IACMAG 2025), held in Hong Kong, served as a high-quality international forum for the exchange of recent advances in computational and applied geomechanics. The conference brought together researchers, practitioners, and early-career scholars from across the world, fostering discussion on emerging challenges and innovative solutions in geotechnical engineering.

The technical program comprised keynote lectures, state-of-the-art sessions, parallel technical sessions, and poster presentations covering a wide range of topics, including seismic and dynamic analysis, soil–structure interaction, multiphysics coupling, geomechanics of waste materials, reliability-based design, and numerical modeling techniques. The keynote lectures were particularly insightful, offering critical perspectives on current research challenges and future directions in computational geomechanics and infrastructure safety. Of particular relevance were lectures and sessions addressing reliability-based design and uncertainty quantification, which highlighted the importance of probabilistic approaches in evaluating the stability of complex geotechnical systems under dynamic loading.

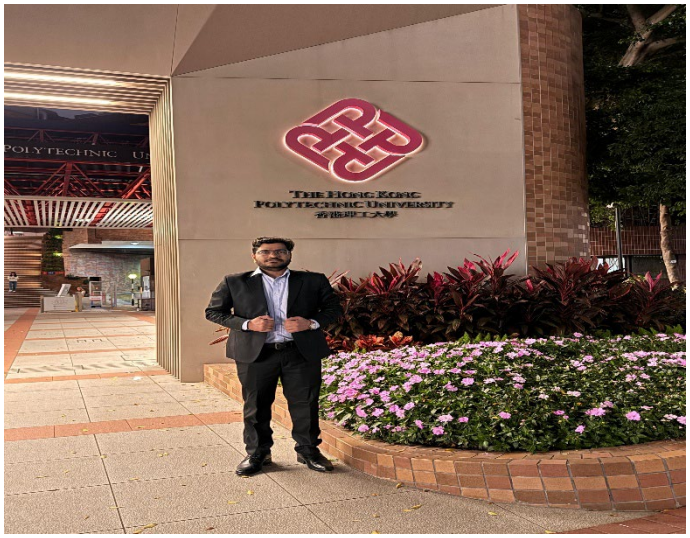
The parallel sessions were well organized and featured technically rigorous presentations supported by numerical and analytical investigations. The discussions following the presentations were engaging and constructive, encouraging knowledge exchange and critical evaluation of methodologies. Sessions related to waste material behavior, dynamic soil response, and coupled hydro-mechanical processes were especially relevant to landfill engineering applications.

As a presenting author, I presented my research work entitled *"Stability Analysis of Expanded MSW Landfill for Earthquake Forces under Over-Berm Failure Condition"* during the poster session. The presentation generated valuable technical discussions, and the feedback received from experts and fellow researchers was constructive and encouraging.

These interactions provided useful insights for refining my ongoing doctoral research and strengthening its practical relevance.

Beyond the technical program, the conference provided excellent opportunities for professional interaction and networking. Discussions with internationally recognized researchers and peers enabled the exchange of ideas and opened avenues for potential future collaboration. Overall, participation in IACMAG 2025 significantly enriched my academic experience and contributed to my professional development. I sincerely acknowledge the financial support provided by the ISSMGE Foundation, which made my participation in this conference possible.

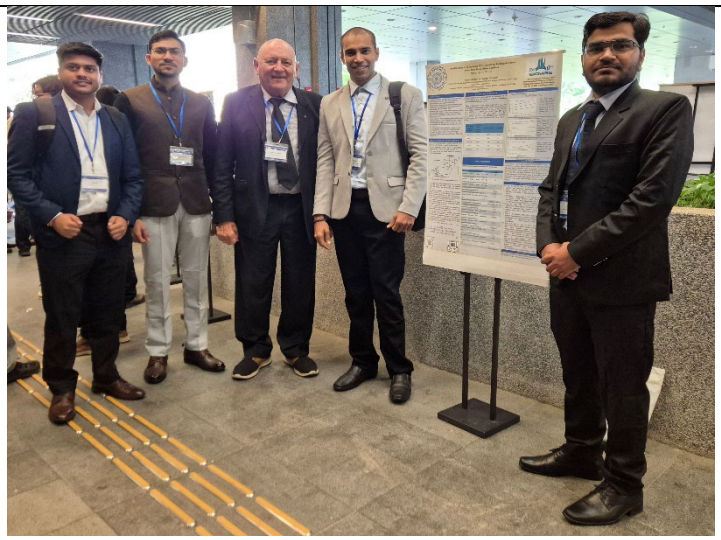
Photographs from Conference:



Somdutt Pathak (me) at The Hong Kong Polytechnic University, IACMAG 2025 conference venue



Registration at the IACMAG 2025 conference venue with Prof. Bal Krishna Maheshwari



Somdutt Pathak (myself) during a poster presentation discussion with Prof. John Carter, President of the IACMAG Board



With Prof. Richard J. Bathurst, Royal Military College of Canada



With Prof. Giang D. NGUYEN, University of Adelaide, Australia



Award received during the banquet on behalf of my supervisor, Prof. Kaustav Chatterjee, for “Excellent Regional Contribution”



With Prof. Lidija Zdravković, Imperial College London (UK)



Group photograph of conference participants