ISSMGE FOUNDATION
REPORT ON CONFERENCE ATTENDANCE

Your Name: Syamili Sarma	***Your Organization:*** Indian Institute of Technology Guwahati, Guwahati, India	***Date of report:*** 10th July 2026
Conference Title: 21st International Conference on Soil Mechanics and Geotechnical Engineering (ICSMGE 2026)	***Location of Conference:*** Vienna, Austria	***Dates of Conference:*** 14th to 19th June 2026

What you learned:

Attending the 21st ICSMGE was a highly rewarding academic and professional experience, both as a presenter and as a participant eager to learn from the wider geotechnical community. I had the opportunity to deliver a short oral presentation and poster titled "Nickel Dependency of Microbially Induced Calcite Precipitation for Bio-Cementation of Coal Mine Overburden", which allowed me to share my research findings and receive valuable feedback from experts in the field.

Beyond my own presentation, I engaged with the core technical programme, which spanned laboratory and in-situ testing, numerical modelling, transportation geotechnics, earthquake engineering, unsaturated soils, and environmental and energy geotechnics. This broad exposure reinforced how interconnected geotechnical challenges are becoming, especially as sustainability considerations increasingly shape research and practice across sub-disciplines. I paid particular attention to sessions on bio-cementation and other bio-mediated ground improvement technologies. These sessions underscored a clear shift in the field toward sustainable, low-carbon alternatives to conventional soil stabilisation methods,

I also attended the plenary session organised by the European Federation of Foundation Contractors, which offered valuable industry perspectives on sustainable construction practices, ground-risk management, and the ongoing digitalisation of geotechnical engineering.

The poster session was one of the most valuable parts of the conference for me personally. It created an excellent opportunity to interact directly with researchers and experts working in bio-geotechnics, leading to detailed discussions. The constructive feedback I received has given me clear direction for strengthening my ongoing research. Importantly, these conversations also led to two promising international research collaboration opportunities in bio-geotechnics and sustainable ground improvement, which I look forward to pursuing further.

Overall, ICSMGE 21 reaffirmed the growing importance of sustainable ground improvement within mainstream geotechnical engineering and provided me with both technical feedback and professional connections to advance my research. Returning to the city where soil mechanics was founded, on the discipline's hundredth anniversary, was a fitting reminder that the field's fundamentals remain the foundation for whatever comes next.

People you met:

I had the privilege of participating in numerous enriching discussions with academicians and researchers, fellow PhD students, and industry engineers, gaining valuable insights from their diverse expertise and experiences and a few of them

- Prof. Krishna R. Reddy, University of Illinois Chicago, USA

- Prof. Rao Martand Singh, NTNU, Norway
- Prof. Hiroyuki Kyokawa, Nagoya Institute of Technology, Japan
- Prof. Hemanta Hazarika, Kyushu University, Japan
- Prof. Deepankar Choudhury, IIT Bombay, India
- Prof. Daehyun Kim, University of Suwon, South Korea

Main features of the conference:

ICSMGE 2026 was held in Vienna, Austria, under the theme “Geotechnical Challenges in a Changing Environment”, coinciding with the 100th anniversary of Karl Terzaghi’s landmark publication and celebrated under the slogan “Where It All Began.” A significant new feature was the first-ever plenary session organised by the European Federation of Foundation Contractors, addressing climate change, sustainable construction practices, ground-risk management, digitalisation of geotechnical engineering, workforce development, and technical guidance for European standards.

Your comments on the conference:

ICSMGE 2026 was an outstanding and well-organised event that lived up to its theme of addressing geotechnical challenges in a changing environment, made all the more meaningful by its coincidence with the centenary of Terzaghi’s founding publication. Presenting my poster on Nickel dependency in MICP for coal mine overburden stabilisation gave me a valuable platform to test my ideas against an international audience and receive constructive feedback. The breadth of the technical programme, from the new European Federation of Foundation Contractors industry plenary to the workshops on emerging global challenges, gave me a much broader view of where sustainable geo-techniques fit within the wider geotechnical engineering landscape. The focus on "Geotechnical Challenges in a Changing Environment" hit the right notes. Sessions on climate change impacts, the integration of artificial intelligence into design, and sustainable construction practices addressed the exact modern pressures facing engineers today. Most rewarding were the informal discussions at the poster and around the conference, which led to promising international collaboration opportunities. The sheer volume of global experts, networking opportunities, and academic exchange demonstrated how vibrant and expanding the geotechnical community is today. Overall, the conference strengthened both my technical understanding and my professional network, and I am grateful for the opportunity to have represented my institution on this international platform.

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

Attending ICSMGE 2026 as a presenter was one of the most rewarding professional experiences of my career so far. The conference theme, “Geotechnical Challenges in a Changing Environment,” coincided with the 100th anniversary of Karl Terzaghi’s landmark publication, celebrated under the slogan “Where It All Began.” The event showcased the latest research, technological innovations, and practical solutions addressing the evolving challenges faced by the geotechnical engineering community.

A significant new feature of ICSMGE 2026 was the first-ever plenary session organised by the European Federation of Foundation Contractors, highlighting the growing role of industry in addressing climate change and reducing the construction sector’s carbon footprint, with discussions on sustainable construction practices, ground-risk management, digitalisation, workforce development, and European technical guidance documents. The core technical programme covered almost every area of modern geotechnical engineering, from laboratory and in-situ testing to numerical modelling, transportation geotechnics, earthquake engineering, unsaturated soils, and environmental and energy geotechnics.

Among the most memorable presentations were the lecture by Dr Jean-Louis Briaud on soil erosion, including erosion on the Moon caused by spacecraft landing operations; the Proctor Lecture by Dr Anand Puppala on resilient geotechnical infrastructure and ground improvement; and the Kerry Rowe Lecture by Dr Krishna R. Reddy on advances in environmental geotechnics. The conference also featured excellent poster sessions and short presentations, as well as workshops, including the TC215 Workshop on “The role of Environmental Geotechnics in addressing emerging global challenges,” which covered carbon sequestration, bentonite geomechanics for nuclear waste containment, and robot-based characterisation of landfill methane emissions.

One of the most rewarding aspects of the conference was the opportunity to interact with researchers and professionals from different countries during the poster sessions, technical discussions, and networking events. Overall, ICSMGE 2026 enabled me to represent my institution on an international platform, contribute to the dissemination of research in sustainable geotechnical engineering, and establish new professional connections expected to support future collaborative research in ground improvement.

Photographs from Conference:

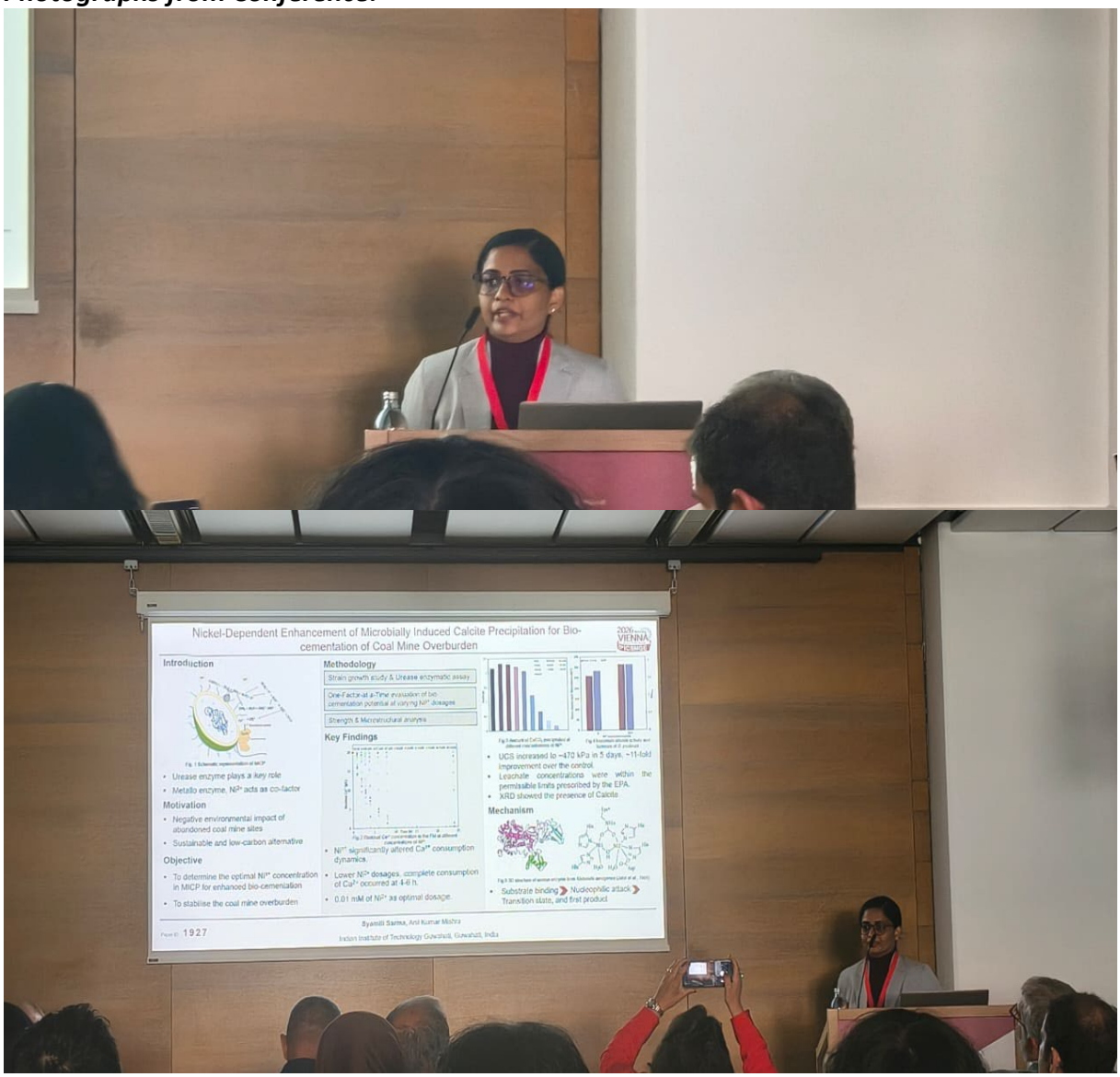


Figure. During my presentation

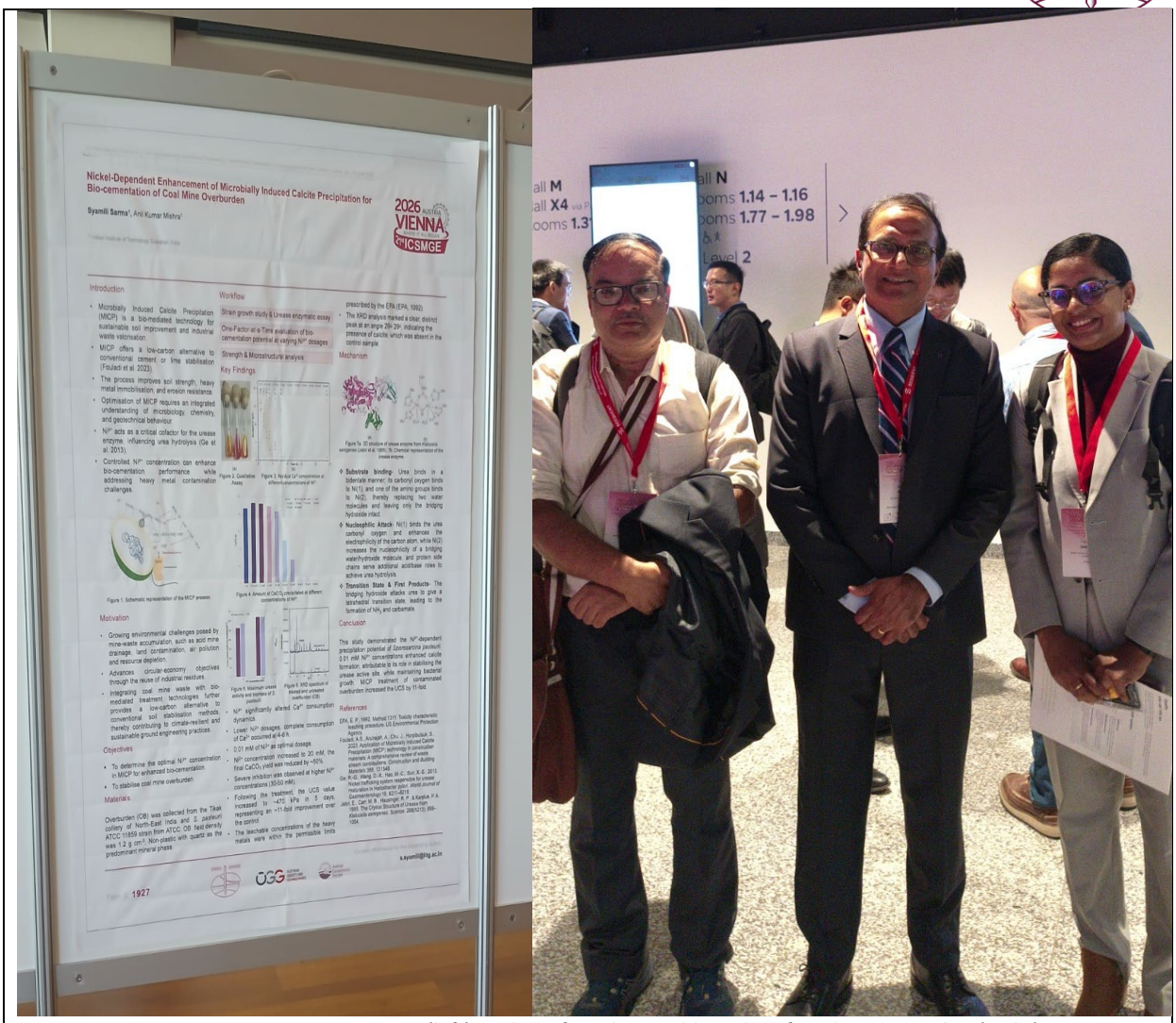


Figure. My poster presentation (left), with Prof. Krishna Reddy and Prof. Anil Kumar Mishra (Right)



Figure. With Prof. Anil Kumar Mishra, Prof. Rao Martand Singh and Prof. Hiroyuki Kyokawa

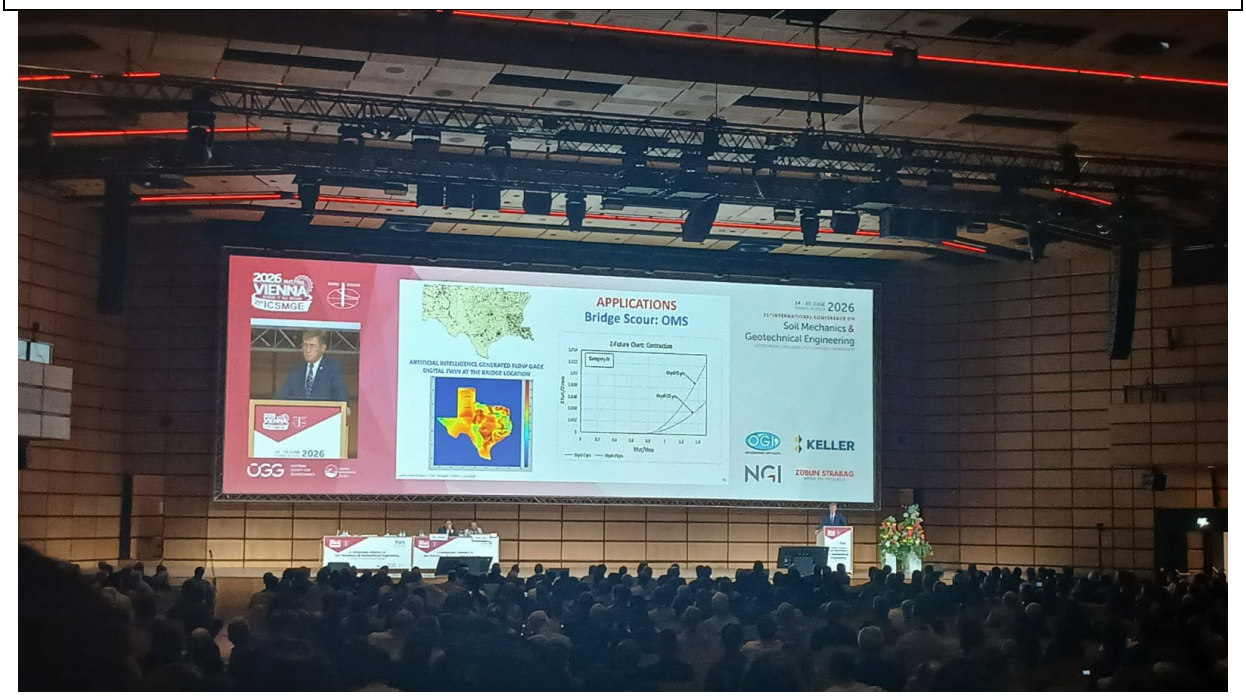


Figure. Lecture by Jean-Louis Briaud