

Indian Geotechnical Society (IGS) is commemorating its 75TH Year Celebrations in the Year 2023

International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) TC-216 Workshop

on

“Advancements in Geotechnical and Foundation Engineering for Difficult Ground Conditions (AGFEDGC-2023)”- 26 – 30 July 2023

On the occasion of **Diamond Jubilee Celebrations of Indian Geotechnical Society (2023)**, the Department of Civil Engineering, National Institute of Technology Srinagar, J&K organized Five Day ISSMGE-TC216 Workshop on Advancements in Geotechnical and Foundation Engineering for Difficult Ground Conditions (AGFEDGC-2023) in **hybrid mode** from **July 26 – 30, 2023**. The workshop was inaugurated by **Hon`able President IGS**, Dr. Anil Joseph in the presence of Dean R&C, Head CED and Workshop Convener, Prof. B. A. Mir. **Hon`able President IGS Dr. Anil Joseph was the Guest of honour and inaugural keynote speaker. The workshop was sponsored by NIT Srinagar, M/S HEICO New Delhi (gold sponsor), M/S Aimil Ltd., New Delhi, M/S Maccaferri and IGS New Delhi.**

Prof. BA Mir (Workshop Convener) in his inaugural address said this workshop offers multitude benefits that contribute to personal and professional growth, from technical knowledge enhancement to networking opportunities and exposure to industry trends, attending such workshops can significantly impact the careers of geotechnical engineers and related professionals, he added.

Dr. Anil Joseph said Indeed, geotechnical engineering is a fascinating and vital subject within the field of civil engineering. It deals with the behavior of earth materials, such as soil and rock, and their interactions with structures and the natural environment.

“Geotechnical engineering plays a crucial role in the successful design, construction, and maintenance of various infrastructure projects, ensuring their stability, safety, and longevity,” he said.

On the occasion, Prof. (Dr) A Q Dar, Head, CED, NIT Srinagar said the workshop is aimed to provide numerous benefits to participants, ranging from enhancing technical knowledge to fostering professional growth and networking opportunities. He said such workshops are the need of the hour in providing participants with in-depth insights into the latest advancements, research, and best practices in geotechnical engineering.

Various Eminent speakers delivered lectures in this 5 day ISSMGE TC216 workshop and shared their knowledge and experience in research on sustainable development related to Geotechnical applications in Difficult Ground Conditions.

The summary of lectures delivered in this 5day workshop is briefly given below:

1st day, Dr. Anil Joseph delivered the first lecture on sustainable Geotechnic with a strong focus case studies involving stabilization of soils in bridge works. Prof K.S. Rao delivered the 2nd lecture where in he discussed in detail the engineering behaviour of rocks and rock masses. He also discusses the various considerations for design and construction of tunnels. Dr. Seethalakshmi delivered 3rd lecture on the engineering behaviour of soils under dynamic loading. She presented a vigorous review of various governing factors parameters.

2nd day, Dr. Anil delivered his second lecture on forensic geotechnics with a strong focus on failures and success particularly including demolition in his second lecture. Dr. Sahil Wani. Sahil delivered second lecture on the consideration of seismic coefficient for design of GRs walls. The lecture was of immense importance given the rapidly growing geosynthetic industry and use of G.T. Dr. Abdullah Ansari delivered the last lecture og 2nd day and discussed detailed study of seismic microzonation of Jammu Region (JR), which is located in the northwestern part of the Himalayas. To accomplish this, seismic hazard analysis is carried out with a primary focus on site characterization using geophysical field testing. Further, the seismic risk of the 345 km long Udampur Srinagar Baramulla Rail Link (USBRL) Project is assessed for serviceability in post-seismic conditions.

3rd day, Dr. Saloni Panday delivered the first lecture and discussed in detail the “liquefaction susceptibility and characterization of rebound response of micaceous sand”. Prof. Ravi Jakka discussed fundamental aspects of laterally load piles subjected to seismic loading. Dr. Rufaida delivered lecture on frost geotechnics, discussed case studies involving the challenges faced by frozen soil were discussed.

4th day, Dr. Prajakta Jadhav presented lecture on “deformation basis seismic design of cantilever retaining walls”. A wonderful lecture discussing in detail the limitation of conventional force base methods. Er. Ravi Sundaram, Director CENGRS, delivered lecture on “Geotechnical Investigation in Difficult Ground Conditions - Indian Experiences”. Dr. Chaidul Chaudhary, presented analytical methods for studying the response of buried pipeline under seismic/dynamic loading, a fundamental study covering the behaviour of buried structure.

5th day, Dr. Altaf Usmani Deputy GM, Engineering India limited, presented on the topic “advances in underground space utilization for energy security and sustainability. A new developing, research/applied underground storage facilities with enhanced security and sustainability were discussed. Dr. Lateef A. Dar delivered lecture on the topic “enhancing embankment stability through granular pile reinforcement of soft foundation soils”. He discussed mathematical and machine learning models for prediction of FOS. He also discussed the seismic response analysis of stone column supported embankment.

Further, the representative of various sponsored agencies also delivered lectures in this workshop, who highlighted their role in the development of latest State-of-the-Art equipments to be used in field of Geotechnical Engineering.

Overall, “Advancements in ground investigation technologies, soil testing methods, ground improvement techniques, geosynthetics, and innovative foundation systems have empowered engineers to undertake projects in challenging environments with confidence,”

Prof. (Dr.) B. A. Mir,
ISSMGE TC216 Convener



Prof. A. Q. Dar (HOD) addressing the audience during 5 day ISSMGE TC216 workshop



President IGS Dr. Anil Joseph, delivering lecture during 5day ISSMGE Workshop, NIT Srinagar, J&K



Participants-5day ISSMGE TC216 workshop, NIT Srinagar



Prof. B. A. Mir Felicitating President IGS Dr. Anil Joseph



Group Photo with President IGS Dr. Anil Joseph