



CSIR – Central Building Research Institute Roorkee – 247667 (UK)



Webinar on Urban Underground Space March 13-14, 2023

A two-day webinar on “*Urban Underground Space*” was conducted under the aegis of CSIR Integrated Skill Initiative during March 13-14 2023 at CSIR-CBRI, Roorkee. This was an exclusive two-day webinar featuring industry experts who are at the forefront of creating new underground infrastructure. We all understand the importance of underground space (especially in urban areas) to our daily lives and how it is transforming the world [in the form of basement parking space, utilities, metros etc]. In order to cope up with these rapid changes happening around us in urban underground infrastructure, eminent industry experts were invited to engage in knowledge sharing and the latest developments in the field of urban underground infrastructure. In this context, this webinar covered two broader areas, one on tunnels and another on other underground infrastructure.

During this webinar different technical sessions were delivered by the eminent experts with the discussion on the geotechnical activities in project sites, deep excavation in construction, embedded retaining structure, ground improvement, failure and rectification of deep excavation, challenges in underground metro constructions, sustainable underground infrastructure and design & construction of underground metros. Over 100 participants have attended the webinar including students, practitioners and academicians cross the country. This webinar was coordinated by *Er. M. Vinoth* and *Er. M.S. Aswathy*, Sr. Scientists of CSIR-CBRI, Roorkee.

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Glimpses of Webinar

**Webinar on
Urban Underground Space**
March 13-14, 2023
Organised Under the aegis of CSIR Integrated Skill Initiative

Timing	Technical Sessions	PATRON	EMINENT SPEAKERS
March 13, 2023			
10:30 am	Geotechnical Engineering Activities in Project Sites		
11:30 am	Deep Excavation in Construction		
01:30 pm	Failure and Rectification of Retaining Structure for Deep Excavation - Case Studies		
03:30 pm	Ground Improvement under Railway Embankments		
March 14, 2023			
10:00 am	Challenges in Underground Metro Construction		
11:00 am	Creating Large Scale Sustainable Underground Infrastructure		
01:30 pm	Design & Construction of Underground Metros		
03:30 pm	Embedded Retaining Structures for Urban Infrastructure		

Organized by: Skill Development Group, CSIR - Central Building Research Institute, Roorkee-247667, Uttarakhand. Email: vimoth@cbri.res.in; Mob: 9486112108

Coordinators: Dr. M. Vimoth (Scientist), Dr. M.S. Aswathy (Scientist), Dr. R. Dharmaraju (Chief Scientist), Dr. D. P. Kamango (Chief Scientist)

Mentors: Dr. D. P. Kamango (Chief Scientist)

CSIR - Central Building Research Institute, Roorkee
OPEN TO ALL - E-Certificate will be given to participants who will attend all the sessions

Webinar Brochure

The screenshots display various technical presentations from the webinar. Key topics include:

- Excavation Systems - Open Excavation:** Shows diagrams and photos of excavation sites.
- Challenges in Underground Metro Construction:** A presentation by Dr. N. Kumar Pillayam, General Manager, TCS Project Limited.
- Design and Construction of Underground Metros:** A presentation by Dr. Makarand G. Khare, Director, Terranova Consultants.
- Embedded Retaining Structures for Urban Infrastructure in India:** A presentation by M. Kumar, Head - Engineering & Technology, L&F Geotechnics.

Screenshots of Technical Sessions