



खान मंत्रालय
MINISTRY OF
MINES



EROS HOTEL, NEHRU PLACE
NEW DELHI

SEPTEMBER 22-27

2024

ISRM International Symposium 2024
& 13th Asian Rock Mechanics Symposium on

Advances in Rock Mechanics -INFRASTRUCTURE DEVELOPMENT

www.arms13.org

JOINTLY ORGANIZED BY ISRM INDIA
AND CBIP UNDER THE AEGIS OF ISRM

KNOWLEDGE
PARTNER



ISRM (India)



ESTD. 1927
New Delhi



IIT, Roorkee

ARMS 13



WELCOME TO ARMS13

On behalf of ISRM, I am pleased and honored to invite you to the ARMS13, the 13th Asian Rock Mechanics Symposium, which is the 2024 ISRM International Symposium. Since its inaugural event in 1997, ARMS has been held in eight Asian countries over the past 27 years, including Korea, China, Japan, Singapore, India, Iran, Indonesia, and Vietnam. The ISRM is deeply grateful to India NG and the Organizing Committee for hosting ARMS13 in India, following the ARMS6, which was held in New Delhi in 2010.

The ARMS13 organizing committee has been diligently preparing for the event, which has received a total of 338 abstracts from 28 countries so far. The event program includes 6 short courses and 5 workshops. Keynote lectures will be delivered by Dr. Nick Barton, Prof. Ömer Aydan, and Prof. Krishna Panthi, who are esteemed leaders in our society. Additionally, the 2024 ISRM Franklin Lecture will be delivered by Dr. Vikram Vishal from India, and the ISRM Rocha Medal Lecture will be presented by Dr. Kazuki Sawayama. The 9th Early Career Forum, organized by the ISRM Education Fund Committee, will also take place, featuring presentations by young engineers invited from various countries in Asia.

The theme of this symposium, "Advances in Rock Mechanics - Infrastructure Development," holds significant importance for India's infrastructure. India has the world's second-largest road network, spanning over 6 million km. Its railway system extends approximately 126,000 km, with many super-long tunnels. There are about 200 hydroelectric power plants, with a total generation capacity of 47 GW. Coal production is the second largest in the world, at 760 billion tons annually. Oil storage stands at 38 million barrels, covering 9.5 to 22 days of the country's consumption. The application of rock mechanics in India's ongoing infrastructure projects is essential and sure to expand significantly. I am certain that this symposium will facilitate a rich exchange of knowledge and experiences related to the theme and various subtopics.

The ISRM sincerely invite you to visit India not only to participate in ARMS13 but also to experience the country's vibrant cultural assets. I extend my deep gratitude to Prof. Mahendra Singh, the Chairman of the Organizing Committee, and to the members of the Committee for making the Symposium most successful.

I look forward to meeting you in New Delhi in September.

Prof. Seokwon Jeon

President, International Society for Rock Mechanics and Rock Engineering

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SYMPOSIUM THEMES

01 Advancement in Site Investigations and Characterization of Rocks & Rock Masses	02 Application of Advance Geophysical Investigation Techniques	03 Constitutive Modelling of Rocks and Soils	04 Rock Excavation Techniques - Drilling, Blasting
05 Mechanical Cutting, Rock and Dump Slope Stability and Foundation Analysis	06 Rock Supports, Instrumentations & Ground Improvement	07 Design Methods and Analysis – Analytical and Numerical Modelling	08 Preservation and Restoration of Ancient Monuments
09 Deep Underground Mining Methods & Instrumentation	10 Underground Space Development for Storages and other purposes	11 Innovations and Applications of IOT in Rock Engineering	12 Structural Health Monitoring and Rehabilitation
13 Advancement in Laboratory Testing Techniques	14 Geo-hazards and Risk Management	15 Green Technologies for Zero Waste Generation and Sustainable Development	16 Case Studies

WORKSHOP & SHORT COURSES TOPICS

DAY 1 (22nd September 2024)

SC-1	9:30 AM - 5:30 PM	Advances in Numerical analysis in Rock Engineering (Full day): Rock Science
WS-1	9:30 AM - 5:30 PM	Smart Mining and Rock Engineering (Full Day) <i>Prof. Dheeraj Kumar, Dy. Director, IIT (ISM) Dhanbad, India</i> <i>Prof. Debasis Deb, IIT Kharagpur India</i>
WS-2	9:30 AM - 5:30 PM	Rock Grouting (Full Day) Hydrogeology and grouting (A. Fransson) Selecting grouting pressure (M. Akx) Refusal and the minimal flow criterion (Dr. Mohamed El Tani)
WS-3	9:30 AM - 1:00 PM	Integrating Rock Mass Classification Techniques and Tunnelling Technology (Half Day) <i>Dr. BineshianHoss; Principal, Technical Director at Amberg Engineering; Adelaide, South Australia, Australia</i>
WS-4	2:00 PM- 5:30 PM	Avantech Engineering Consortium Pvt. Ltd.

DAY 2 (23rd September 2024)

WS-5	9:30 AM - 5:30 PM	Rockfall Protection and Landslide Stabilization Solutions Integrated With IOT Technology (Full day)
SC-2	9:30 AM - 5:30 PM	Rock Mechanics in Tunnelling Techniques (Full day) <i>Prof. Debasis Deb, IIT Kharagpur, India</i> <i>Prof. V.M.S.R. Murthy, IITISM Dhanbad, India</i>
SC-3	9:30 AM - 5:30 PM	Numerical Analysis with FLAC2D/FLAC3D (Full day) <i>Rockmech IT Solutions Private Limited</i>

THE VENUE

Located in Nehru Place in New Delhi, Eros Hotel is known for its contemporary design and comfort paired with old world hospitality charm. Its close proximity to the business areas in South Delhi and choices for shopping, entertainment and tourist locations makes it a truly convenient choice for the travelers. Facing the magnificent Lotus Temple, this hotel defines indulgence at a whole new level. In spite of being surrounded by the hustle and bustle of mainstream urban life, the hotel boasts an ambience that speaks of harmony and elegance.



EXHIBITION

The cynosure of ARMS13 will be a multi-functional exhibition showcasing products and services relevant to the Rock Mechanics and Rock Engineering Community. All exhibits will be housed in a single booth offering delegates the opportunity to explore presentation, poster displays and network – all while enjoying complimentary refreshments. Don't miss out on the opportunity to showcase your brand at our upcoming event. We are planning to set up over 22 stall/booths, each measuring (3M×2M). The Exhibition layout is given blow.

With limited space available for exhibitors, booths are filling up fast and are allocated on a first-come, first-served basis. Secure your preferred booth now to ensure maximum visibility and engagement with your target audience! The tariff for each stall is as under:

Indian Exhibitor
Foreign Exhibitor

INR 2 lacs + GST @ 18%
USD 4,000 + GST @ 18%



SPONSORSHIP

ARMS 13 provides excellent opportunities to national and international organizations, central and state government organizations, public sector undertakings, industrial organizations, equipment manufacturers, entrepreneurs, financial and funding institutions, consulting firms, and construction companies to join the event as a Platinum, Gold, or Silver sponsor or as a Supporter. Sponsors will benefit from prominent visibility on the event's website, mobile app, backdrops, banners, signage, publicity materials, and all other collaterals. Additionally, sponsors will have the exclusive opportunity to send delegates and showcase their products and services at the exhibition without any charges. Details regarding entitlements and the fee structure for sponsorship are provided below. Act promptly to secure your spot, as opportunities are limited!

	PLATINUM SPONSOR	GOLD SPONSOR	SILVER SPONSOR	SUPPORTER
	USD 15,000 (₹10 LAC)	USD 8,000 (₹5 LAC)	USD 4,000 (₹2 LAC)	USD 2,000 (₹1 LAC)
Delegates	10	5	3	2
Speaking Opportunity	✓	X	X	X
Logo on ARMS13 website home page	✓	X	X	X
Exhibition Booth (3M×2M)	✓	✓	X	X
Distribution of Literature/Brochures	✓	✓	X	X
Event specific recognition Logo on promo materials	✓	✓	✓	✓
Sponsor recognition sign at Exhibition Hall	✓	✓	✓	✓
Full page advertisement in the Publication	✓	✓	✓	✓
Logo on Mobile App, Sponsor page of ARMS13 website link to corp. website, On-site Signage & Sponsor page of Final Bulletin	✓	✓	✓	✓

As per Gol Rule - *18% GST under Reverse charge Mechanism

REGISTRATION

The participants may register for the Symposium on website www.arms2024.org. Participants can also send the registration form by e-mail to the Symposium Secretariat along with payment. It is mandatory that at least one of authors of each paper shall register for the symposium for the paper to be included in the symposium proceedings. The fee structure is given below:

	INDIAN NATIONAL				FOREIGN NATIONAL			
	ISRM Member	ISRM Non-Member	Student Member	Student Non-Member	ISRM Member	ISRM Non-Member	Student Member	Student Non-Member
Only Symposium (3 days)	₹ 20,000	₹ 25,000	₹ 8,000	₹ 10,000	USD 500	USD 625	USD 250	USD 312
Workshops + Short Courses (2 Days)	₹ 8,000	₹ 10,000	₹ 4,000	₹ 5,000	USD 300	USD 375	USD 150	USD 187
Symposium + all workshops + all Short Courses (5 Days)	₹ 25,000	₹ 31,250	₹ 10,000	₹ 12,500	USD 680	USD 850	USD 340	USD 425

Accompanying Person : Indian National - ₹ 10,000, Foreign National - USD 300

*Retired Person must have attained the age of 60 years or before 1st July 2024 and must not be engaged in any regular employment.

Symposium Registration Fee is inclusive of taxes @18%.
All payments to be made by bank demand draft/cheque payable at par in New Delhi, drawn in favour of "THE COMMITTEE OF THE ISRM " or by bank transfer to Account No. 0157101031512 (Canara Bank, Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi 110021) MICR Code No. 110015007; IFSC Code: CNRB0000157; Swift Code: CNRBINBDBFS

25% Discount
for Retired Persons*

10% Early Bird Discount
up to 14th June 2024

PROGRAM

at a glance

Abstract Submission Deadline	- 15 th January 2024
Notification of Abstract Acceptance	- 15 th February 2024
Deadline for Full paper submissions	- 10 th June 2024
Notification of Review for Full paper submissions	- 30 th June 2024
Deadline for Early-Bird Registration	- 14 th June 2024
Camera ready paper submissions	- 21 st June 2024

DATE	MORNING	AFTERNOON	EVENING
Sunday 22 Sept. 2024	<ul style="list-style-type: none"> ♦ Workshops ♦ Short Courses ♦ ISRM Board Meeting 	<ul style="list-style-type: none"> ♦ Workshops ♦ Short Courses ♦ ISRM Board Meeting 	
Monday 23 Sept. 2024	<ul style="list-style-type: none"> ♦ Workshops ♦ Short Courses ♦ ISRM Commission Meetings ♦ Joint Technical Committee Meeting 	<ul style="list-style-type: none"> ♦ Workshops ♦ Short Courses ♦ ISRM Council Meeting ♦ Asian Council Meeting 	
Tuesday 24 Sept. 2024	<ul style="list-style-type: none"> ♦ Registration ♦ Symposium Opening ♦ Rocha Medal Award ♦ Exhibition Opening ♦ Poster Session Display 	<ul style="list-style-type: none"> ♦ Registration ♦ Symposium Sessions ♦ Exhibition ♦ Poster Session Display ♦ Early Career Forum ♦ Rock Bowl 	<ul style="list-style-type: none"> ♦ Welcome Reception ♦ Student's night
Wednesday 25 Sept. 2024	<ul style="list-style-type: none"> ♦ Registration ♦ Symposium sessions ♦ Exhibition ♦ Poster Sessions 	<ul style="list-style-type: none"> ♦ Registration ♦ Symposium sessions ♦ Exhibition ♦ Poster Sessions ♦ Rock Bowl 	<ul style="list-style-type: none"> ♦ Cultural Evening ♦ Dinner
Thursday 26 Sept. 2024	<ul style="list-style-type: none"> ♦ Registration ♦ Symposium sessions ♦ Exhibition ♦ Poster Sessions 	<ul style="list-style-type: none"> ♦ Symposium sessions ♦ Exhibition ♦ Poster Sessions ♦ Rock Bowl ♦ Closing Ceremony 	
Friday 27 Sept. 2024	<ul style="list-style-type: none"> ♦ Technical Visit ♦ Site seeing 	<ul style="list-style-type: none"> ♦ Technical Visit ♦ Site seeing 	



ISRM (India)

ISRM (India) SECRETARIAT

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