

7th International Conference

# DAM SAFETY 2025 Resilient Infrastructure for A Sustainable Future

20th - 21st March 2025, New Delhi

### Organised by





Central Board of Irrigation & Power

### Supported by





### Knowledge Partners\*









\*Consent awaited

### INVITATION FROM THE PRESIDENT OF INCOLD



Dams play a critical role in sustainable water management and energy transition worldwide. The reservoirs they create form the backbone of economic growth and the well-being of communities, making their long-term operational integrity indispensable. To ensure these vital assets continue to serve future generations, dam safety has emerged as a specialized discipline.

With advancements in technology and the evolving challenges posed by aging dams, seismic risks, and changing flood patterns, it is imperative to continually update the expertise of dam safety professionals, owners, contractors, consultants, and regulators. Many older dams require modern research and rehabilitation to adapt to current safety standards, while even relatively newer structures may face risks due to changing environmental factors.

Recognizing the need for collaborative solutions, INCOLD is committed to provide a platform for professionals to address the unique challenges of dam safety. This forum will facilitate discussions on cutting-edge technologies, economic considerations, and disaster mitigation strategies.

By bringing together stakeholders-including regulators, researchers, and service providers-we aim to create a shared knowledge base that advances the safety and resilience of dams globally.

On behalf of INCOLD, I am delighted to invite you to the International Conference on Dam Safety 2025, themed "Resilient Infrastructure for a Sustainable Future," to be held on 20-21 March 2025 at CBIP, New Delhi. This conference will serve as an invaluable opportunity for knowledge exchange and collaboration among leading experts.

We look forward to your participation in this important event.

R.K. Vishnoi

President, INCOLD &

Chairman & Managing Director, THDC



### **BACKGROUND & ANNOUNCEMENT**

INCOLD has built a prestigious legacy by organizing its signature Dam Safety Conference at regular intervals, with the last six conferences held successfully in Chennai (2015), Bengaluru (2016), Roorkee (2017), Thiruvananthapuram (2018), Bhubaneswar (2019), and Jaipur (2022). Each of these events garnered an overwhelming response, attracting significant participation from professionals both from India and across the globe. As we approach the 2025 edition, it will mark the seventh conference in this esteemed series. India, with over 6,300 large dams and thousands of medium and small dams, ranks third globally in dam construction. These critical infrastructures serve essential functions in water supply, irrigation, hydropower, and flood control. However, in the face of aging infrastructure, evolving climatic challenges, and an increasing demand for sustainability, ensuring the safety of these dams has become a national priority. The Dam Safety 2025 Conference, organized by INCOLD, aims to create a collaborative platform for stakeholders to engage in discussions on cutting-edge technologies, innovative practices, and emerging challenges in dam safety management. This two-day event will bring together global experts, policymakers, engineers, and researchers to foster knowledge exchange, identify actionable strategies, and strengthen India's dam safety framework. Join us on March 20-21, 2025 for this landmark conference, featuring thematic sessions, technical presentations, interactive panel discussions, and case studies designed to shape the future of dam safety worldwide.

### THEMES AND TOPICS

# Pioneering Technologies for Dam Health Assessment

- o Advanced dam inspection methods (geophysical and underwater investigations).
- o Seepage and leakage detection technologies.
- o Crack mapping and structural integrity analysis.
- o Material testing innovations and challenges.
- Case studies showcasing breakthroughs in dam health assessment.

### **Smart Monitoring and Surveillance Systems**

- o Real-time dam health monitoring and automated instrumentation.
- o Advanced data acquisition and processing systems.
- o Earthquake hazard assessment through innovative monitoring techniques.
- o Satellite, terrestrial radar, and laser-based surveillance systems.
- o Hydro-meteorological and inflow forecasting systems.
- Communication and public address (PA) systems for emergency preparedness.
- Case studies on successful implementation of modern monitoring systems.

# Cutting-Edge Techniques for Dam Rehabilitation

- o Innovative rehabilitation techniques and use of geomembranes.
- o Underwater works & foundation grouting advancements.
- o Reservoir de-sedimentation practices.
- o Pre-rehabilitation investigations and project management challenges.

- o Refurbishment of gates and other critical components.
- o Institutional capacity building for rehabilitation projects.
- o Case studies on successful dam rehabilitation projects.

### Climate Resilience in Dam Safety

- o Understanding climate change impacts on dam safety.
- o Flood risk management and design flood reviews.
- o Management of glacial lake outburst floods (GLOFs).
- o Optimization of reservoir operation for climate adaptation.
- o Integrated reservoir management strategies.

# Comprehensive Safety Evaluation of Existing Dams

- o Structural, hydraulic, hydrologic, and geotechnical safety assessments.
- o Risk analysis and risk management frameworks.
- Comprehensive safety evaluations and prioritization of safety measures.

# **Ensuring Safe Operation and Disaster Preparedness**

- o Emergency action plans (EAPs) for disaster response.
- o Resources and capacity building for emergency management.
- o Integration of operation, maintenance, and disaster management frameworks.
- o Best practices in disaster risk reduction and resilience.

### **Learning from Dam Failures**

- o Analysis of causes of dam failures.
- o Case histories of significant dam failure incidents.
- o Lessons learned & their application in safety frameworks.

### WHO SHOULD ATTEND?

- o Dam Owners and Operators: Representatives from government water resources departments, irrigation authorities, PSUs, and private dam operators.
- o Regulators and Policymakers: Officials from the Ministry of Jal Shakti, Central Water Commission (CWC), and State Dam Safety Organizations (SDSOs).
- o Engineers and Consultants: Civil, geotechnical, and hydropower engineers involved in dam construction, maintenance, and rehabilitation.
- o Technology Providers: Companies offering monitoring, inspection, and rehabilitation technologies.
- o Academicians and Researchers: Experts in hydrology, structural engineering, and climate change.
- o Disaster Management Authorities: Professionals involved in emergency planning and public safety.
- o International Experts: ICOLD members and global organizations specializing in dam safety.

### **KEY TAKEAWAYS FOR PARTICIPANTS**

- 1. Technical Insights: Learn about the latest tools and technologies for dam safety assessment, monitoring, and rehabilitation.
- 2. Best Practices: Gain knowledge from global and national case studies on dam safety management and incident response.
- 3. Regulatory Updates: Understand the implications of the Dam Safety Act, 2021, and its impact on dam management in India.
- 4. Collaboration Opportunities: Network with policymakers, industry leaders, and global experts to foster partnerships for dam safety initiatives.
- 5. Actionable Strategies: Receive a comprehensive roadmap for implementing safety evaluations and operational improvements.
- 6. Resource Materials: Access detailed technical papers, case study presentations, and actionable recommendations.

### CALL FOR PAPERS

The experts, researchers, engineers, and industry professionals are invited to contribute papers/ presentations on the topics and share their knowledge, experiences, and groundbreaking research to enrich the discourse and drive advancements in this field. The timeline for submission and acceptance of papers is as follows:

- Full papers: 20th Feb., 2025
- Communication of accepted papers: 25th February 2025 . Submission of PowerPoint slides (limited to 12) for oral presentation: 10th March 2025

### **DATES & VENUE**

The date for the event is 20 - 21 March 2025 (Thursday - Friday) at CBIP Hall, (1st Floor), CBIP Building, Malcha Marg, Chanakyapuri, New Delhi

### OFFICIAL LANGUAGE

The official language for the event is English.

### **REGISTRATION FEE\***

- The registration fee for participation is Rs.12,000/- per participant.
- There would be discounted fee of Rs.10,000/- per participant, applicable for Members of CBIP & INCOLD. Fee per person applicable for group nomination (upto 5 no.) will be Rs. 9,000/- (for members) and Rs. 11,000/- non-member.
- 50% discount in the fee will be applicable for Student and Young Participants (up to 35 years of age)

\*GST 18% will be charged extra on Registration fee.

The registration fee includes registration kit, working lunch, tea/ coffee during the event only. The participants will have to make their own arrangement for boarding and lodging, transport, etc. Registration fee once paid will not be refunded. Spot registration facility will also be available provided prior Information is received.

### **PAYMENTS**

The payment related to the event is to be remitted either through cheque in favour of "THE COMM FOR INCOLD" or through bank transfer to the following account:

Name of Bank: Canara Bank, Delhi Diplomatic Enclave, 7/48,
 Malcha Marg, Chanakyapuri, New Delhi

Account No. 0157101031509

MICR Code No. 110015007

· Account Holder Name: "THE COMM FOR INCOLD"

IFSC Code: CNRB0000157

· Swift Code: CNRBINBBDFS

Bank charges if any, must be borne by the participants and should not be deducted from the amount remitted.

### OPPORTUNITIES FOR SPONSORSHIP

Scope exists for organizations to be the Sponsor on lump sum payment with following attendant benefits:

# Platinum Sponsor : Rs. 3,00,000/-

- 10 delegate passes for participation in the conference
- · Company logo on main banner
- · Circulation of Company Literature
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- · Speaking Opportunity
- · Table Space to display
- Invitation to the key person of the organisation as special invitee.
- Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event.
- One year complementary Institutional membership of INCOLD to Platinum sponsor besides other privileges

# Gold Sponsor: Rs. 2,00,000/-

THE COMM FOR INCOLD

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- Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event

### Silver sponsor : Rs. 1,00,000/-

- 03 delegate passes for participation in the conference
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- Announcement
   Thanking sponsor

### OPPORTUNITIES FOR TABLE TOP DISPLAY

Limited Slots are available @ Rs. 50,000/- Plus GST, for display of products, services & Innovations.

### **SECRETARIAT**

All correspondence relating to the event should be addressed to:

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# 7<sup>th</sup> International Conference DAM SAFETY 2025

# Resilient Infrastructure for A Sustainable Future

20 - 21 March, 2025, New Delhi CBIP, Malcha Marg, Chankyapuri, New Delhi

(E-mail: contact@incold.co.in)

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Is enclosed.  In ank Details for online payment  Name of Bank: Canara Bank, Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi  Account No. 0157101031509  MICR Code No. 110015007  Account Holder Name: "THE COMM FOR INCOLD"  IFSC Code: CNRB0000157  Swift Code: CNRBINBBDFS  I intend to participate in the deliberations of the Conference.  Is enclosed.  REGISTRATION FEE*  (per participant)  Non Members: Rs.12,000/-  Members (CBIP & INCOLD): Rs.10,000/-  Group Nomination (upto 5 no.):  Members: Rs. 9,000/-  Non members: Rs. 9,000/-  Non members: Rs. 11,000/-  Student & Young Participants (up to 35 years of age): 50% discount	Mobile No	E-mail ID
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