



88th Annual Meeting
INTERNATIONAL COMMISSION ON LARGE DAMS
&
Symposium

SUSTAINABLE DEVELOPMENT OF DAMS AND RIVER BASINS

APRIL 4-10, 2020 - NEW DELHI, INDIA

Call for Abstracts



Organised by



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SYMPOSIUM

SUSTAINABLE DEVELOPMENT OF DAMS AND RIVER BASINS – 8th - 9th April, 2020

CALL FOR ABSTRACTS

SYMPOSIUM THEMES

1. Modern Technologies in Survey and Investigation for Sustainable Dam Development
2. Simulation Methodologies for Dam Analysis and Design
3. Advances in Dam Safety, Risk Assessment and Management
4. Advances in the Rehabilitation of Dams and Appurtenant works:
 - (a) Innovations and Adaptations in Intakes, Spillways and Gates
 - (b) Advancement in Materials for Dam Repair and Rehabilitation
 - (c) New Approaches in Energy Dissipation Arrangements in High Velocity Spillways.
 - (d) Causes of Damages and Structural Performance Evaluation of Dams.
 - (e) Rehabilitation Technologies to Enhance Dam Safety
 - (f) Underwater Inspection, Robotics and Repair Methodologies for Dams.
 - (g) Modernization, Optimization and Rehabilitation of Aging Dams
 - (h) Dam Surveillance and Monitoring
5. River Basin Development and Management including Optimization of Reservoirs Operation
6. Innovative Construction Methodology and Contracting Practices
7. Impacts of Climate Change – Sustainable Dams and Hydropower Development including Pumped Storage
8. Engineering Challenges and Safety of Tailing Dams.

Authors are invited to submit abstracts on any of the above themes. All accepted papers will be published electronically in the Symposium Proceedings.

WORKSHOPS – 7th & 10th April, 2020

THEMES

The following workshops are being organized by INCOLD during the ICOLD 2020 event, which will offer good scope for exchange of experiences to facilitate exposure of state of the art technology in all aspects of dam engineering, considering participation of eminent dam experts throughout the world. These workshops will be useful for planners, decision makers, designers, scientists, researchers, engineers, geologists, managers, practitioners, regulatory bodies, government departments, developers, contractors, consultants and students working in the field of dam design, hydropower development, environmental engineering, and structural hydraulics.

1. Workshop on Numerical Analysis of Dams

Numerical modelling has become an indispensable and powerful tool for design and safety assessment of dams. The benchmark-workshop being organized by INCOLD under the aegis of ICOLD Technical Committee A “Computational Aspects of Analysis and Design of Dams” will provide an excellent opportunity for engineers, researchers and operators to present and exchange their experiences and the latest developments related to the design, performance and monitoring of dams.

2. Workshop on Roller Compacted Concrete Dams

RCC dams have the virtues of saving a great deal of concrete, building quickly, bringing project cost down, early completion of the project and so on. Hence, this technique of constructing dams has quickly spread and applied since it came out. Today, there are more than 400 RCC dams in more than 40 countries where great successful experiences have been observed. There appears a need to create awareness about RCC technology including planning, design, construction, equipment, cost aspects, O&M etc. especially highlighting the scope for utilization of bulk quantity of fly ash being produced annually in thermal power stations in the country.

3. Workshop on Reservoir Operation for Handling of Extreme Events

Over the years, India has frequently witnessed the floods causing numerous loss of lives and extensive damages to the infrastructure, agricultural production and other properties in different parts of the country. In recent years, severe floods were experienced in Uttarakhand, Jammu & Kashmir, Chennai and Kerala due to excessive rains have proved that operation policies of existing dams and the structural and non-structural measures are less effective due to anthropogenic activities in the river basins. Such flooding is attributed to the climate change. Thus, there is need for a paradigm shift from flood control to flood management, which has been recognized only during the past decade.

4. Workshop on Life Extension Technologies and Strategies for Aging Dams

This Workshop will provide participants an understanding of how dam owners evaluate decisions relating to extending the life of a dam and new technologies and techniques that are used globally. The Workshop will identify the common aging mechanisms that relate to potential failure of dams. Some of the aging processes that will be examined include concrete deterioration mechanisms, reduced drain efficiency, erosion of the downstream foundation, erosion due to high velocity, cavitation, gate reliability issues and failure of water stops. The Workshop will conclude with case studies that explore the impact of key aging mechanisms on the safety of concrete dams.

5. Workshop on Sediment Management in Reservoirs for Sustainable Development

Sedimentation poses a significant threat to the longevity, usefulness, and sustainable operations of both storage reservoirs and run of the river projects. Over time, sediment builds up in reservoirs and displaces usable storage

volume, which in turn negatively affects hydropower generation reduces the reliability of domestic and irrigation water supply, flood management services and degrades aquatic habitat. Climate change is also expected to increase sediment loads in many rivers, amplifying the threat of reservoir sedimentation. The workshop will offer a good scope for exchange of experiences in order to understand how efficiently sediment control measures can deal with reservoir sedimentation, their impacts on sediment loads and on trapping of sediment. It would provide exposure of state of the art technology in all aspects of sediment management, especially considering participation of eminent international experts.

6. Workshop on Seismic Analysis for Dam Design and Safety Evaluation of Existing Dams

The workshop will provide opportunity for dissemination of the international state of the art and good practices in the seismic design of dams by the global experts, which have taken place during the last 50 years. Deliberations will include:

- From pseudo-static to dynamic seismic analysis of dams.
- From seismic coefficient to safety evaluation earthquake ground motion.
- From single ground shaking hazard to multiple seismic hazards.
- From safety factors to rational seismic performance criteria.

Authors are invited to submit abstracts on any of the above themes. All accepted papers will be published electronically in the Workshop Proceedings.

ABSTRACTS SUBMISSION DATE

The deadline for submitting abstracts is 30th September 2019

METHOD OF SUBMISSION

- All abstracts must be submitted only via the online form that is accessible after Login.
- Authors will be notified about the delivery of their abstract by e-mail immediately. In case you do not receive confirmation within 24 hours, please check your spam folder and in case of no confirmation, please contact at : abstracts-papers@icold2020.org.
- Authors will have access to their abstracts until the deadline and will have possibility to edit already submitted abstracts or submit another one.
- All correspondence concerning the abstract will be sent to abstract submitting author's e-mail address.

ABSTRACT SUBMISSION INSTRUCTIONS

- Abstracts can be submitted on the topics listed above.
- Abstracts and papers have to be written in English.
- Submitted abstracts must be original. Abstracts previously published or presented at an international scientific meeting should not be submitted.
- Fill in the submitting author's name and e-mail address properly - these contact details will serve for further correspondence with the author(s).

ABSTRACT LAYOUT

- The length of the abstracts should not be more than 200 words, plain text.
- Title: Make the title of the abstract brief, clearly indicating the nature of the investigation, etc. Use a capital letter for the first letter in the title only (DO NOT capitalize each word).
- Names of the authors: Submit the full given name(s) and the family name. Do not include degrees or professional titles.

IMPORTANT DATES

30th September 2019 : Abstract submission deadline for symposium and Workshops.

CONTACT

If you have any questions regarding abstract submission, please contact, E-mail : abstracts-papers@icold2020.org

Schedule for Technical Papers:

- **30th September, 2019**: Deadline for abstract submission and confirmation of your commitment to produce a technical paper as well as a presentation. A French version of your abstract is not essential at this stage; however, it will be necessary for the completed paper. Please note that the Technical Committee can assist you in this regard.
- **30th November, 2019**: Notification to be sent to authors for acceptance of abstracts.
- **31st December, 2019**: Completed paper submission in MS Word (DOC) and Acrobat (PDF) format.
- **31st January, 2020**: Deadline for presenters to register for ICOLD 2020. If authors chosen for presentation are not registered by this date, they will be removed from the program and will not be allowed to present their submissions at the Symposium.
- **31st January, 2020**: Transmission in PDF format of the Poster to be shown at the poster session (for authors chosen for Poster presentation). Authors are responsible for printing their poster for the Symposium in A0 format.
- **31st January, 2020**: Transmission in PPT format of presentation for the Symposium (for authors chosen for Oral presentation). The time allowed for oral presentation is 15 minutes.

PROGRAM AT A GLANCE

Date	Technical Programme	Accompanying Person Programme	Social Programme
Saturday 4 th April 2020	<ul style="list-style-type: none"> ICOLD Board Meeting (14:00 – 18:00 hrs.) 		Dinner of ICOLD Board + INCOLD Reps. (19:30 – 22:00 hrs.)
Sunday 5 th April 2020	<ul style="list-style-type: none"> Registration (09:00 – 17:00 hrs.) ICOLD Board Meeting (09:00 – 17:00 hrs.) ICOLD Board + Local Organizing Committee (17:00 – 19:00 hrs.) Congress Questions Panel meeting (17:00 – 19:00 hrs.) 	New Delhi City Tours	Dinner of Board + LOC and Tech. Comm. Chairmen (20:00 – 22:00 hrs.)
Monday 6 th April 2020	<ul style="list-style-type: none"> Registration (09:00 – 17:00 hrs.) Meeting of ICOLD Board and Chairmen of Technical Committees (09:00 – 12:00 hrs.) Technical Committee Workshops (14:00 – 18:00 hrs.) Young Engineers Forum (18:00 – 19:30 hrs) 	City Tours	Welcome Reception (20:00 – 22:00 hrs.)
Tuesday 7 th April 2020	<ul style="list-style-type: none"> Technical Committees Meetings (09:00 – 17:00 hrs.) – 27 Break Outs Technical exhibition opening ceremony ICOLD Regional Clubs Meetings (17:00 – 19:00 hrs.) Workshops – 3 Nos. (09:00 – 17:00 hrs.) 	City Tours	Young Engineers Social evening Specifics Private Functions (20:00 – 22:00 hrs)
Wednesday 8 th April 2020	<ul style="list-style-type: none"> Symposium Opening Ceremony (09:30-11:00 hrs.) Press Conference (Political, Board, INCOLD and Journalists) 11:00 – 11:30 hrs Symposium Contd. (11:30 – 18:00 hrs.) Technical exhibition Francophone delegates meeting (18:00 – 19:00 hrs.) 	City Tours	Cultural Event (19:30 – 22:00 hrs.)
Thursday 9 th April 2020	<ul style="list-style-type: none"> Symposium on Sustainable Development of Dams and River Basins (09:00 – 18:00 hrs.) Technical Tours /Visit to Agra (08:00 – 19:00 hrs) Technical Exhibition 	City Tours	Specific Private Receptions (20:00 – 22:00 hrs.)
Friday 10 th April 2020	<ul style="list-style-type: none"> 88th ICOLD General Assembly (09:00 – 18:00 hrs.) Workshops – 3 Nos. (09:00 – 18:00 hrs.) 	City Tours	Farewell Dinner (19:30 – 22:30 hrs.)

ICOLD 2020 Annual Meeting/Symposium Secretariat

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