

CONFERENCE INAUGURATION PROGRAM

Venue: Conference Hall, The Leela Kovalam, Thiruvananthapuram, India
Tuesday, 23rd January 2018

1000 - 1003 h	Introduction and ushering in of the Dignitaries	Comperer
1003 -1006 h	Invocation	MBS Youth Choir Group
1006 -1010 h	Lighting of Lamps	All the Dignitaries
1010 -1015 h	Welcome Address	Dr K. Ellangovan IAS CMD, Kerala State Electricity Board Ltd.
1015-1020 h	An overview of DRIP	Shri S. Masood Husain Chairman, Central Water Commission
1020 -1025 h	World Bank Initiatives for Dam Safety Management	Mr. Satoru Ueda Lead Dam Specialist, World Bank, Washington, USA
1025 - 1030 h	Release of Dam Safety Guidelines and Launching of Dam Health and Rehabilitation Monitoring Application (DHARMA), a Software tool	
1030 - 1035 h	Inaugural Address	Shri Pinarayi Vijayan Hon'ble Chief Minister, Govt. of Kerala
1035 - 1040 h	Global Challenges in Dam Safety Management	Prof. Dr. Anton J. Schleiss President of International Commission of Large Dams ICOLD, EPFL, Lausanne, Switzerland
1040 - 1045 h	Dam Safety Management- Lessons from Australia	Dr. Nicholas Schofield Chief Executive Officer, Australian Water Partnership, Australia
1045 - 1050 h	Lessons Learnt from DRIP	Shri Tom Jose IAS Additional Chief Secretary, Water Resources Department, Govt. of Kerala
1050 - 1055 h	Address by the Guest of Honour	Shri Mathew T. Thomas Hon'ble Minister for Water Resources, Govt. of Kerala
1055 - 1100 h	Address by the Guest of Honour	Shri M M Mani Hon'ble Minister for Electricity, Govt. of Kerala
1100- 1110 h	Presidential Address	Shri Arjun Ram Meghwal Hon'ble Minister of State, MoWR, RD &GR, Govt. of India
1110 - 1115 h	Vote of Thanks	Shri Sanjay Kundu Joint Secretary, MoWR, RD&GR, Govt. of India
1130- 1200 h	Tea	

EXHIBITION INAUGURATION

Venue: The Leela Kovalam
Date & Time: Tuesday, 23rd January 2018; 1115 h – 1130 h

By

Shri Arjun Ram Meghwal
Hon'ble Minister of State, MoWR, RD & GR, Govt. of India

Shri Mathew T. Thomas
Hon'ble Minister for Water Resources, Govt. of Kerala

Shri M. M. Mani
Hon'ble Minister for Electricity, Govt. of Kerala

In the presence of other Dignitaries

PRESS CONFERENCE

Venue: The Leela Kovalam
Date & Time: Tuesday, 23rd January 2018; 1130 h – 1200 h

Shri Arjun Ram Meghwal
Hon'ble Minister of State, MoWR, RD & GR, Govt. of India

Shri Mathew T. Thomas
Hon'ble Minister for Water Resources, Govt. of Kerala

Shri M. M. Mani
Hon'ble Minister for Electricity, Govt. of Kerala
and other Dignitaries

1100 - 1105 h	Presentation of Press Note	Shri S. Masood Husain Chairman, Central Water Commission
1105 - 1115 h	Press Conference – responding to the questions from the Press	By the Dignitaries on the Dais
1115 - 1130 h	Tea	

PLENARY SESSION
SUSTAINABLE DAM SAFETY INITIATIVES

Venue: Conference Hall
Date & Time: 23 January 2018; 1200 – 1330 h

Chairman	S. Masood Husain Chairman, Central Water Commission, New Delhi, India
Co-Chairman	Shri Sanjay Kundu Joint Secretary, MoWR, RD&GR, Govt. of India
Rapporteur	Gulshan Raj , Chief Engineer, Central Water Commission, New Delhi, India

S.N.	Theme	Eminent Speaker	Duration
1.	Challenges in Dam Safety Management in India	A. B. Pandya Secretary General, The International Commission on Irrigation and Drainage (ICID), and Former Chairman, Central Water Commission, New Delhi, India	15 min
2.	Sustainable and Safe Development of Dams and Water Reservoirs as Vital Water Infrastructures in this Century – The Important Role of ICOLD	Prof. Dr. Anton J. Schleiss President of International Commission of Large Dams ICOLD, EPFL, Lausanne, Switzerland	30 min
3.	Regulatory Framework for Dam Safety-World Bank Perspective	Satoru Ueda Lead Dam Management Specialist, World Bank, Washington, USA	20 min
4.	Dam Safety, Maintenance and Long Service Life the Main Technical Factors of Sustainable Storage Dams	Dr. Martin Wieland Chairman, ICOLD Committee on Seismic Aspects of Dam Design, Poyry Switzerland Ltd., Zurich, Switzerland	20 min

TECHNICAL SESSION - 1A
UNCERTAINTIES AND RISK MANAGEMENT IN DAMS

Venue: Conference Hall

Date & Time: 23 January 2018; 1430 – 1600 h

Chairman	Dr. Desmond Hartford Principal Engineering Scientist, BC Hydro, Canada
Co-Chairman	D.K. Sharma Chairman, Bhakra Beas Management Board, Chandigarh, India
Rapporteur	Vivek Tripathi Director, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Risk and Uncertainty in Dam Safety (Theme Paper)	Dr. Desmond Hartford , Principal Engineering Scientist, BC Hydro, Burnaby British Columbia, Canada	15 Min
2.	Decision Making Under Uncertainty on Risk-Informed Dam Safety Management: Which Actions Goes First?	Dr. Adrian Morales-Torres Director iPresas Risk Analysis, Valencia University, Valencia, Spain	10 Min
3.	The Two Faces of the Emergency Action Plan for Dams Development and Implementation	David Gonzalez Diaz Central Project Management Unit, DRIP, International Expert, New Delhi, India	10 Min
4.	Safety of EDF Large Reservoir Dams During Floods: Feedback and New Developments	Manuel Antunes-Vallerey EDF Hydro Engineering Centre, Paris, France	10 Min
5.	Real Time Dam Stability Monitoring	Ton Peters Deltares, Delft, the Netherlands	10 Min
6.	CFD Modeling of Piano Key Weirs Using Flow-3D	Amir Isfahani Flow Science, Inc. Santa Fe, New Mexico, USA	10 Min

TECHNICAL SESSION - 1B
UNCERTAINTIES AND RISK MANAGEMENT IN DAMS

Venue: Conference Hall Annex
Date & Time: 23 January 2018; 1430 – 1600 h

Chairman	Dr. Ignacio Escuder Bueno , Valencia University, Spain
Co-Chairman	Dr. Mukesh Kumar Sinha Narmada Control Authority, MoWR, RD&GR, Indore, India
Rapporteur	Prof. Santosh G. Thampi , NIT, Calicut, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Uncertainties and Risk Management in Dams (Theme Paper)	Dr. Ignacio Escuder Bueno Valencia University & President, SPANCOLD, Spain	15 Min
2.	Liquefaction and Permanent Deformation Analysis of an Earth-Fill Dam Subjected to a Strong Earthquake. A Case Study: Tendaho Dam, Ethiopia	Dr. Hadush S Hagos Central Project Management Unit, DRIP, International Expert New Delhi, India	10 Min
3.	Ensuring Safe Filling of Sardar Sarovar Reservoir	Dr. Mukesh Kumar Sinha Narmada Control Authority, MoWR, RD&GR, Indore, India	10 Min
4.	Seismicity Studies for the Projects – A Case Study of Tehri Dam	Dr. M. L. Sharma IIT Roorkee, Roorkee, India	10 Min
5.	Underwater Rectification of Gate Grooves	Rajesh Pandey Dynasoure Concrete Treatment Pvt. Ltd., Mumbai, India	10 Min
6.	Prevention of Cavitation on Spillways	Ravindra R Bhate Central Water and Power Research Station, Pune, India	10 Min

INDUSTRY SESSION
**CONTEMPORARY DEVELOPMENTS IN TECHNOLOGY,
MATERIALS, AND INSTRUMENTATION**

Venue: Conference Hall
Date & Time: 23 January 2018; 1600 – 1730 h

Chairman	Jun Matsumoto Task Team Leader, DRIP, World Bank, Jakarta, Indonesia
Co-Chairman	Alberto Scuero Group Managing Director, CARPI Ltd., Switzerland
Rapporteur	Samir K Shukla , Director, Central Water Commission

Paper Presentation:

S.N.	Organization	Presenter
1.	M/s Trimble	Munish Malhotra
2.	M/s Ferro-concrete	Dr. Mahavir Bidsaria
3.	M/s CARPI India	Alberto Scuero
4.	M/s Apaar Infratech Pvt. Ltd.	Suresh Nair
5.	M/s Mechatronics	Ashok Karwa
6.	M/s Parsons	Sanjay Rana Stefano Priano
7.	M/s Tri Star Global	Sameer Vasudeva
8.	M/s BASF	Zaheer Abbas
9.	M/s Dynasoure	Rajesh Pandey
10.	M/s EGIS EAU	Stephane Giraud
11.	M/s DHI	R. K. Mahana
12.	M/s MC-Bauchemie	Madhav Naik Wolfgang Litz

TECHNICAL SESSION - 2A
OPERATION, MAINTENANCE, REHABILITATION, AND
UPGRADING OF EXISTING DAMS

Venue: Conference Hall

Date & Time: 24 January 2018; 0900 – 1030 h

Chairman	Satoru Ueda Lead Dam Specialist, World Bank, Washington, USA
Co-Chairman	R. Jeyaseelan Former Chairman, Central Water Commission, New Delhi, India
Rapporteur	Anil Jain Director, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Global Challenges in Operation, Maintenance, Rehabilitation and Upgradation of Existing Dams in India (Theme Paper)	Satoru Ueda Lead Dam Specialist, World Bank, Washington, USA	15 Min
2.	Sustainability Evaluation of Dam Rehabilitation Projects: A Framework with Interactive Tool	Dr. Sanjay Giri Expert advisor - Specialized Consultancy, Deltares, Delft, the Netherlands	10 Min
3.	Innovation in Operation, Maintenance and Rehabilitation of Hydro-Mechanical Components	Narendra Kumar NHPC Ltd, Faridabad, India	10 Min
4.	Visual Inspection of Anchor Work Site with a Small-Sized Multicopter	Tatsuo Kunieda Director, Japan Water Agency, Saitama City, Japan	10 Min
5.	Sediment Management in Reservoirs of Run-of-the-River (RoR) Hydropower Projects with Restrictions on Drawdown Flushing	T K Sivarajan Central Water Commission, New Delhi, India	10 Min
6.	Innovations in Operation of Multipurpose & Multi Valley Reservoir Projects – Trends and Challenges	KA Joshy Kerala Water Resources Department. Thiruvananthapuram, India	10 Min

TECHNICAL SESSION - 2B
OPERATION, MAINTENANCE, REHABILITATION, AND UPGRADING
OF EXISTING DAMS

Venue: Conference Hall Annex
Date & Time: 24 January 2018; 0900 – 1030 h

Chairman	Angus Swindon National Director, Entura Hydro Tasmania, Australia
Co-Chairman	A.K. Ganju Former Member, Central Water Commission, New Delhi, India
Rapporteur	D. S. Chaskar Director, NWA, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Operational Safety of Dams and Reservoirs (Theme Paper)	Dr Desmond Hartford, Principal Engineering Scientist, BC Hydro, Burnaby, British Columbia, Canada	15 Min
2.	Construction Management Challenges in Rehabilitation of DRIP Dams	Edward E. Flint Central Project Management Unit, DRIP, International Expert, New Delhi, India	10 Min
3.	Managing Geotechnical Challenges for Safe Design and Construction of Dams with Deep Foundation	Vivek Tripathi Central Water Commission, New Delhi, India	10 Min
4.	Rehabilitation of 100 Year Old Krishnaraja Sagar Dam, Karnataka	Kishore Kumar K Karnataka Water Resources Department, Mysore, India	10 Min
5.	Stability and Rehabilitation of Earth Dams-Case Histories	Jaee S Edlabadkar Central Water & Power Research Station, Pune, India	10 Min
6.	Repair of Cracks using Microfine Cement Grouting – Case Studies	Aloushy Paul C KSEB Ltd., Idukki, India	10 Min

TECHNICAL SESSION - 3A
DAM SAFETY MANAGEMENT PRACTICES

Venue: Conference Hall

Date & Time: 24 January 2018; 1100 – 1230 h

Chairman	Dr Anton J. Schleiss President of International Commission of Large Dams ICOLD, EPFL, Lausanne, Switzerland
Co-Chairman	Hideshi Sasahara Deputy Secretary General of Network of Asian River Basin Organizations (NARBO), and Director of International Affairs Division (IAD), Japan Water Agency, Japan
Co-Chairman	Sanjay Kundu Joint Secretary, Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt of India
Rapporteur	T K Sivarajan , Chief Engineer, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Recent efforts for Better Dam Safety Practices (Theme Paper)	Hideshi Sasahara Dy Secretary General of NARBO and Director of IAD, Japan Water Agency, Japan	15 Min
2.	Dam Safety Initiatives in India (Theme Paper)	Sanjay Kundu Joint Secretary, MoWR, RD & GR, Gol	10 Min
3.	Underwater Work at Punt dal Gall Dam: An outstanding Project	Elmar Kaempfen HYDRO Exploitation, Sion, Switzerland	10 Min
4.	Dam Safety Experience in Uganda	David Cheptoek Kampala, Uganda	10 Min
5.	DRIP and the Use of Geomembranes	Alberto M Scuero CARPI Group, Berkel en Rodenrijs, The Netherlands	10 Min
6.	Sonic Tomography Study of Chimoni Dam	Sudheer Padikkal Irrigation Department of Government of Kerala State, Palakkad, India	10 Min

TECHNICAL SESSION - 3B
DAM SAFETY MANAGEMENT PRACTICES

Venue: Conference Hall Annex
Date & Time: 24 January 2018; 1100 – 1230 h

Chairman	Dr. Russel Michael GUNN Senior Project Director, Dam & HEPP Expert, BG Consulting Engineering Ltd, Switzerland
Co-Chairman	M Gopala Krishnan Former Secretary General ICID & Former Member, Central Water Commission, New Delhi, India
Rapporteur	O.P. Gupta Director, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Dam Safety and Risk Analysis Benchmarking (Theme Paper)	Russell Michael Gunn BG Consulting Engineers Ltd, Lausanne, Switzerland	15 Min
2.	Challenges in Operation, Maintenance, Rehabilitation and Upgradation of Existing Dams in India (Theme Paper)	M Gopala Krishnan Former Secretary General ICID & Former Member, Central Water Commission, New Delhi, India	10 Min
3.	Satellite Positioning and Monitoring Solution for Dam, Levee and Other Water Retention System	Paul Drummond Trimble Inc., Christchurch, New Zealand	10 Min
4.	DHARMA – An Integrated Approach for Asset Management of Large Dams	Tom Kendall Egis Eau, Montpellier, France	10 Min
5.	Dam Safety Management at Koldam	Madhukar Aggarwal NTPC Ltd, Koldam Project, Bilaspur, India	10 Min
6.	Remotely Operated Vehicles for Underwater Inspection of Dams	Vineet Upadhyay Planys Technologies Pvt. Ltd., Chennai, India	10 Min

TECHNICAL SESSION - 4A
INTEGRATED FLOOD MANAGEMENT FOR EXISTING DAMS

Venue: Conference Hall

Date & Time: 24 January 2018; 1330 – 1500 h

Chairman	Peter Hill Principal Hydrologist and Director at Hydrology and Risk Consulting, Australia
Co-Chairman	N. K. Mathur Member, Central Water Commission, New Delhi, India
Co-Chairman	Pradeep Kumar Jena Principal Secretary, Water Resources Department, Govt. of Odisha
Rapporteur	N. N. Rai Director, Central Water Commission, New Delhi, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Some Recent Advances in the Application of Quantitative Risk Assessments for Dam Safety - An Australian Perspective (Theme Paper)	Peter Hill Principal Hydrologist and Director at Hydrology and Risk Consulting, Blackburn, Australia	15 Min
2.	Design Storm and Design Flood Study for Kadana Dam	Nitya Nand Rai Central Water Commission, New Delhi, India	10 Min
3.	Dam Safety Experience, Srilanka	A D W Wijesunda Colombo, Sri Lanka	10 Min
4.	Glacier Lake Outburst Flood (GLOF) and its Impact on Safety and Design Aspects of Himalayan Dams	M. R. Bhajantri Central Water and Power Research Station, Pune, India	10 Min
5.	2D Numerical Modelling Techniques – The Futuristic Approach for Dam Break Studies	Sunil Kumar Advanced Centre for Integrated Water Resources Management, Bengaluru, India	10 Min
6.	Web GIS Enabled Emergency Information System for Selected Panchayaths in Pampa River Basin	Rajalakshmi CR College of Engineering, Thiruvananthapuram, India	10 Min

TECHNICAL SESSION - 4B
INTEGRATED FLOOD MANAGEMENT FOR EXISTING DAMS

Venue: Conference Hall Annex
Date & Time: 24 January 2018; 1330 – 1500 h

Chairman	Dr. Dasarath Jayasuriya General Manager, Public Safety, National Forecast Services Group, Bureau of Meteorology (BoM), Government of Australia
Co-Chairman	Dr. E.J. James Director, Research, Consultancy & International Relations, Karunya Deemed University, Coimbatore, India
Rapporteur	Prof. P.G. Jaira College of Engineering, Trivandrum, India

Paper Presentation:

S.N.	Paper Title	Presenter	Duration
1.	Managing Risks to Public Safety Through Flood and Short-Range Forecasts – An Australian Perspective (Theme Paper)	Dr. Dasarath Jayasuriya Bureau of Meteorology (BoM), Government of Australia, Melbourne, Australia	15 Min
2.	Hydraulic Model Studies for Two Tier Spillway – A Case Study	Amit Kulhare Central Water and Power Research Station, Pune, India	10 Min
3.	Case Study in Flood Mitigation at Major Dams in New South Wales, Australia	Daniel Berry Manager Water System Operations Water NSW, Australia	10 Min
4.	Hydraulic Design and Upgradation of Stepped Spillway	Vishal P. Jamnekar Water Resources Department (Special Project) Amravati, Maharashtra, India	10 Min
5.	Integrated Flood Management for Existing Dams – A Case Study of Manimuktha Nadhi Dam In Villupuram District of Tamilnadu	D. Selvagandhi Govt. of Tamilnadu, Water Resources Dept.- PWD, Villupuram, India	10 Min
6.	Preparation of Emergency Action Plan(EAP) for Ukai Dam using 1D/2D Coupled Hydrodynamic Modelling and Google Earth Image	Dhruvesh Patel Pandit Deendayal Petroleum University, Gandhinagar, India	10 Min

VALEDICTORY SESSION

Date & Time: 24 January 2018; 1500 – 1540 h

Dignitaries on Dias:

N.K. Mathur, Member, CWC; **Pradeep Kumar Jena**, Principal Secretary, Water Resources Department, Govt. of Odisha; **Sanjay Kundu**, Joint Secretary, MoWR, RD&GR, **Dr. Chabungbam Rajgopala Singh**, TTL (DRIP), World Bank; **Dr. Sivaji Chakravorti**, Director, NIT Calicut; **Dr. J David**, Principal, CET; Representative from KWRD; Representative from KSEBL; **Pramod Narayan**, Project Director (DRIP).

1500 – 1515 h	Recommendations of the Conference	Dr. Shivaji Chakravorti
1515 – 1520 h	Remarks by the Dignitaries	Remark by each dignitary
1520 – 1525 h	Valedictory Address	N.K. Mathur
1525 - 1530 h	Handing over of the Conference Baton	Taking over Baton by Pradeep Kumar Jena
1530 – 1540 h	Vote of Thanks & Way Forward	Pramod Narayan
1540	National Anthem	
	Tea	