

Wednesday 13:00 à 14:50	T1 -Breach Modeling	T2 - Climate Change and Environmental Issues	T3 - Seismic Analysis of Concrete Dams	T2 - Construction and Rehabilitation of Embankment Dams	T5 - Tailings	T2 - Dam Safety
	130 - Breach modelling: why, when and how?	318 - Greenhouse gas emissions from newly-created boreal hydroelectric reservoirs of La Romaine complex in Quebec, Canada	14 - Seismic safety evaluation of Tekeze arch dam	411 - Retour d'expérience sur les mélanges chaux/ciment dans les écrans « deep soil mixing » des levées de la Loire	386 - An operational perspective in the implementation of the new guidelines related to tailings management	187 - Using maturity matrices to evaluate a dam safety program and improve practices
	132 - Canal Embankment Failure Mechanism, Breach Parameters and Outflow Predictions	162 - Effects of a salt-contained formation on Gotvand Reservoir. An overview on a 7- year monitoring	83 - Towards Reliability Based Safety Assessment of Gated Spillways Subjected to Severe Loadings	416 - Small earth dam failure in Burkina Faso: the case of the Koumbri dam	175 - Static Liquefaction Analysis of the Fundão Dam Failure	363 - A consequence-based tailings dam safety framework
	133 - CFD Modelling of Near-Field Dam Break Flow	236 - Potential effects of the Soluble Formation of Gachsaran on Reser-voir Water Quality of Persian Dam Reservoir	454 - The use of Ambient Vibration Monitoring in the behavioral assessment of an arch dam with gravity flanks and limited surveillance records	182 - Refurbishment of Ontario Power Generation's Sir Adam Beck Pump Generating Station Reservoir, Niagara Falls – Construction Execution	392 - Comparison of cyclic resistance ratios of tailings estimated using standard empirical methods and cyclic direct simple shear tests	195 - A case for innovation in establishing policies, practices and standards for dam safety
	537 - Levee and dam breach erosion through coarser grained materials	126 - Comparison of reproducibility of water temperature and water temperature stratification formation by different methods in dam reservoir water quality prediction model	494 - State of the art nonlinear seismic analysis of an arch dam	23 - Challenging conditions in the design and construction of Puah Dam in Malaysia	38 - Drainage and consolidation of mine tailings near waste rock inclusions	105 - Necessity of a new public safety program around dams in Korea
	407 - Predictive Breach Analyses for Reservoir Cascades	247 - The Study on the Impetus Mechanism into Resettlement due to Reservoirs in China - The Analyses based on WDD Hydropower station's immigration	515 - Spillway gate-reservoir interaction under earthquakes	34 - Innovations in drawoff works replacement	298 - Enhancement of contractive tailings using deep soil mixing technique at Kittila mine	369 - Risk tolerability criteria in dam safety – what is missing?
553 - Study of bank erosion and protection measures on Subansiri River, Assam, India	149 - Integrating climate change impacts in the valuation of hydroelectric assets	51 - Seismic assessment of a dam-foundation-reservoir system using Endurance Time Analysis	88 - Kangaroo Creek Dam upgrade – a balanced approach to the design of upgrade works	33 - Innovation in Dams Screening Level Risk Assessment	505- Classification of Itaipu and Three Gorges Dams according to criteria of Brazilian and Chinese government agencies	
Wednesday 15:40 à 17:30	T1 - Hydraulic Modeling and Design	T4- Hydrology	T2 - Construction and Rehabilitation of Concrete Dams	T1 - Design of Embankment Dams	T5 - Tailings	T2 - Dam Safety
	287 - Design and construction of an auxiliary labyrinth spillway for an ageing dam	220 - Hurricane Harvey rainfall, did it exceed PMP and what are the implications.	250 - The application of Rubble Masonry Concrete (RMC) construction for African dams and small hydropower projects	194 - Refurbishment of Ontario Power Generation's Sir Adam Beck Pump Generating Station Reservoir, Niagara Falls – Design	444 - CDA technical bulletin on tailings dam breach analyses	193 - Oroville in Retrospect: What needs to change?
	278 - Innovative Approach to Hydraulic Design and Analysis for Bluestone Dam Primary Spillway Stilling Basin	282 - Sensitivity of Probable Maximum Flood estimates: Climate change, modelling, and adaptation	438 - Arcay generating station life extension and modernization studies	208 - Feedback on the Innovative Spillway for Crotty Dam – 25 Years of Performance Data	311 - Application of Simplified / Empirical Framework to Estimate Runout from Tailings Dam Failures	103 - Development of new simulator for training of dam operation and its future outlook
	341 - "Hydrothermal" and season based design of dual PKW - Flap gate spillway at Gage Dam	549 - Australian experience with application of Monte Carlo approach to extreme flood estimation	292 - Langströmmen Dam Safety – Best Practice Project, an additional new spillway with an emergency radial gate and 2.5 km earth-fill dam enlargement	488 - Case histories of tailings dam and reservoir waterproofed with a bituminous geomembrane (BGM)	593 - Tailings management – current practice in Sweden	279 - Lessons learned from dam failures and incidents due to spillway malfunctions
	399 - Hydraulic Design of Stepped Spillway using CFD Supported by Physical Modelling: Muskrat Falls Hydroelectric Generating Facility	22 - Integrated watershed modeling to support dam safety studies	135 - Underwater technologies for rehabilitation of dams: Studena case history	299 - Impact of variable foundation conditions on the design of the Itare Asphalt Core Rockfill Dam (ACRD) in Kenya	143 - Design and operating challenges at a TSF in a high altitude, desert setting in China	285 - Importance of Emergency Management Programs for Dams and Hydropower Projects - Canadian Perspective and Nepalese Context
	389 - The Redesign of a Plunge Pool Slab for a Temporary Diversion due to Dynamic Pressures	450 - Impact of climate change on the flow regime and operation of reservoirs - A case study of Bhakra and Pong dams	183 - Safety by design - The new intake at John Hart Generating Station project	564 - Construction of diversion culverts on compressible foundations – Large Earthfill Dams	572 - Staged emergency spillway development – design considerations	204 - Toward effective emergency action plan of a dam by using a network analysis
457 - Dam and spillway rehabilitation to accommodate increased design flood: Calero Dam	462 - Climate change and waterpower - Reducing the impacts and adapting to a new reality	344 - Geomembrane Sealing Systems for Rehabilitation and Upgrading Concrete Dams	42 - Small embankment dams – benefits and problems	415 - Maintenance of safety and reliability of high tailings dams in cold regions of Russia during the design phase	111 - Study on Disaster Mitigation Measures and Emergency Management of Reservoir Dams in Strong Earthquake Region	
Thursday 8:30 à 10:00	T2 - Water Management - Simulation and Optimization	T4 - Protection	T1 - Roller Compacted Concrete Dams	T1 - Design of Embankment Dams	T3 - Geohazard	T2 - Risk
	140 - Analysis of joint optimization scheduling rules for Jinsha River cascade and Yalong River cascade	216 - Modelling of the ice load on a Swedish concrete dam using semi-empirical models based on Canadian ice load measurements.	480 - Muskrat Falls North Dam - overcoming the challenges of placing RCC in an extreme environment	265 - The failure of homogeneous dams by internal erosion – The case of Sparmos Dam, Greece	324 - Review of the Mudflow Incident at Kafue Gorge Power Station and Lessons Learnt	186 - Dam portfolio risk management: What we learned from analyzing seven dams owned by the Regional Government of Extremadura (Spain)
	82 - Analyzing the water supply effect of Three Gorges Reservoir on Dongting Lake during the dry season	123 - Riprap Upgrade at WAC Bennett Dam in Canada	542 - RCC knowledge: how specific test can help to evaluate the real behavior of material and a better design of RCC dams	442 - ICOLD Bulletin 164 on internal erosion - how to estimate the loads causing internal erosion failures in earth dams and levees	308 - The 2014 Ludian co-seismic landslide dam (Yunnan, China): transformation from high hazard to dual purpose water conservancy and hydropower project	64 - Incorporation of a time-dependent risk analysis approach to dam safety management
	217 - Optimal water resources allocation and water supply risk assessment under changing environment in the Mid-lower Hanjiang River Basin, China	528 - Multi-purpose permanent booms - design approach and past experience	178 - High performing RCC and pumpable poor CVC mix design for Monti Nieddu Dam (Italy)	536 - Application of Ground-Penetrating Radar (GPR) as supporting technology for monitoring cracks at Bening Dam, East Java, Indonesia	211 - A Multi-Disciplinary Approach to Active Fault Rupture Risk Characterization: 3D Geological Modelling of the Willunga Fault, Mt Bold Dam, South Australia	241 - Understanding risk communication approaches for dam related disasters
	163 - Unknown DPRK's dam water level analysis applying Artificial Intelligence & Machine Learning Method	326 - Restoration of the upstream slope face of the Itaipu Binacional Rockfill Dam - Procedures and Characterization of materials	317 - Tallest RCC gravity dam in Lao PDR - Need for high speed and solutions adopted at the Nam Ngiep 1 Hydropower	69 - Hydro-TISAR and Hydro-SEEP – State of the art innovative geophysical techniques for dam safety investigations	92 - A large landslide, a reservoir and a small inspection gallery – A risk assessment, based on a well-designed instrumentation	491 - In praise of monitoring and the Observational Method for increased dam safety
	266 - The method for increasing the waterpower generation by using the storage volume for flood control in the multipurpose dams	466 - River management challenges during construction of large hydropower projects in cold climates	468 - Updating the dam safety instrumentation systems of concrete gravity dams: A case study from the Kootenay River, British Columbia, Canada	418 - Underwater visualization for asset management and risk mitigation of dams	93 - Diversion Tunnels – Risk Management Confronting Multiple Hazards	525 - Scaling risk assessment methods and approaches - from over 200 dams to site-specific studies
Thursday 10:30 à 12:00	T2 - Sedimentation - Monitoring and Management	T2 - Water Management - Monitoring and Operation	T1 - Design and Numerical Modeling of Concrete Dams	T1 - Embankment Dams Numerical Modeling	T1 - Dam Foundation and Geology	T2 - Design of Hydropower Scheme
	297 - Sediment replenishment as a measure to enhance river habitats in a residual flow reach downstream of a dam	87 - Flexible approaches to maximum supply water level of multi-purpose dams	110 - Diversion tunnel orifices for energy dissipation during reservoir filling at Site C	294 - Considering geosynthetic-reinforced piled embankments as cemented material dam (CMD) foundation	380 - Stabilization of abutments for dam safety: A case of Punatsangchu-I dam with adverse geology	275 - Small historic dams made safe
	557 - Change in river basin morphology due to climate change led extreme flood event	225 - Operation of large Norwegian hydropower reservoirs after quantifying the downstream flood control benefits	388 - Detailed investigations and finite element analysis of Idukki dam in India	383 - Numerical Modelling of Construction and Impoundment of the Romaine-2 Asphaltic Core Rockfill Dam (Québec, Canada)	66 - Mechanical characteristics of class-I columnar jointed basalt of Baihetan hydropower station	233 - Site C Clean Energy Project, Design Overview
	566 - Bener Dam as the management efforts of Bogowonto Watershed	274 - National Census on River and Dam Environments in Japan and utilization for appropriate dam management using the results	514 - Assessment of apparent cohesion at dam-rock interfaces through multiscale modeling	261 - Global sensitivity analysis in the design of rockfill dams	575 - Développement de nouveaux coulis cimentaires pour l'injection des fondations en milieu froid	371 - Role of dams and levees in the flood risk management in Romania
	267 - Sediment management plan in Sakawa River -The results of the first phase	322 - Assessment of Increase in Bed Level of Ghazi-Barotha Reservoir	451 - Computation of safety margins of a cracked dam considering drainage efficiency in a coupled hydro-mechanical model	443 - Comparison of cracks and settlements in Givi Dam body in two periods, before and after earthquake (case study, Givi Dam, Iran)	75 - Challenges in Engineering of Pare Dam on Weak Foundation	432 - Un barrage en milieu aride
	127 - Turbidity control and sediment management using sluicing tunnel at hydropower dam	373 - Multipurpose water uses of reservoirs in Slovenia	427 - Dams in 3D: The Importance of Considering Three-Dimensional Response of Gravity Dams	35 - Reliability-based safety factors for earth dam stability calculations	104 - Innovative 3D ground models for complex hydropower projects	190 - Unexpected risks and work experience in construction of HPP's cascade on the Grande-de-Santiago River, Mexico
Thursday 13:30 à 15:00	T2 - Sedimentation - Modeling	T1 - Thermal and Alkali-Silica Reaction - Concrete Dams	T1 - Design and Numerical Modeling of Concrete Dams	T3 - Seismic Analysis of Embankment Dams	T2 - Spillways	T2 - Risk
	59 - The Study on Optimization of Sediment Flushing Efficiency from Cascade Reservoirs as Mitigation to the Secondary Impact of Volcanic Hazard	219 - Assessment of frost damage in hydraulic structures using a hydro-thermo-mechanical multiphase model	524 - Reducing generation loss - operating with ice and debris on the Upper Mississippi River	28 - Earthquake-induced cracking evaluation of embankment dams	16 - Effect of boundary layer conditions on uplift pressures at open offset spillway joints	501 - Bayesian Network approach for failure prediction of Mountain Chute dam and generating station
	546 - Reservoir operation of Mangdechhu project and safety of the structure	484 - Thermal analysis and design features of Muskrat Falls RCC North Dam	410 - Concrete Assessment and Service Life Extension Planning for Morris Sheppard Dam	252 - Key Technologies on the Harnessing Project of Hongshiyuan Barrier Lake on Niulan River triggered by the 2014 Ludian earthquake	302 - The challenge of securing a concrete lined spillway founded on weak fractured rock containing active aquifer layers	146 - Analysis of the probability of failure of the Moste Dam
	101 - Experimental study on effective sediment channel with reservoir topography and morphology	251 - Refurbishment of the 120 year old inlet tower on Mundaring Weir	260 - Biscarriús. The first hardfill dam in Spain	492 - Site effect study of Denis-Perron Rockfill Dam	15 - "You Don't Know What You Don't Know" Inspecting and Assessing Spillways for Potential Failure Modes	463 - Risk management of new hydropower dams on the White Nile Cascade - A case study of Isimba & Karuma Hydropower Dams in Uganda
	125 - Study on water diversion and sediment control of diversion type hydropower station downstream of high dam with large reservoir state	398 - Study of concrete hydroelectric facilities affected by AAR using multi-physical simulation: consideration of the ultimate limit state	409 - Safe design and operation of spillway gates under extreme conditions - cold climate	201 - Seismic design aspects and first reservoir impounding of Rudbar Lorestan rockfill dam	567 - Avoiding rock erosion in the discharge channel of the Péribonka spillway	281 - Conditional flood risk management
	340 - Morphological modelling of sediment-induced problems at a cascade system of hydropower projects in hilly region of Nepal	176 - FE assessment of the ASR-affected Paulo Afonso IV dam	71 - Design and operational safety of ultra-deep buried large headrace tunnels of Jinping II hydropower station in China	364 - Modified equivalent linear analysis of the Aratozawa dam subjected to the 2008 Miyagi earthquake	330 - High resolution spillway monitoring: Towards better erodibility models (and benchmarking spillway performance)	132 - Integrated hydrological risk analysis for hydropower projects
Thursday 15:30 à 17:30	T1- Hydraulic Modeling and Design	T2 - Performance and Monitoring of Concrete dams	T3 - Seismic Analysis of Concrete Dams	T2 - Investigation and Monitoring of Embankment Dams	T1 - Instrumentation	T2 - Dam Safety
	394 - Screening level analysis of Ilisu Dam first filling impacts at Mosul Dam	414 - Guideline for structural safety in cracked concrete dams	328 - Topographic amplification on hilly terrain under oblique incident waves	58 - Internal Settlement Measurements of the Romaine-3 Rockfill Dam	148 - regObs, a tool to share observations in safety management	57 - Safety vs wildlife: managing conflicting interests during dam projects in the UK
	245 - Solving spillway geometry for three-dimensional flow	384 - Measurement of in situ stresses in the concrete of the Cahora Bassa dam	52 - Analytical study on effects of fracture energy for crack propagation in arch dam during large earthquake	413 - The North Spur Story: Two Years Later	577 - Fiber optic temperature sensors in under-documented dams	362 - Investigation and assessment of interfaces with earthen levees
	379 - Design, construction and operation of offshore and onshore flood control dams in Sweden and Switzerland	404 - Structural health monitoring of a buttress dam using digital image correlation	89 - Effect of joints behavior on seismic safety of concrete arch dams	224 - Vegetation control on embankment dams as a part of remediation work	223 - The need for instrumentation: experiences on irrigation dams of Ethiopia	289 - Design, construction and operation safety of a reinforced soil dam
	437 - 25 years of Gabčíkovo Water Structure System – operation, upgrade, safety and impacts on environment	67 - Application of Laser Doppler Vibrometry in Dam Health Monitoring	571 - DamQuake: More than just a database, a powerful tool to analyze and compare earthquake records on dams	566 - Investigation and treatment of buried channels in river valley projects in Himalayas	106 - Dam monitoring flaws and performance issues: some thoughts and recommendations	301 - Safety measures for earth dams on basis of instrumentation data, dam site location and reservoir volume
	397 - Minimizing the power swing incorporating the trifurcation system of the hydropower plant	436 - Investigation of Repeated Penstock Weld Ruptures – Case Study	48 - Design check of a river diversion inlet subjected to induced earthquake	551 - Means and methods of evaluating subsurface conditions and project performance at Mosul Dam	114 - Reservoir Safety System (RSS) V2.0: A highly automated platform for managing the operation of reservoirs	113 - Application of mechanical facilities support system using tablet terminals for dam management
254 - Investigating high flow measurements using compound gauging structures	403 - Evaluating the operational safety of an old run-of-river power plant	238 - Comparative Seismic Performance of Dams in Canada and China Using Numerical Analysis and Shake Table Testing	10 - Empirical shear stiffness of embankment dams	13 - Recent Remote Underwater Surveys: Advances in Methods and Technologies for Structural Assessments of Dams and Spillways	215 - Dam Safety Framework for Decision-Making and Asset Portfolio Management	