



SANCOLD

SANCOLD News

Newsletter of the South African National Committee on Large Dams

www.sancold.org.za

August 2019



SANCOLD Conference 2019

Registration for the 2019 SANCOLD Annual Conference to be held from Wednesday 6th to Friday 8th November 2019 at the aha Kopanong Hotel and Conference Centre, Benoni is in full swing and is proving very popular. The general theme of the Conference is **“Sustainable long-term dam infrastructure development and management”**. Some 45 technical papers have been accepted providing a full programme in addition to the SANCOLD AGM, YPF function, Gala Conference Dinner and study tour to Hartbeespoort and Roodekopjes Dams. Registration details on Conference website

<https://www.eventregistration.co.za/sancold-2019/homepage/Site/Register>

Pricing details appear on the second page after you enter your name on the Registration section. *CPD points are available from ECSA and SACNASP for attending the Conference*

ICOLD 2019 – Ottawa

There are 100 ICOLD participating countries of which 76 attended the Ottawa meeting. A large contingent of some 15 RSA delegates and accompanying persons attended the ICOLD Annual Meeting held in Ottawa, Canada, 9-14 June 2019.

Important issues discussed included
88th Annual Meeting – New Delhi, India 2020
89th AM & 27th Congress – Marseilles, France 2021
90th Annual Meeting – Shiraz, Iran 2022
91st Annual Meeting – Gothenburg, Sweden 2023

Uganda became 102nd ICOLD Country

Vice President election (2019- 2022)
Zone Europe - Enrique Cifres – Spain
6th Post – Devendra K Sharma – India

New RSA representatives approved for Technical Committees
Gerald de Jager
Kogi Naidoo
Vicci Schoeman
Rudolf van Wyk

Questions and wording approved for 27th Congress in Marseilles.

Question 104 “Concrete Dam Design Innovation and Performance”

- Innovations for arch dam analysis, design and construction; including RCC arch and arch-gravity dams.

- Innovations for design, construction materials and placement methods, flood management during construction and performance of concrete dams, including RCC and cemented material dams.
- Innovations for raising existing concrete dams. d/ Innovations for extremely high concrete dams.
- Operational performance of concrete dams during the life cycle, including under extreme conditions.

Question 105 “Incidents and Accidents concerning Dams”

- Recent lessons from incidents and accidents concerning dams during the life cycle, including during construction.
- Evaluation of the flows and flood, estimation and quantification of the consequences, including social, economic and environmental aspects, in case of failure or incidents.
- Emergency planning: regulation, organisation, information of the population and examples of implementation.
- Governance of the safety: definition of the responsibilities, periodic reviews, implementation tests, organisation of lessons learned implementation.

Question 106 “Surveillance, Instrumentation, Monitoring and Data acquisition”

- Long term performance of existing surveillance systems including reliability and accuracy; importance of visual inspections
- New technologies in dam and foundation instrumentation and monitoring.
- Data acquisition and processing to evaluate the behaviour of dams, predict and identify incidents.
- Understanding and handling of large quantity of data, including artificial intelligence approach.

Question 107 “Dams and Climate Change”

- Impacts of climatic change on existing dams and reservoirs and remedies; case studies and costs.
- Impacts of climatic change on needs and designs of dams, reservoirs and levees (water storage, floods mitigation, oceans raising...).

SAICE GeoTech Division

The following may be of interest to some members

Grouting Fundamentals & Current Practice Course, 16-19 September 2019, Munich, Germany. For more info contact www.grouting-fundamentals.com

17th African Regional Conference on Soil Mechanics and Geotechnical Engineering, 7-9 October 2019, Century City Conference Centre, Cape Town. For more info contact arc2019.org

Evening lecture co-hosted by GIGSA and SAICE Geotech Division

Date: Thursday 3 October 2019
Venue: Ambrosia Hall, 97 Allan Road, Glen Austin, Midrand
Presentations by:

Conrad Boley “Geotechnical Design for Large Scale Infrastructure and Tunneling projects etc”

Kent von Maubeuge “Regulations and recommendations should adapt the approach from the new ISO design guide for geosynthetic barriers”

Attendance is complimentary, but it is still essential to RSVP before Friday 27 September 2019 for catering purposes.

Kindly send an email to info@selahproductions.co.za to confirm your attendance.

If you have any questions please contact us on +27 82 323 3910 or send an email to info@selahproductions.co.za.

- Favourable impacts of dams on climatic change, including greenhouse gases reduction by optimisation of hydroelectric production. Needs, potential and cost of energy pumped storage.
- Unfavourable impacts of dams and reservoirs on climatic change: evaluation of greenhouse gases emissions by reservoirs and dam construction.



Parliamentary precinct, Ottawa

Draft technical reports submitted by Technical Committees since the last General Assembly and approved.

- 1) Tailings Dams Design – Technology Update submitted by the Committee on Tailings Dams & Waste Lagoons, available on the ICOLD web site, Circular Letter 1940 of 22 October 2018.
- 2) Sediment Management in Reservoirs: National Regulations and Case Studies submitted by the Committee on Sedimentation of Reservoirs, available on the ICOLD web site, Circular Letter 1947 of 6 March 2019.
- 3) Selection of Dam Type submitted by the Committee on Selection Of Dam Type, available on the ICOLD web site, Circular Letter 1949 of 10 March 2019.
- 4) Management of Expansive Chemical Reaction in Concrete Dams & Hydroelectric Projects Submitted by the Committee on Concrete Dams, available on the ICOLD web site, Circular Letter 1950 of 28 March 2019.
- 5) Challenges and Needs for Dams in the 21st Century Submitted by the Committee on Emerging Challenges and Solution, available on the ICOLD web site, Circular Letter 1951 of 12 April 2019.



Cultural evening at Canadian Museum of History



Locks on the historic Rideau Canal

The next ICOLD meeting, the 88th ICOLD Annual Meeting and accompanying symposium “Sustainable Development of Dams and River Basins” will be held 4-10 April 2020 in New Delhi, India. Initial details are available on the ICOLD website.

Technical Committees and SANCOLD Working Groups.

SANCOLD serves on 18 of the 26 ICOLD Technical Committees and includes two Vice-chairpersons and two Chairpersons in its ranks.

SANCOLD Working Groups have also been formed for most of these Committees. If anyone is interested in participating in a Working Group, please contact the SANCOLD Secretary. Further details of these working groups will be found on the SANCOLD website.

Membership Contact Details

Please inform the SANCOLD Secretary of changes in your e-mail address or other contact details so that our SANCOLD database stays current and you don't miss important announcements or get into arrears with your membership fees.

E-mail: Secretary@SANCOLD.org.za

URGENT: Updating Membership

Please note that SANCOLD is updating its membership lists and will be deleting members with outstanding membership fees in terms of Cl 6.8 of our Constitution. If in doubt, please contact the Secretary urgently.

E-mail: secretary@sancold.org.za

SANCOLD Financial Support for post graduate studies 2019:

SANCOLD has identified the urgent need to update the data and methods used for design flood estimation in South Africa and has initiated a National Flood Studies Programme (NFSP) to update these. To advance this programme, SANCOLD is proud to announce that it has provided for 2019, financial support of R75 000 to each of five students whose research links into furthering this programme. Research projects guided by Prof JC Smithers at the University of KwaZulu-Natal are;



Nkosinathi Dlamini

- Nkosinathi Dlamini whose study proposal is "Development and Assessment of a Joint Probability Event Based Approach for Design Flood Estimation in South Africa,"



Udhav Maharaj

- Udhav Maharaj whose research proposal is "Refine and update the SCS-SA model for design flood estimation to account for antecedent moisture conditions and joint association of rainfall and runoff using the results and methodology from a CSM system that was developed,"



Ryshan Ramlall

Member Dr Luis Alberto Torres Cruz of Wits University, recently co-authored a note for Science Magazine commenting on the cause of failure of coal ash and tailings dams. He believes it might be of interest to the SANCOLD community in general. Their note makes reference to the findings of the ICOLD Bulletin 121.

Here is the link:

<https://science.sciencemag.org/content/364/6440/526>

- Ryshan Ramlall whose research proposal is “Assessing and updating techniques for disaggregating daily rainfall for design flood estimation” and



Keanu Singh

- Keanu Singh whose research proposal is “An assessment of data quality and availability on the estimation of design floods in South Africa”

At Stellenbosch University under the guidance of Prof JA du Plessis the final award is to



Todd Thomas

- Todd Thomas whose research proposal is “Deriving Areal Reduction Factors using Radar Imagery”.

We wish these awardees success in their studies and hope that their research will provide valuable input to the NFSP.

SANCOLD YPF Training events.

The SANCOLD Young Persons Forum is planning a number of afternoon informal events for 2019.

Please keep a lookout for notifications via email and on the SANCOLD YPF Facebook and LinkedIn pages.



Parliament Hill across Ottawa River



Historic Chateau Laurier Hotel- Ottawa



ByWard Market Area - Ottawa

Editor: SANCOLD News

Editor: Peter Pyke, Secretary: SANCOLD

E-mail: secretary@sancold.org.za