



**30<sup>th</sup>** Annual **INCOSE**  
international symposium

Cape Town, South Africa  
July 18 - 23, 2020

## Keynote Speaker

### Dr. Ronnie S. McKenzie

Former Chairman, Water Loss Group  
International Water Association



Speaking Topic: **Water Supply Systems : A Broad Overview**

**Biography.** Ronnie is well known as a specialist in the fields of Water Demand Management, Hydrology, Water Resource Planning and Systems Analysis, with more than 30 years of experience in these fields. He has been involved in the analysis of many large water resource systems, particularly in Southern Africa where he is currently based. He was a key member of the Vaal River System Analysis team which pioneered the water resources systems analysis techniques now used throughout South Africa and many other parts of the world. Other major projects in which Ronnie has been involved include the Orange River System Analysis, the Namibian Central Area Water Master Plan and the verification of the Lesotho Highlands hydrology for royalty calculation purposes.

He has developed and presented more than 100 papers, courses and workshops in many parts of the world, and was responsible for introducing the internationally recognised Burst and Background Estimate (BABE) water demand management techniques to South Africa and numerous other countries. Ronnie also developed Leakage Benchmarking software for the South Africa Water Research Commission as well as the Australian Water Supply Association and the New Zealand Water and Waste Association.

In the past few years, Ronnie has initiated several large leakage reduction projects throughout South Africa including the Khayelitsha Advanced Pressure Management Project and the Sebokeng/Evaton Advanced Pressure Management PPP, both of which won several national and international awards for technical excellence (SAACE, SAICE, IWA and IMESA). He was responsible for the development and presentation of many training courses in Water Resource Systems Analysis and Water Demand Management and has personally presented more than 50 courses throughout South Africa as well as in Ethiopia, Brazil, Australia, Puerto Rico, USA, New Zealand, Namibia, Botswana, and Lesotho. He is a fellow of the SA Institution of Civil Engineering, IWA and WISA and is a past Chairman of the IWA Water Loss Specialist Group.