

PROFESSOR N S GOVINDA RAO MEMORIAL LECTURE 2021 ONLINE

“WATER SECURITY IN A CHANGING WORLD”

by

PROFESSOR HOWARD WHEATER FEng FRSC

University of Saskatchewan, Canada
and Imperial College, London UK

PROFESSOR GOVINDAN RANGARAJAN

Director, Indian Institute of Science
will preside

5TH FEBRUARY 2021, FRIDAY AT 1600 HRS IST



Abstract:

One of the world's major global challenges is the management of freshwater resources in an era of unprecedented societal and environmental change. The talk will discuss the threats to water security in the 21st century, including transboundary waters, the opportunities for new science and improved management tools, and the need for greater integration of water science with society. Examples will draw on Canada's experience of changing cold regions, and recent collaboration between IISc Bangalore and Imperial College London to address India's water challenges.

About the speaker: Professor Howard Wheeler is Canada Excellence Research Chair Laureate in Water Security at the University of Saskatchewan, where he founded the Global Institute for Water Security, and Distinguished Research Fellow and Emeritus Professor of Hydrology at Imperial College London. A leading expert in hydrological science and modelling, he has published more than 200 refereed articles and 6 books. He is a Fellow of the Royal Society of Canada, the Royal Academy of Engineering, UK, and the American Geophysical Union. Awards include the IAHS-UNESCO-WMO International Hydrology Prize and the Prince Sultan bin Abdulaziz International Prize for Water.

He has initiated and led national and international research programmes in the UK and Canada, and has advised states, provinces and national governments on flood, water resource and water quality issues. He represented Hungary and Argentina at the International Court of Justice (ICJ), and recently sat on an International Court of Arbitration concerning the Indus Waters Treaty. He was, until 2014, vice-chair of the World Climate Research

Programme's Global Energy and Water Cycle Exchange (GEWEX) project and continues to advise UNESCO's GWADI arid zone water program. In Canada, he led the Changing Cold Regions Network, focused on the analysis and prediction of hydrological change in western Canada, and initiated the Global Water Futures Program, focused on managing water futures in Canada and other cold regions where global warming is changing landscapes, ecosystems, and the water environment. His role as Chair of the Council of Canadian Academies Expert Panel on Sustainable Management of Water in the Agricultural Landscapes of Canada saw the release of a report in February 2013 entitled Water and Agriculture in Canada: Towards Sustainable Management of Water Resources. More recently, he served as the only non-US member of the US National Academies of Science, Engineering and Medicine Committee on Future Water Resource Needs for the Nation: Water Science and Research at the U.S. Geological Survey. He is currently advisor to Chile in a dispute with Bolivia before the ICJ and to the state of Nevada, USA, concerning a proposed nuclear waste repository at Yucca Mountain.



<https://zoom.us/j/93433251047>

YouTube https://youtu.be/_QYzbLhmcdU



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