A. N. Kholsa Lecture Series

Department of WRDM organized A.N. Khosla Memorial Lecture Series in the memory of Padma Vibhushan Dr. A.N. Khosla on "River Water Disputes" by Prof. K.G. Ranga Raju on August 19, 2019, IIT Roorkee.

The Department of Water Resources Development and Management was established in 1955 as a training center in water resources development for Asia, Africa, and the Far East countries. The center was established at the University of Roorkee on November 25, 1955, and was founded by Dr. A N Khosla. The initiative to develop this center came from Dr. P.S. Lokanathan, Executive Secretary of ECAFE, and Dr. Shen-Yi, Chairman of the Flood Control Division of ECAFE. They have been in constant consultations since 1951 with Dr. A.N. Khosla, then Chairman, Central Water and Power Commission, and later Vice-Chancellor of Roorkee University. It was finally decided to establish, with the help of the Government of India, a Water Resources Development Training Centre (referred to as WRDTC) at Roorkee, as an integral part of the University of Roorkee.

The first course started on April 02, 1956, and was completed on March 31, 1957. The department has contributed substantially to building various water resources projects in India like Bhakra, Hirakund, Idduki, Indira Sagar, Kota Barrage, and Tehri dam. The faculties of this department have achieved the highest positions in the country and have been well recognized at the National & International levels.

Therefore, the endowment lecture series has been initiated in honor of Dr. A N Khosla, the founder-director of this department. Dr. Ajudhia Nath Khosla was a well-known civil engineer turned politician. He was the Chairman of the Central Waterways Irrigation and Navigation Commission (Now Central Water Commission) of India. Dr. A N Khosla worked as Vice-Chancellor of the University of Roorkee from 1954 to 1959. He was awarded the Padma Bhushan in 1954 and the Padma Vibhushan in 1977. He was a member of the Rajya Sabha and was the 11th Governor of Odisha.

As an engineer, Er. A N Khosla served in the following prestigious positions :

• He was appointed as the first Chairman of the newly constituted Central Waterways, Irrigation and Navigation Commission (Now known as Central Water Commission) in 1945.

• He established the Central Water and Power Station at Khadakvasla (earlier known as Poona Research Station)

• He was instrumental in the construction of Bhakra Dam and later served as Chairman of the board of Consultants of Bhakra Control Board until its commissioning in 1963.

• He undertook planning, design, and construction of Hirakud Dam, a major Water Resources Project in India.

• He was the president of the Indian National Science Academy during 1961-62.

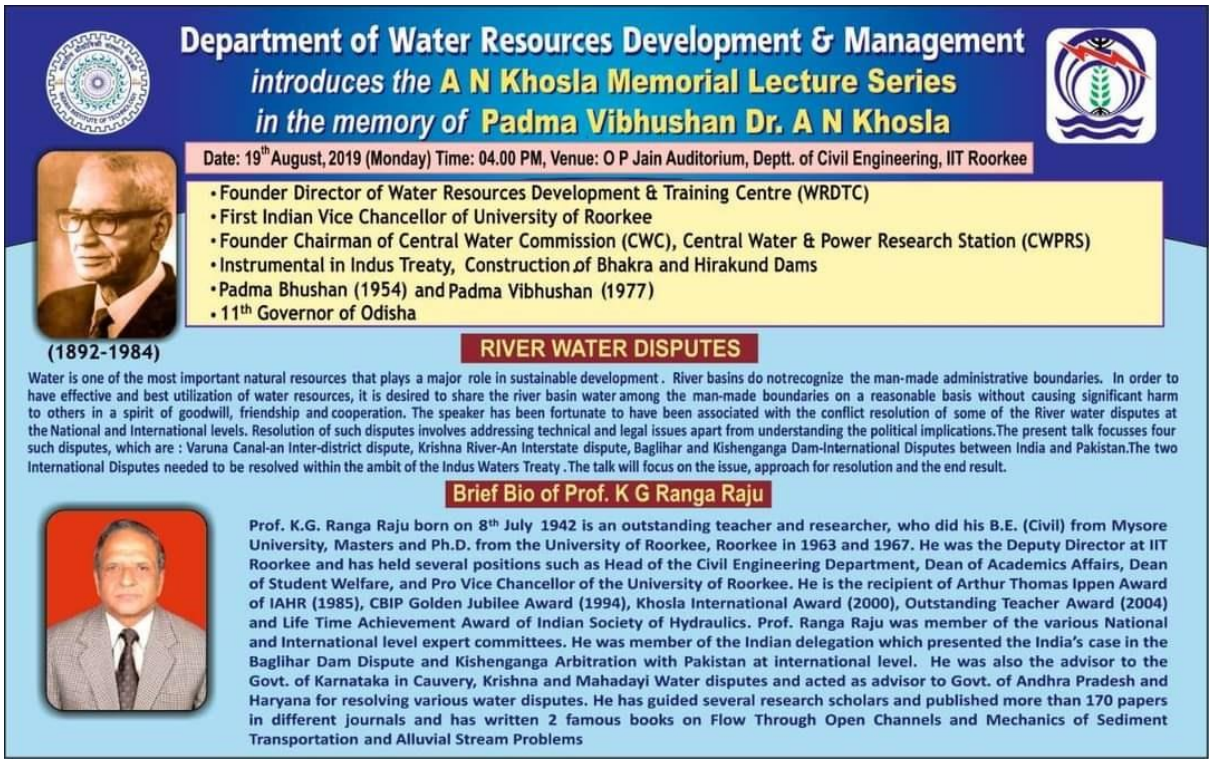
• He was instrumental in bringing about several agreements on negotiations for Indus Water Dispute with Pakistan.

• As an educationist, he was the first Indian Vice-Chancellor of the Thomason College of Civil Engineering (later renamed as the University of Roorkee and now the IIT Roorkee).

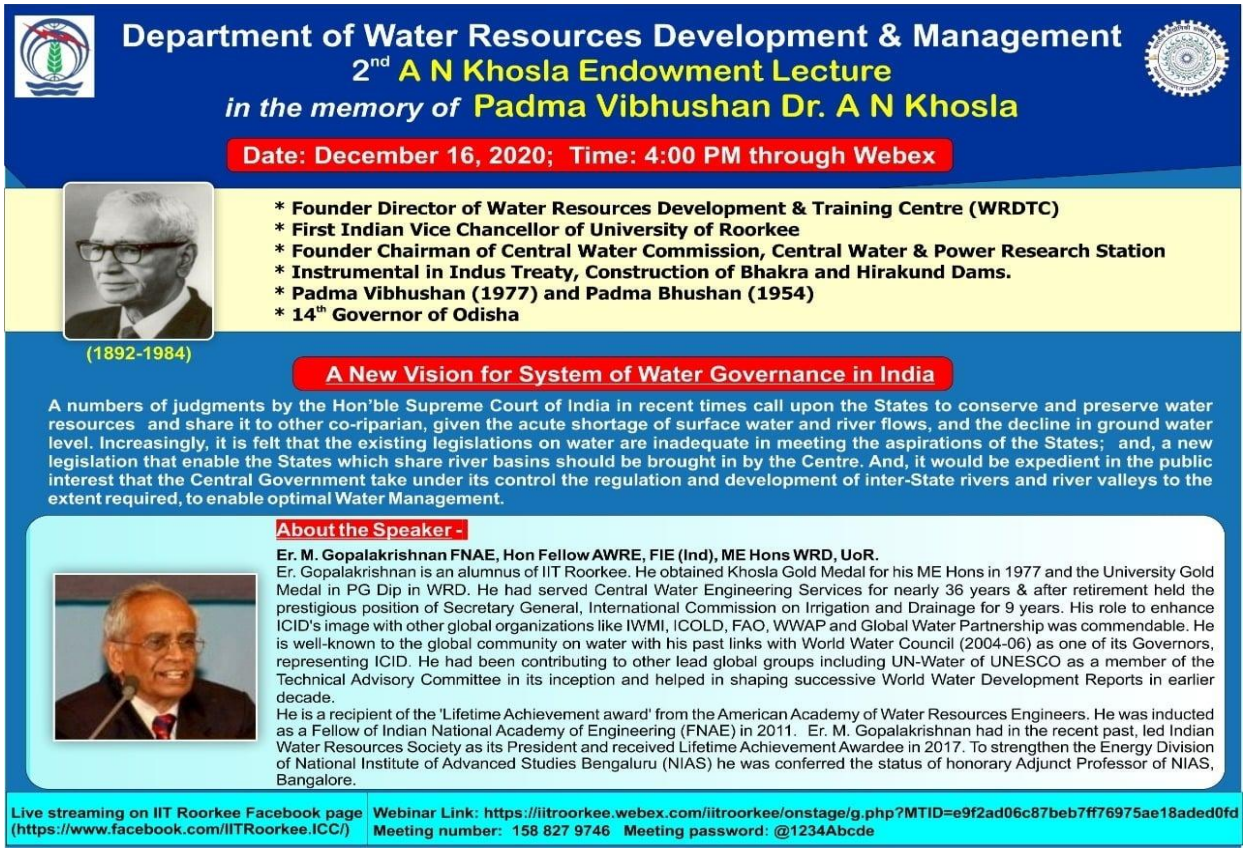
• He was the founder of two specialized engineering departments, i.e., The Water Resources Development Training Centre and the School of Research and Training in Earthquake Engineering, which have made the UoR internationally well-known.

Recognizing his contributions, the UoR Conferred the honorary D.Sc. Degree to him in 1959. He was also awarded D.Sc degrees (Honoris Causa) by Rensselaer Polytechnic Institute, USA, and various universities such as the University of Punjab, Sambalpur University OUAT, Bhuvneshwar, Jadavpur University, and IIT Delhi. The government of India recognized his contributions and awarded him the most prestigious Shanti Swarup Bhatnagar Prize in 1974. He completed his life in 1984.

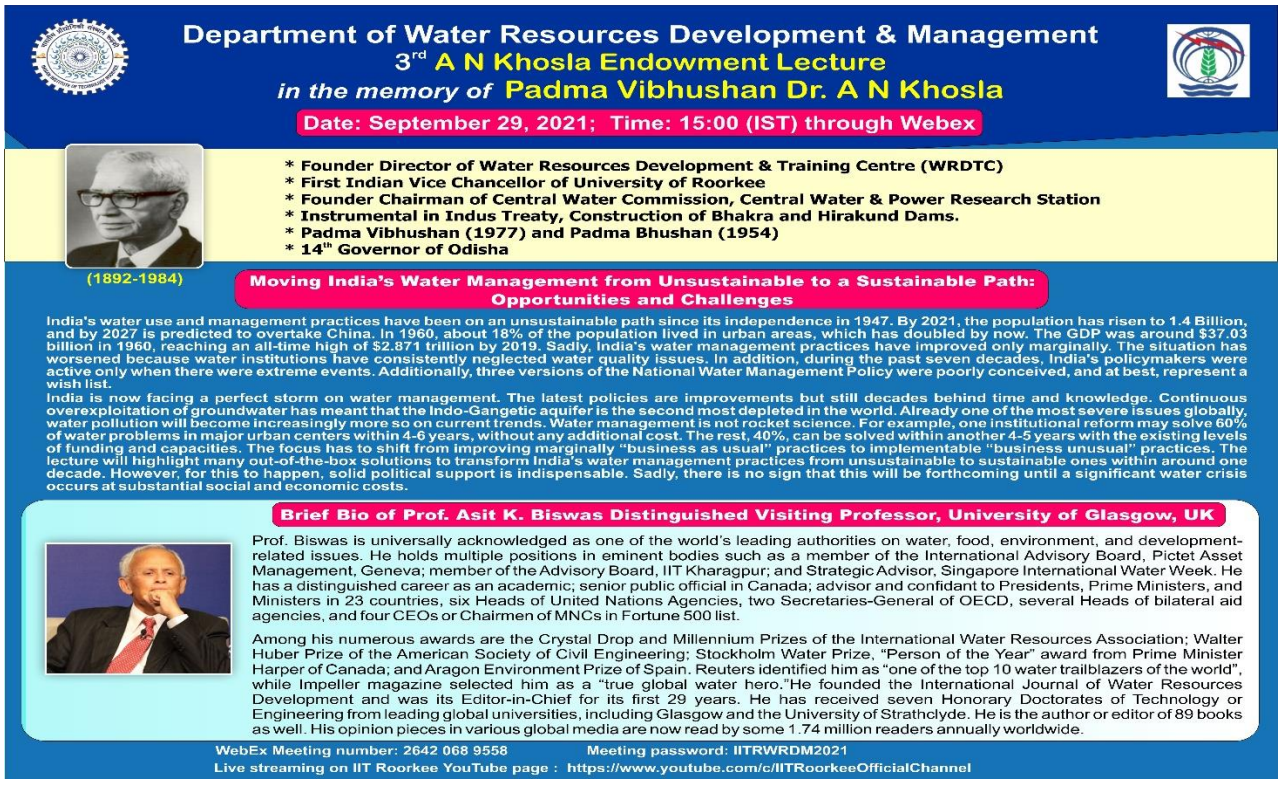
First Lecture in this series by Prof. K.G. Ranga Raju



Second Lecture in this series by Er. M. Gopalakrishnan



Third Lecture in this series by Prof. Asit K. Biswas



Fourth Lecture in this series by Prof. Venkappayya R Desai

Department of Water Resources Development & Management

4th A N Khosla Endowment Lecture

in the memory of Padma Vibhushan Dr. A N Khosla

Date: January 19, 2023; Time: 11:00 AM at O.P Jain Auditorium, IIT Roorkee

(1892-1984)

* **Founder Director of Water Resources Development & Training Centre (WRDTC)**
* **First Indian Vice Chancellor of University of Roorkee**
* **Founder Chairman of Central Water Commission (CWC), Central Water & Power Research Station (CWPRS)**
* **Instrumental in Indus Treaty, Construction of Bhakra and Hirakund Dams.**
* **Padma Vibhushan (1977) and Padma Bhushan (1954)**
* **14th Governor of Odisha**

Promotion of Water Harvesting and Voluntary Afforestation through Traditional Indian Knowledge System

Climate change is causing an increase in the precipitation intensity and a decrease in the number of annual rainy days as well as the average storm duration. The role of vegetation in general and forests in particular, in maintaining ecological balance is well established. Nevertheless, over the past several decades, tree cover is continuously decreasing in substantial parts of the world, mainly due to deforestation caused by human beings. Simultaneously, there is also a steady increase in greenhouse gases in general and carbon dioxide in particular. The main reasons for this phenomenon are the emissions from fossil fuel combustion and/or aerosol generation and/or cement manufacturing. Things have reached such an alarming level wherein the Himalayan Kingdom of Bhutan is the only carbon-negative nation in the world. Even some of the best management practices (BMPs) adopted in Arctic Norway/Alpine Switzerland/ Mediterranean Israel/ Equatorially located Singapore have not helped them to transform into carbon-negative nations so far. Based on the traditional Indian Knowledge System (IKS) on precipitation, it should definitely be possible to combat climate change, at least sporadically, to create additional carbon-neutral and/or carbon-negative nations/ regions.

Brief Bio of Prof. Venkappayya R Desai, Director, IIT Dharwad and Former Dean of Faculty of Engg. and Architecture (FoEA), IIT Kharagpur

Prof. Venkappayya R Desai is an Academician with 33+ years of teaching experience, out of which 27+ years have been at the Indian Institute of Tech, Kharagpur, West Bengal. He obtained his BE (Civil) degree in 1983 from BVB Engg. College, Hubballi, Karnataka; M Tech (HWRE) degree in 1986 from Karnataka Regional Engineering College, Surathkal; Ph.D. in Civil Engineering in 1993 from Clemson University in S Carolina, USA. At the National level, he is now serving as a NAAC Academic Advisory Committee member, as an Executive Committee member for AICTE in New Delhi and Visweswaraya Technological University in Belagavi, Karnataka; as a Board of Governors Member for NITTTR, Kolkata, West Bengal, and IISER, Thiruvananthapuram, Kerala, to name a few.