## ABOUT CWRDM, KOZHIKODE, KERALA

The Centre for Water Resources Development and Management (CWRDM) is located 12 km east of Kozhikode city in Kerala. Apart from research activities, 40 Scientists and 70 Technical staff function as resource personnel for various research and training programmes. The Centre has excellent facilities for the studies on various aspects of surface and groundwater hydrology. It has well equipped laboratories and facilities for studies on application of stable and radioactive isotopes to hydrology related research. It is recognized as a research centre for carrying out Ph.D programme by several Universities.

# ABOUT KARUNYA UNIVERSITY AND THE WATER INSTITUTE

Karunya University established as an Engineering College in 1986 transformed into an Autonomous institution in 2000 and a Deemed University in 2004 (under UGC Act 1956). There are around 8000 students pursuing their B.Tech, M.Tech / MBA / MCA / MSc / MA and PhD progammes in 9 Schools and 23 Departments of the University. The entire student community and most of the staff stay in the campus, which spreads over 750 acres, surrounded by the Western Ghats.

The Water Institute was established in 2008 in line with the vision of the Founders to focus on academic, research and extension programmes in areas relevant to the welfare and livelihood of society. The Institute started a M.Tech course in Integrated Water Resources Management (IWRM) and one dozen scholars are pursuing their PhD programmes in hydrology and water management.

Research projects funded by DST (GoI) and MoEF(GoI) are being carried out by the Institute. Facilities for research on electrochemical techniques for water treatment have been established. Consultancy projects are carried out for international agencies and government departments.

#### REGISTRATION

Participants with engineering, geology background and faculty members and researchers in any relevant area from academic institutions and officials from government departments in the water sector will be considered for the Workshop. No registration fee will be charged from participants. Those desirous of participating in the Workshop may forward the enclosed registration form duly filled in on or before 30/09/2012.

# **Important Dates**

For receiving applications: 30/09/12 Intimation to Participants: 03/10/12

The Registration form may be sent to:

# Dr. J. Brema

Associate Professor
School of Civil Engineering
Karunya University
Coimbatore – 641 114, Tamil Nadu
Email: brema@karunya.edu

Mob: 09486662284

# Workshop

**Isotope Hydrology** 

Karunya University, Coimbatore: 11 October 2012

# Organized by







CWRDM Kozhikode, Kerala

# Sponsored by



Department of Science and Technology (SERB), Govt. of India



(KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES)
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)
Karunya Nagar, Coimbatore 641 114, India

Website: www.karunya.edu

### **BACKGROUND**

The increasing demand for freshwater due to ever growing population calls for proper evaluation of its potential, source, age, etc. One of the prerequisites for efficient management of water resources is reliable information on the quantity, flow and recharging source of water within the resource that is being exploited. Modern tools and techniques can significantly supplement the conventional approaches to water resources management and can strongly support the engineers, planners and managers in the water sector. During the past three decades, isotope techniques are used for stream discharge measurements, surface water-groundwater interaction, reservoir/lake dynamics, leakage/seepage in dams/canals etc. Similarly in groundwater studies, isotope techniques are virtually applied in all areas.

Isotope techniques are yet to gain wider application. The reason for this slow progress may be due to limited interaction among academicians, practitioners, hydrologists and the isotope specialists and also the lack of sufficient laboratory facilities for isotope analysis.

The Centre for Water Resources Development and Management (CWRDM), Kozhikode, a unique Water Resources Research Institute in Kerala, has been actively involved in isotope based research for more than 15 years. Under the aegis of CWRDM, Kozhikode and the Water Institute and School of Civil Engineering, Karunya University, a one-day Workshop on Isotope Hydrology is organized with financial support from the Department of Science and Technology (DST), Government of India under its Science and Engineering Research Board (SERB) scheme.

#### **OBJECTIVES OF THE WORKSHOP**

- Creating awareness among the participants and familiarizing them with the emerging field of isotope hydrology and its applications
- Appraising the participants on the status of isotope hydrology in the country and its future applications.
- Providing a forum for interaction among scientists, practicing engineers and isotope specialists

## **WORKSHOP TOPICS**

The Workshop will consist of lectures by experts in isotope hydrology from CWRDM, Kozhikode, and relevant experts from other organizations. The lectures will cover basic concepts of isotopes - stable and radioactive - and their applications in hydrology. Case studies will also be discussed during the lectures

# One-day Workshop on Isotope Hydrology

11 October 2012

#### **REGISTRATION FORM**

Name:
Designation:
Organization
Mailing Address
Tel.:
Fax:
Email: