Ben-Gurion University of the Negev
Jacob Blaustein Institutes for Desert Research
Zuckerberg Institute for Water Research

אוניברסיטת בן גוריון בנגב
המכונים לחקר המדבר ע"ש י. בלאושטיין
מכון צוקרברג לחקר המים

Short course:

The Use of Isotopes in Environmental Hydrology

11-14 December 2005

Environmental isotopes analysis has fast become a major tool in the quantitative evaluation of hydrological processes. In particular, it has emerged as an essential tool in hydro-geological assessment of complex basins with insufficient hydrological information.

A short course is offered for graduate students (qualified undergraduates may also be accepted subject to number of places).

Total course credits: 2.

Course format: The course consists of 20 hours of lectures, taught in English. The course will conclude with a project (equivalent to 4 hours), to be submitted within one week of the end of the course.

Lectures will take place at the Albert Katz International School for Desert Studies, Sede Boqer Campus, at the following times (exact location will be announced nearer the date):

Date/Time	09:00-11:00	13:00-15:00	16:00-18:00
11/12/05	M. Geyh	E. Adar	E. Adar
12/12/05	M. Geyh	D. Ronen	
13/12/05	M. Geyh	A. Issar	E. Adar
14/12/05	A. Issar	M. Geyh	

Lecture topics and lecturers:

- **Principles of Environmental Isotopes Technologies in Hydrogeology (4 lectures)**
  Prof. Dr. Mebus Geyh - Faculty of Geosciences, University of Marburg, Germany.
- **The Use of Isotopes in Exploring Groundwater Systems in Drylands (1 lecture)**
  Prof. Arie Issar – Professor Emeritus, Department of Environmental Hydrology & Microbiology, Zuckerberg Institute for Water Research, J. Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev.
- **The Use of Isotopes in Investigating Climate Change in the Past as a Key to the Future, and its Effect on Hydrological Systems (1 lecture)**
  Prof. Arie Issar
- **The Behaviour of Groundwater Levels Evidenced by Specific Discharge Profiles of ^{18}O Depleted Water (1 lecture)**
  Prof. Daniel Ronen – Department of Environmental Hydrology & Microbiology, Zuckerberg Institute for Water Research, J. Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev; and Department of Water Quality, Israeli Water Commission.
- **Use of Environmental Isotopes and Hydrochemistry in Groundwater Modelling – the Mixing Cell Approach (2 lectures)**
  Prof. Eilon Adar – Department of Environmental Hydrology & Microbiology, Zuckerberg Institute for Water Research, J. Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev.

Students wishing to attend should apply to Mrs. Dorit Levin at the Albert Katz International School for Desert Studies: Email: dschool@bgu.ac.il; Tel: 08 659 6733; Fax: 08 659 6985. For further information regarding the course, please contact Prof. Eilon Adar: Email: eilon@bgu.ac.il; Tel: 08 659 6979; Fax: 08 659 6889.