

قسم جيولوجيا المياه

١٤٢٧هـ / ٢٠٠٦م



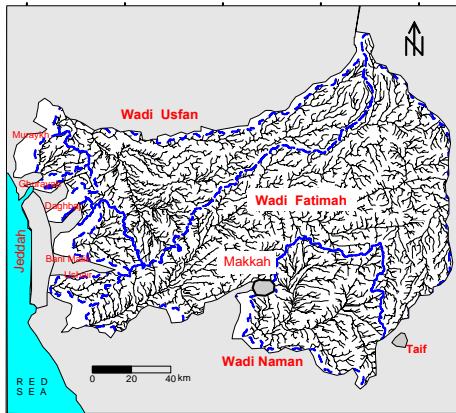
مركز النشر العلمي

جدة

Kingdom of Saudi Arabia
Ministry of Higher Education
King Abdulaziz University



Faculty of Earth Sciences



Hydrogeology Department

1427H/2006G

Background

Hydrogeology department was established in 1970 as an independent department in the center of Applied Geology for graduate studies offering High Diploma and M.Sc Degrees. Ph. D. and B. Sc. Degrees started after the centre joined King Abdulaziz University in 1975 to become the Institute of Applied Geology and then, the Faculty of Earth Sciences. The Hydrogeology department grants B.S.c, M.Sc. and Ph.D Degrees.

Objectives

- Introducing integrated knowledge of groundwater occurrence, movement and quality,
- Teaching applied groundwater exploration techniques, survey, and analysis of water use suitability,
- Improving and developing knowledge of hydrogeologists by conducting short courses and seminars in both academic and applied domains,
- The department is contributing toward the preparation of qualified Saudi hydro-geologists that can participate in developing water resources of the Kingdom.

B.Sc. Program

The department of Hydrogeology grants B.Sc. Degree after successful completion of 136 course units during four academic years, two semesters in each year. In addition to the university and the faculty course requirements the department requires the following courses:

Applied hydrology, Flow in porous

media, Groundwater geology, Groundwater Hydro-chemistry, Groundwater Hydraulics, Hydro-geology, Field Hydrogeology, Statistical Geology, Water well technology, Ground-water management and Planning, Hydro-geology of the Kingdom, Isotope hydrology, Groundwater pollution, Ground-water modeling, and Graduation. Project, in addition to other compulsory courses from various departments

Postgraduate Program

The postgraduate program provides opportunity for advanced study and research in special aspects such as hydrogeology, hydrochemistry, ground-water resources management, ground-water modeling and environmental hydrology. It is designed to broaden and enhanced the student's knowledge with these fields, to enable them to participate in advanced studies and research projects, and to promote the spirit of independent and cooperative research.

The study units required for graduation are:
M.Sc. by thesis: 24 course units and a thesis of 10 units.

M.Sc. by courses and Dissertation : 41 course units and a research project of 4 units.

Ph. D. 30 course units and a thesis of 20 units.



Laboratory and Facilities

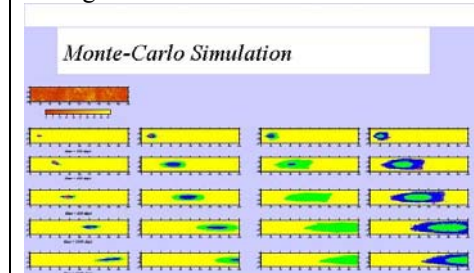
The department has the following laboratories and facilities:

- 1-Hydrogeology lab.
- 2-Hydrochemistry lab.
- 3-Personal computer lab.

Current Research Activities

The following are examples of the research activities:

- Evaluation of groundwater resources in the Arabian shield and Arabian shelf,
- Groundwater quality and usability,
- Applications of environmental isotopes in hydrology,
- Groundwater pollution,
- Groundwater resources management,
- Modeling of groundwater systems,
- Applications of GIS in hydrogeology,
- Environmental impact of surface runoff and groundwater.



For further information please contact:

*Head of Hydrogeology Department,
Faculty of Earth Sciences,
King Abdulaziz University
P.O. Box 20806 Jeddah 21589
Kingdom of Saudi Arabia
Tele: ++ 02-6952314
Fax: ++ 02-6952095
E-Mail: fes-hydro@kaau.edu.sa*

