



**Institute for Advanced Studies
in Basic Sciences**
Gava Zang, Zanjan, Iran



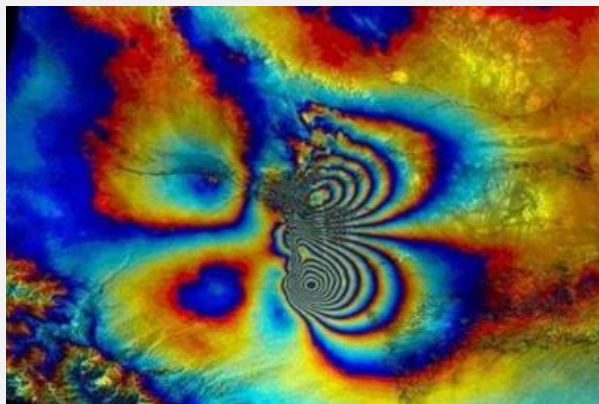
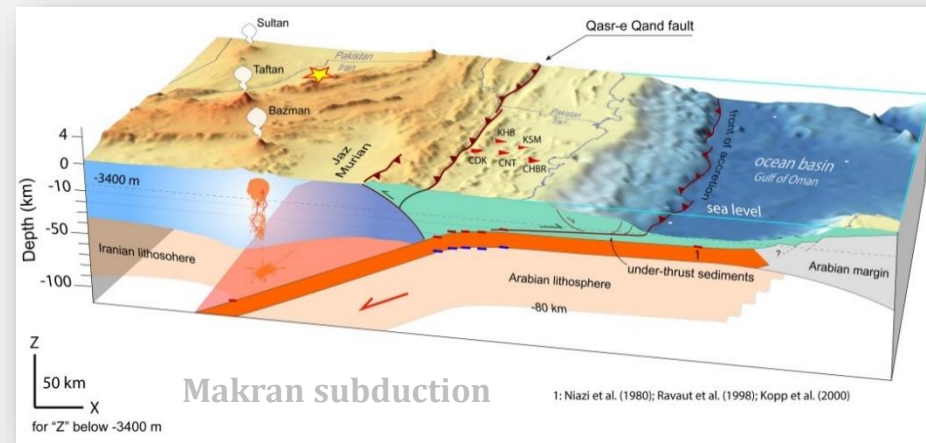
The Department of Earth Sciences

Departmental Overview

The Department of Earth Sciences at the IASBS is dedicated to research and education at the graduate level. We offer PhD and MSc programmes in various fields of geology and geophysics. We have active research in numerous multidisciplinary areas in geophysics, tectonics, space geodesy, sedimentology, petrology, climate change and hydrology. Current research areas include instrumental seismology to study the structure of the crust and lithosphere and the analysis of seismic waves and seismic sources, geophysical potential fields and applications, geohazards, active tectonics, structural evolution of collisional settings, applications of space geodesy in surface deformation, sedimentary basin analysis and reservoir geology, geochronology, magmatic processes in geodynamic settings, sustainable water resource management, climate change, groundwater hydrology and hydro-environmental analysis.

Areas of Study

- ✓ Deep Earth Structure
- ✓ Continental Deformation (Short to Long Term)
- ✓ Hydrogeophysics
- ✓ Hydroclimate and Environmental Monitoring
- ✓ Reservoir Geology
- ✓ Sedimentary Basin Analysis



Bam Earthquake



Mianeh Basin



Qizil-uzan River

Faculty Members

Geophysics & Geodesy



Majid Abbasi
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Geodesy, Earth's Gravity Field &
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Sedimentology & Hydrogeology



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Tectonics and Petrology



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Research Facilities

- ✓ The Department has several instrumental, analytical, and computational facilities at the service of its teaching and research programs. Our main laboratories include:
 - Geophysical instrument pool
 - Sample preparation
 - Hydrochemistry
 - Sedimentology
 - Microscopy
 - Image processing

- ✓ Further analytical facilities housed in other departments of the Institute are also available to our faculty and students.
- ✓ We also have a range of general facilities to support student activities that include personal office space, computer lab, map collections and various databases, and meeting rooms.



Vehicles and other facilities for field excursions

Graduate Studies

- ✓ The Department of Earth Sciences offers the following course- and research-oriented graduate degree programmes:
 - MSc in Geophysics, Tectonics, and Sedimentology/Hydrogeology
 - PhD in Geophysics
- ✓ The MSc degrees are two-year programmes with 10 to 12 courses in the first year and a research thesis project in the second year. Individuals with a **bachelor's degree** in physics, geology, mathematics, or engineering are eligible to apply.
- ✓ The PhD degree is a four-year programme with at least 6 courses in the first year, and a dissertation that is expected to result in papers publishable in peer-reviewed international journals.
- ✓ Individuals with a **master's degree** in physics, geology and geophysics, mathematics, or engineering are eligible to apply.



Every year the Department organises several field excursions to bring lessons learned in the classroom to the outdoors.

Contact Us

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