



***PhD positions at the Istanbul Technical University  
Eurasian Earth Science Institute***

Open for recruitment during the first half of 2014

In the frame of the **European Marie-Curie ITN project ALerT**

Salary is attractive and will be commensurate with a Marie-Curie ESR position

All necessary information is available in: <http://www.itn-alert.org>

ITU is seeking to fill 2 Early Stage Researcher (ESR: PhD Student) positions on the subjects below:

**1. Evolution of drainage networks and Quaternary sedimentary records of the northern margin of the Central Anatolia Plateau (Dr. Attila Çiner: <http://yunus.hacettepe.edu.tr/~aciner/>)**

Intermontane basins along the northern margin of the Central Anatolia Plateau, in addition to being primary targets of interest for petroleum industry, provide a sink for sediments to accumulate within the orogen and a storage area for easily eroded material, if climatic/tectonic conditions change. The PhD candidate will work on these sensitive recorders of change through structural, stratigraphic and sedimentological approaches in addition to cosmogenic nuclide and OSL age determinations.

**2. Deformation and earthquakes along the modern plateau margins (Dr. Cengiz Yıldırım)**

Fluvial terraces, marine terraces and uplifted shorelines are geomorphic strain markers providing information about history ( $10^3$  to  $10^5$  yrs), pattern, magnitude and rate of deformation in actively deforming regions. These data will integrate to regional modern GPS data. Turkey has installed a series of 34 permanent GPS stations in the high-strain regions of the country. The high resolution record of both horizontal and vertical movements available from these stations, together with shorter campaign-style geodetic data, can help fill the spatial and temporal gaps between longer term deformation records from geologic archives and the recent, highly localized record of crustal strain from earthquakes. Combined with paleoseismology, which can substantially augment the record of earthquakes in high-risk areas, our analyses will improve the growing database that describes local and regional crustal deformation to improve hazard assessment. The PhD candidate will work on geomorphology and geochronology ( $^{14}\text{C}$ , Cosmogenic Dating, U-Th, and OSL) of the terraces and shorelines, and integrate them with the modern deformation (GPS).

**Requirements:**

We are seeking applications from highly motivated students with a strong interdisciplinary background in geology, geomorphology, sedimentology, stratigraphy and tectonics. Basic knowledge of dating techniques (cosmogenic surface dating, OSL,  $^{14}\text{C}$  etc..) is a plus.

- Fluency in English (**speaking and writing**) is essential.
- Applicants can be of any nationality.
- Applicants must be researchers who have not yet been awarded the doctorate degree. To be eligible they must be in the first four years of research career counting from the date of obtention of the degree (diploma, master) which gives access to doctoral studies.
- Applicants may not have resided or carried out their main activity (work, studies, etc...) in Turkey for more than 12 months in the last 3 years. Short stays such as holidays are not taken into account.
- Starting date for appointment is expected to be the beginning of 2014.

**Please send your application, at the latest by the end of 2013 to Dr. Attila Çiner ([aciner@hacettepe.edu.tr](mailto:aciner@hacettepe.edu.tr)) and Dr. Cengiz Yıldırım ([cyildirim@itu.edu.tr](mailto:cyildirim@itu.edu.tr)) by e-mail.**

**The application should contain (Pdf-file):**

- Cover letter outlining the motivation and qualification for the project position
- Curriculum vitae (CV)
- List of publications (if available)
- Candidate should also send samples of previous work (master's thesis, published papers)
- Copies of university degree(s) and school certificates
- 2 letters of reference

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This PhD project comes in the frame of the Marie-Curie International Training Network (ITN) ALerT, funded in October 2013 by the EU. **ALerT (Anatolian pLateau climatE and Tectonic hazards)** is a virtual campus in the fields of applied Earth sciences, natural hazard monitoring, knowledge transfer, and risk communication. ALerT combines the resources and training structures of universities, research departments, and affiliated industry partners across Europe. ALerT research targets are the tectonic and climatic boundary conditions in the regions along the densely populated margins of the Central Anatolian Plateau (CAP) in Turkey and the associated natural hazards. The principal aim of our initiative is to establish a research-based virtual campus, designed to foster excellent training of young geoscientists through cutting-edge research topics and the transfer of knowledge.

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**Eurasian Earth Science Institute in ITU** is an excellent research and teaching center (<http://www.eies.itu.edu.tr/index.php/en/academic/departments/the-solid-earth-sciences>) situated in İstanbul, Turkey. During her/his PhD, the candidate will benefit from secondment with coadvisor(s) from other(s) ITN partner(s), and is expected to participate to several ALerT related meetings and specialized courses, including several field courses, offered by the ITN.