EARTH & ATMOSPHERIC SCIENCES

Associate/Full Professor - Earth and Atmospheric Sciences - Two (2) Positions - Tenure-Track

Description:

The Department of Earth and Atmospheric Sciences at the University of Houston invites applicants for in four sub-disciplines of geology and geophysics to fill two tenure line positions at the Associate Professor or Professor levels.

Candidates are sought to participate in our expansion plans in geology and geophysics that will help to meet demands created by a dynamic and growing undergraduate and graduate student enrollment and expanding interdisciplinary collaborative research opportunities. Candidates are expected to have the ability to conduct transformational research in their disciplines and to have a demonstrated record of exceptional research productivity, peer-reviewed publication, external research funding, and outstanding teaching and mentoring skills. Candidates should have an international reputation in their field of interest. Successful tenure line faculty appointees will be expected to teach at both the undergraduate and graduate levels.

Of the four disciplines advertised below, the two top candidates are expected to be appointed by January 15th, 2011.

1. Structural Geologist

The Department of Earth and Atmospheric Sciences invites applicants for a tenure track faculty position at the Associate Professor or Professor level in structural Geology, with an emphasis on fault zone deformation processes. we especially seek candidates with a thorough understanding of the mechanics of fluid saturated rocks, permeability barriers, fault sealing, interaction between fluid flow, deformation and mineralization, and the characterization, evolution and mechanics of fractures and fault populations. Preference will be given to candidates who have quantitative approaches to analysis of fault zone geometry, kinematics and dynamics at the all scales. Experience in interpreting faults and fault zones in seismic sections and/or within core or boreholes may be beneficial.

2. Sedimentologist/Stratigrapher

The Department of Earth and Atmospheric Sciences invites applicants for a tenure track faculty position at the Associate Professor or Professor level in the field of sedimentology/stratigraphy, The successful candidate must have a demonstrated record of research excellence in related areas such as diagenesis, sedimentary petrology, petrophysical properties, facies and stratigraphic architecture, experimental or numerical modeling, and/or reservoir characterization. Preference will be given to candidates with the ability to integrate an array of outcrop, well, seismic, laboratory, and other data to solve fundamental geologic problems.

3. Rock Physicist

The Department of Earth and Atmospheric Sciences invites applicants for a tenure track faculty position at the Associate Professor or Professor level in the field rock physics with expertise in the measurement, theory, and interpretation of physical rock properties to fill a tenure-track position in Rock Physics at the associate professor or professor level, candidates with expertise in high-pressure and high-temperature experimental rock physics measurement are sought. The successful candidate would be a collaborator in the UH Rock physics Consortium and will have access to a full range of teaching and research facilities within the Department and university including a fully-equipped and state-of-the art Rock and Fluid physics Laboratory and a seismic Acoustics Laboratory.

Equipment in the rock physics lab includes:

1. apparatus for rock p- and s-wave velocity measurement rated to 15,000 psi and 150°C,

2. fluid modulus measurement capability rated to 20,000 psi and 200°C,

- 3. a time-lapse simulation setup,
- 4. anisotropy measurement,

5. special setups for unconsolidated sediments and shales with simultaneous resistivity measurement, and

6. standard rock properties measurements.

4. Marine Geophysicist - Multicomponent Seismology

The Department of Earth and Atmospheric Sciences invites applicants for a tenure-track faculty position at the Associate Professor or Professor level in the field of marine geophysics, we especially encourage applicants with experience in marine seismic operations and acquisition systems (particularly ocean-bottom seismometers). Preference will be given to candidates with expertise in the processing, analysis, and interpretation of multi-component seismic reflection and/or refraction data as well as familiarity with seismic streamer and multi-component seismic reflection and/or refraction acquisition systems. The successful candidate will have access to a new group of ocean-bottom seismometers, oceangoing opportunities, extensive high performance computing hardware and a wide variety of industrystandard seismic processing and interpretation software.

The Department of Earth and Atmospheric Sciences

The Department currently has 25 tenure line faculty and 18 Research faculty appointments and offers a comprehensive set of Geosciences undergraduate and graduate degree programs in geology, geophysics and atmospheric sciences (see www.geosc.uh.edu). For a full list of research equipment, facilities and software available in the Department, candidates are directed to http://www.geosc.uh.edu/research/facilities/index.php.

Application Procedures:

Candidates for all positions should submit: (1) a letter of application including statements of teaching and research interests, (2) a curriculum vitae, (3) three letters of references (letters must be received before the applications will be considered), and (4) an official Ph.D. graduate school transcript showing date of degree and degree conferred to:

Dr. John F. Casey, Chair University of Houston Department of Earth and Atmospheric Sciences 312 Science and Research Building 1 Houston, Texas 77204-5007.

Signed reference letters may be submitted by referees as attached files via email to Tram Nguyen at tnguye36@mail.uh.edu.

Further information on the department and facilities can be obtained by viewing the departmental web page at <u>http://www.geosc.uh.edu</u> or by calling the Department at (713) 743-3402.

Tenure line candidate evaluations will begin September 15th, 2010, and continue until the positions are filled.

Equal Opportunity / Affirmative Action:

The University of Houston is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.