

PERMANENT RESEARCH POSITION "CHARGE DE RECHERCHE" OPEN (M/F)

in Geology

<u>Institution</u> : MINES ParisTech (Ecole Nationale Supérieure des Mines de Paris) <u>Research Center</u> : Centre de Géosciences

In the frame of the development of its research and teaching activities in the area of Geosciences, MINES ParisTech, member of PSL Research University, is opening a permanent position of "chargé de recherche" in Geology. In MINES ParisTech, a "chargé de recherche" is typically a junior member of staff with a permanent position having research as main dutyand teaching as a second duty. Equivalent positions outside France would be lecturer or assistant professor.

This position is targeting a young (approximately 3 - 10 years after PhD) researcher or an experienced engineer (f/m) willing to develop multidisciplinary research combining fundamental and applied sciences in the area of sedimentology.

1. THE RESEARCH AT MINES ParisTech

In line with its training activity, MINES ParisTech develops a research activity that covers a wide range of scientific disciplines. The eighteen research centers are organized in five departments: Earth and Environmental Sciences, Energy and Processes, Mechanics and Materials, Mathematics and Systems, and finally, Economics, Management and Society.

MINES ParisTech research aims at both academic excellence and socio-economic impact. This research model is developed in close interaction with the socio-economic world: private or public sector companies, as well as institutions and public administrations. MINES ParisTech is the first school in France by its volume of research on contracts, carried by Armines, the Mines ParisTech Foundation or MINES ParisTech. This special positioning allows the School to expand its staff and maintains unique experimental and digital platforms highly appreciated by its partners.

This ability for MINES ParisTech and companies to work together on ambitious scientific and industrial issues is recognized nationally and internationally, as exemplified by the CNRS silver medal awarded to Madeleine Akrich, two French Research Agency industrial chairs and the renewal of the Carnot label in 2016. MINES ParisTech is positioned at the 23rd place in the QS World University Rankings by subject and in the top 100, 150 and 300 of the Shanghai engineering thematic rankings.

2. CENTRE FOR GEOSCIENCES

The Centre for Geosciences of MINES ParisTech focuses on research and teaching activities in the field of applied Earth Sciences. It is located in Fontainebleau, 65 km South of Paris. Research and training activities cover various fields in relation to the understanding of mining and management of underground resources (mineral raw material, oil & gas, groundwater, deep underground energy and waste storages, tunneling and underground space management) in the context of a sustainable development.

The Centre for Geosciences is divided into six research teams in applied Earth Sciences fields (geology, geophysics, geostatistics, hydrogeology, hydrogeochemistry and engineering geology/geomechanics). Research activities are generally multidisciplinary and involve several teams of the Centre with topics spanning from original and fundamental developments to innovative industrial solutions. The Department employs about 40 tenured researchers, 35 technicians and administrative staff members and 40 PhD students.

The **Geology** research group focuses on research projects seeking to improve the comprehension of sedimentary dynamics of modern clastic "source-to-sink" systems and their preservation in fossil successions from the reservoir to the basin scale. The team expertise is based on field observation, mineralogical and geochemical analysis combined with modeling. It has a strong activity in the development of new concepts on the sedimentary record in terrestrial

environments within various geodynamics settings. A special attention is paid to the fracturing and associated fluids in the reservoir and cap rock modelling.

The research group is made of four lecturers/researchers. It has been partly renewed over the last years by the recruitments of young researchers coming from the academic area and working on the interactions between sedimentation-deformation- and fluid circulation in both modern and fossil environments.

MINES ParisTech opens a "chargé de recherché" position in geology, in order to enrich the research group with a confirmed person having both an excellent level in sedimentary geology and a solid industrial experience.

3. POSITION DESCRIPTION

The candidate is expected to perform fundamental and applied research in the area of geology. He/she should be autonomous and develop and build research projects in collaboration with academic and industrial partners.

Research

The successful candidate is expected to develop his/her own research direction in the area of geology and participate to the supervision of PhD students, post-doctoral researchers and trainees. He/she will be expected to:

- propose new topics and perform research with a high scientific visibility which would also be relevant to industry,
- publish in the best scientific journals;
- apply for projects on the national and international level and build projects in collaboration with industry keeping, at the same time, high scientific standards.

Teaching

The successful candidate is expected to participate to various teaching activities particularly for MINES ParisTech, but also in the frame of "Paris Sciences et Lettres" (PSL) Research University, as well as in Post-Master program in the area of his/her expertise. He/she will take part in teaching for Executive Engineering program of MINES ParisTech and students' projects "The job of engineer". He/she will also be involved in tutoring of Post-Master students as well as in advising PhD students. He/she will also be encouraged to suggest new courses that would enrich the spectrum of teaching offered by MINES ParisTech.

Candidate qualifications

- PhD or HDR (Habilitation à Diriger des Recherches) in the field of clastic sedimentology.
- Mastering of sedimentology and diagenesis (interactions reservoir architecture, tectonics damaged zones and fluid flow)
- In-depth experience of reservoir quality assessment in industrial areas such as water resources, geothermal energy, mining and oil.
- Demonstrated experience in students' supervision.
- Interest in developing high-level research attracting international recognition for the Centre for Geosciences.
- Capacity to generate a strong activity contributing to research visibility and publication.
- Potential in building research projects.
- Demonstrated working experience in the international context.
- Demonstrated capacity to communicate in English.
- Will to learn French for foreign candidates.

4. APPLICATION FILE

The application should consist of the following documents :

- A cover letter
- A detailed CV
- Research project in clastic sedimentology (5 pages limit)
- Copies of official transcripts for all degrees at all institutions attended
- List of publications and of oral communications at scientific conferences
- Three recommendation letters to be sent directly by the reference person. Optionally, to provide contact details of three researches to be contacted for recommendation.

The file (ONE pdf file) will be sent before 26 april 2018, to:

Mme Isabelle OLZENSKI, Chargée de mission auprès du directeur du Centre de Géosciences

Centre Géosciences – MINES ParisTech,

35 rue Saint Honoré,

77305 Fontainebleau Cedex, France

and/or by e-mail to:

isabelle.olzenski@mines-paristech.fr

For more information, the candidate can contact:

- For all administrative aspects: the Human Resources Department of MINES ParisTech and/or Isabelle OLZENSKI
- For scientific aspects: Isabelle COJAN, phone + 33 (0)1 64 69 49 11 ; mail : isabelle.cojan@mines-paristech.fr

A Jury composed of representatives of MINES ParisTech and external scientific experts will perform the review of applications. Applicants that have been short-listed will be invited for interviews and a presentation of their scientific project.