MAITRE ASSISTANTE/ MAITRE ASSISTANT in experimental metallurgy

PERMANENT JUNIOR FACULTY POSITION

JOB ENVIRONMENT:

Institut Mines-Telecom is the leading public group of engineering and management Grandes Écoles in France. Comprising eight public Grandes Écoles and two subsidiary schools, Institut Mines-Télécom fosters and develops a rich ecosystem of economic, academic, and institutional partners, all dedicated to higher education, research, innovation and economic development.
As a member of Institut Mines-Télécom, Mines Saint-Étienne carries out missions of education, training, research, innovation, industrial transfer, and scientific culture. With 2,500 students, 500 staff members, and a budget of €50 million, it operates on three campuses dedicated to i) the industries of the future, ii) health and well-being, and iii) sovereignty in digital technology and microelectronics industries. It is ranked in the top 15 of French graduates schools of engineering and in the Top 500 of world universities.

The 2023-2027 strategy of Mines Saint-Étienne contributes to that of Institut Mines-Telecom. Its ambitions are:

- To support and accompany ecological, digital, and generational transitions and train the actors involved in these transitions,
- To foster national and European sovereignty in microelectronics and digital technologies.

To support this strategy, Mines Saint-Étienne is recruiting a junior faculty member in metallurgy.

JOB DESCRIPTION:

The position available is for a Maitre assistant (permanent junior Faculty member) in experimental metallurgy metallurgy, assigned to the Training and Research Center « Sciences des Matériaux et des Structures - SMS
Center Presentation

The research and teaching groups of the Center SMS are: Mechanics and Elaboration Processes, Physical mechanics and Interfaces And Physics and Mechanics for the Metallurgy.
Expertise, skills and knowledge can be summarized as follows: Experimental and digital simulation of direct manufacturing processes for synthetic and bio-sourced composites, powder metallurgy and multimaterials, thermomechanical processing of alloys, microstructural evolutions, new alloys durability in extreme environments, materials for Design and the Creative Industries.

The recruited person will align his/her research project with that of the Research Unit: Laboratoire Georges Friedel UMR CNRS 5307.

The research activities of the Laboratoire Georges Friedel, mechanical science, materials and processes, are widely recognized and oriented towards major societal challenges, eco-efficient processes and materials (low in energy, resources, sustainability, light weighting), “tailor-made” materials in the fields of the environment, energy and transport. The ambition of the LGF, having an academic research profile with strong interactions with industry, is to assert its role as a leading scientific actor to address the topics of: “Durability and energy efficiency of materials and industrial components”.

Rationale for recruitment:

Training context and objectives

The teaching mission (courses, tutorials and practical work, project supervision and internships) concerns Ingénieur Civil des Mines degree and Research Masters of science training as well as apprenticeship training. The candidate must be able to cover a broad spectrum among the teaching of materials, physics, mechanics and processes and in particular physical metallurgy, advanced methods of characterization of matter. These sessions may also concern doctoral training. The recruited person will be actively involved in the teaching teams. As such, the design of new activities and the development of innovative teaching methods, particularly thanks to digital features, are an integral part of the teaching mission. English teaching skills preferred.

Research context and objectives

The Center SMS wishes to strengthen its skills in experimental physical metallurgy. Candidates must propose a project falling within one or more of the research axes below: “combinatorial metallurgy”, “evolutions of microstructures and non-equilibrium phase transformations”, “solidification of alloys”, “experimental simulations of processes », “microstructural and mechanical characterizations”. Academic and industrial activities will rely on technological platforms for the development of model and complex alloys, as well as metallic 3D printing (powder bed, wire fusion). The recruited person will be invited to integrate a modeling approach to, on the one hand, validate their experimental developments and, on the other hand, promote interactions with all the teacher-researchers involved in this theme.

The position is based on the campus of Saint-Étienne Participation to activities operated by the other campuses of Mines Saint-Etienne and international collaborations are encouraged.

PROFILE:

Holder of a Ph.D. in material science, and possibly of one or several successful post-doctoral experiences in a related field)

Essential skills, knowledge, and experiences:

- Teaching experience (at graduate or postgraduate level) is desirable.
- Demonstrated ability to publish research in peer-reviewed journals and develop a strategy for the dissemination of one’s research results.
- Proficiency in English is required. Most teaching and research activities can be carried out in English. However, in accordance with the French law, the candidates will have to demonstrate to the comitee a sufficient ability to interact daily in French with fellow faculty members, administrative staff and students .

Valued skills, knowledge, and experiences:

- Qualification by the French Conseil National des Universités (CNU) section(s) (28,33 and60) will be positively considered.
- Experience with distance or hybrid (in-person + remote) teaching.
- A significant international experience will be appreciated.
- Experience in industrial partnerships and collaborative research with the industry.
- Participation in actions of scientific culture and affinity for outreach activities in general, are a plus.

Abilities and aptitudes:

- Quality of oral and written communication.
- Affinity for teamwork, ability to deploy and operate collaborative projects.
- Interest in industrial relations, technology transfer, and innovation.
- Development and dynamism of international collaborations.

WHY JOIN US:

Institut Mines-Telecom is characterized by:
https://www.youtube.com/watch?v=m39m6hdNC48

- An environment of scientific excellence.
- A group with entities across the entire French territory.

Mines Saint-Etienne stands out for:

- A privileged working environment with high faculty-to-student and support staff-to-faculty ratios,
- State-of-the-art experimental and digital resources,
- Career progressions that takes into account all the aspects and missions of a faculty member,
- Significant contractual research activity (€11 million/year in Research and Innovation contracts), mostly with industrial partners,
- 25% international students, Member of the T.I.M.E. network and of the EULIST European University,
- A science center – La Rotonde – unique in France in the context of a graduate college of engineering, with a significant impact on society (>50,000 visitors per year),
- Ranked 55th worldwide and #1 in France for the Sustainable Development Goal-SDG 13 : Climate Action by the Times Higher Education
- A presence in some of the most dynamic and attractive areas in France : Lyon and Saint-Etienne metropolitan areas in the Auvergne-Rhone-Alpes region, and Aix-Marseille-Provence metropolitan area in Region SUD
- The possibility of partial telecommuting,
- 49 days of leave and time off.

ADDITIONAL INFORMATION:

- Nature and duration of the contract : Permanent faculty position - Permanent Contract (CDI).
- Position location : Saint-Étienne.
- **Application deadline : April 19, 2024.**
- The application file should include:

- An application cover letter
- A curriculum vitae outlining teaching activities, research work and where appropriate, relations with economic and industrial sectors (maximum 10 pages)
- Recommendation letters, at the discretion of the candidate,
- A copy of the Doctorate diploma (or PhD),
- A copy of an identity document

https://institutminestelecom.recruitee.com/o/maitre-assistante-maitre-assistant-en-metallurgie-experimentale-2

- **Desired start date: September 1st/October 1st, 2024.**
- Positions offered in the recruitment are open to everyone, with adjustments available upon request for candidates with disabilities.
- Position open to civil service holders and/or contractual individuals.
- In accordance with the specific status of the faculty members of Institut Mines Télécom (decree n° 2007-468 of March 28, 2007, amended), candidates must hold a Ph.D. or a qualification recognized as at least equivalent to national diplomas. Additionally, candidates must be nationals of a European Union country on the day of submitting their application (Law 83-634 of July 13, 83 on the rights and obligations of civil servants. Art 5 and 5 bis).
- Selected candidates are appointed as tenure-track faculty members. The tenure period is one year after which, tenured faculty members whose services have are satisfactory are granted a permanent position.

Contacts :

- On the content of the position: In charge of recruitment: Julien Favre: julien.favre@emse.fr.
  Head of SMS: Christophe Desrayaud: cdesray@emse.fr
- On administrative/HR aspects: Julie Jaffre julie.jaffre@emse.fr