

Phd Student (CIFRE)

The *Laboratoire d'Étude des Microstructures et de Mécanique des Matériaux*, (LEM3, Université de Lorraine, CNRS, Arts et Métiers ParisTech) located in Metz (France) is a center for transdisciplinary experimental and theoretical research combining mechanics of solids and metallurgy, materials science, chemistry, and physics. By maintaining the balance between basic and applied approaches, it ensures a strong visibility of its cutting-edge research and an effective knowledge transfer to industrial partners. The worldwide scientific excellence of the LEM3-Université de Lorraine was recognized in 2020 by the Shanghai Ranking: 43rd in "Metallurgical Engineering".

JEOL EUROPE SAS is a major developer and manufacturer of electron microscopes and other scientific instruments, industrial equipment and medical equipment. Its headquarters are in Tokyo, Japan, with 25 domestic and foreign subsidiaries and associated companies as of 2014. It is listed in the top ten businesses worldwide for analytical laboratory instrument manufacturing. JEOL's instruments are used by researchers around the world.

To support our research, we are looking for a

PhD Student

Development of a new STEM-in-SEM technique.

Start date: ~January 2021

Your tasks:

- You will develop a new cutting-edge technique for characterizing defects by electron microscopy.
- You will perform detailed analyses of deformation microstructures.
- Your results will be discussed in the framework of materials science.
- You will interact with several researchers and engineers.
- You will publish your work in international scientific journals.

We offer:

- Dynamic international environment
- Direct supervision by tenured senior academics and application engineers
- Enrolment in graduate school program
- Cutting-edge experimental facilities
- 3 years fixed term contract

Your profile:

- You enjoy developing cutting-edge techniques.
- Master's degree in Materials Engineering, **passed with honors**.
- Good knowledge of engineering, crystallography and materials science.
- Experience with electron microscopes is a plus.
- You have good written and verbal communication skills and enjoy working in an international team.
- Good English language skills are required.

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You will be registered as PhD Student at the *Université de Lorraine* and employed by JEOL EUROPE SAS (CIFRE program).

Further information and application

For further information and application [resume including addresses of referees and your exam scores \(bachelor and master\)](#), please contact:

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Application without enclosures mentioned may not be accepted.