



## ACADEMIC POSITION AT INSTITUT MINES-TELECOM

### LECTURER / ASSISTANT-PROFESSOR



#### **DISCIPLINE : MATERIALS / CIVIL ENGINEERING**

**AFFILIATION** : Ecole Nationale Supérieure Mines-Télécom Lille Douai (IMT Lille Douai)

Created by the merger of Mines Douai and Telecom Lille on January 1st, 2017, IMT Lille Douai is one of the largest graduate schools of engineering, north of Paris. It aims at training engineers and scientists of the future, with both industrial expertise and strong skills in digital technologies. Strategically located at the crossroad of Europe, one hour from Paris, one hour and a half from London and thirty minutes from Brussels, IMT Lille Douai intends to become a major player in industrial, digital and environmental transformations of the 21st century. Therefore, our school is building bridges between education, research, engineering and digital science.

Public establishment belonging to IMT (Institut Mines-Télécom), placed under the supervision of the Ministry of Industry, IMT Lille Douai has three main objectives: providing our students with ethically responsible engineering practice enabling them to solve 21st century issues, carrying out our R&D activities leading to outstanding innovations and supporting territorial development through innovation and entrepreneurship.

Located on two main campuses dedicated to research and education in Douai and Lille, IMT Lille Douai offers research facilities of almost 20,000m<sup>2</sup> in the following areas:

- Digital science
- Processes for industry and services
- Energy and Environment
- Process and Materials engineering applied to polymers, composites and civil engineering

IMT Lille Douai aims at strengthening its Research and Innovation Center (CERI) in Process and Materials both in education and training but also at developing cross-cutting research activities with the other Research and Innovation Centers of our school. The central axes of the CERI are based on eco-resources processing, environment, high-performance materials, advanced manufacturing, relations between microstructures and multi-scale modeling.

The selection committee will pay specific attention to cross-cutting proposals allowing the connection between the different Centers of IMTLD. For more information, see: [www.imt-lille-douai.fr](http://www.imt-lille-douai.fr)

The required missions of the successful lecturer / assistant professor position candidate are described below.

#### **BRIEF:**

Under the guidance of the Head of Process and Materials Engineering Centre, the successful candidate will actively contribute to the teaching and research efforts of the Centre:

#### **Teaching Missions and responsibilities :**

- Significant contribution to the delivery of teaching programs (courses, tutorials, practical works) of undergraduate and graduate students in his/her field of expertise (Civil Engineering) but also in common core courses (calculation of foundations, seismic calculation of structures, calculation of civil engineering structures). Some lectures can be given in English.
- Implement and engage innovative educational methods (MOOC, inverted classes...)
- Participate in pedagogical supervision (projects, internships, competition juries). Experience in monitoring internships and supervising thesis would be highly appreciated.

**Research and technology-transfer Missions :**

- Develop and conduct research projects that are aligned with IMT research focus areas.
- work effectively with other academics and supervise master/PhD students and post-docs in one or several of the core business of the Centre, in particular building materials from the recovery of industrial by-products and/or the integration of digital sciences in the civil engineering approach.
- implement contractual research and incentive actions and facilitate knowledge transfer in partnership with economic actors.
- Initiate cross-cutting research with other IMT teams to deliver innovative and market-driven solutions such as digitalization in construction industry, including BIM, construction management, construction process and similar.
- Prepare the French diploma accreditation to supervise research (“Habilitation à Diriger des Recherches (HDR)” in French).
- promote the department’s activities and ensure its thematic development while enhancing the links with our research and innovation centers.
- be actively involved in the development of the center's research themes.
- participate to the activities of regional, national and international scientific groups and organize scientific events.
- undertake a scientific watch.
- produce high quality scientific outputs : peer-review papers, patents, etc.

**REQUIRED PROFILE :**

The successful candidate must have strong scientific background and technical skills, allowing her/him to carry out the aforementioned missions.

**She/He should :**

- have solid scientific and technological background and significant experience in the field of building materials, and more precisely in the area of recovery of industrial by-products and waste:
  - Physicochemical and mechanical characterization techniques
  - Manufacture and preparation of mineral additions for hydraulic binders
  - Formulation of geopolymers and activated alkali materials
  - Durability of mineral matrices
  - Geotechnics of road materials
- set up national international projects (européen-INTERREG), national and regional projects (ANR, ADEME, BPI France, fonds FEDER...)
- have competencies and/or experience in the field of digital sciences (BIM, data processing, localization, mapping and mobility, etc.)
- have very good communication and teamwork skills.
- a strong teaching experience is mandatory.
- Have a good command of English, (both oral and written) and show negotiation and communication skills in order to :
  - demonstrate a marked integration into the international community, justify linguistic and cultural abilities to develop international training and research projects.
  - Attend working and discussion groups, international and national events (seminars, congresses..)
- deliver online internet courses (MOOCS in English).

The candidate must hold a PhD degree in Civil Engineering or Materials Chemistry. This position is open to a candidate interested in teaching and research oriented towards industrial and societal issues. Work experience of post-doctoral research and of project management will be highly appreciated and substantial record of research output in high quality outlets, will be highly desirable. The candidate should show cultural awareness with an aptitude for multi-disciplinary projects.

The administrative residence is located in Douai but teaching delivering will be done in both main locations.

**GENERAL INFORMATION :**

The required document and for applying for this position can be obtained by contacting **Human Resources Department** ([serviceconcoursdrh@imt-lille-douai.fr](mailto:serviceconcoursdrh@imt-lille-douai.fr) - Tél : +33 (0)3.27.71.25.36) :

Ecole Nationale Supérieure Mines-Télécom Lille Douai (IMT Lille Douai) - Direction des Ressources Humaines

Site de Douai - 941, rue Charles Bourseul - CS 10838 - 59508 DOUAI Cedex - France

Deadline date for submissions : 30/04/2020.

Eligibility Conditions : European Nationality Holders (European Union) at the candidature submission date and possessed of a PhD degree.

**FOR MORE INFORMATION ABOUT THE MISSIONS, CONTACT:**

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