



ACADEMIC POSITION AT INSTITUT MINES-TELECOM

LECTURER / ASSISTANT-PROFESSOR



DISCIPLINE : ENERGY AND PROCESS 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 20,000m² 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 Energy and Environment Centre research both in education and training but also at developing cross-cutting research activities with the other Innovation and Research Centers (CERI) of our school. Within the CERI EE the research unit "Energy Efficiency of Components, Systems and Processes" (ECSP) has 10 teacher-researchers, 2 engineers, 1.5 technicians. Research areas of interest are intensification of transfer phenomena in thermofluidic components, at different scales, applied in the fields of energy efficiency, process engineering and health. Numerical and experimental approaches are developed and implemented in parallel to improve energy efficiency at the component or process level in terms of heat exchange, mixing and transport mechanisms. Our research also includes flows with complex rheological behaviors, the development of innovative surface exchange designs, and coupled heat and mass transfers in solid media.

The selection committee will pay specific attention to cross-cutting proposals allowing the connection between the different Centers. For more information, see : 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 Energy and Environment 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. Some lectures can be delivered in English.
- develop and participate in the development of future innovative training methods/techniques (MOOC, inverted classroom...)
- participate in pedagogical supervision (projects, internships, competition juries). Experience in monitoring internships would be very much appreciated. Participate in setting up and organizing new courses (undergraduate and graduate, master levels)
- The successful candidate must possess a good background (theory and practice) in heat transfer sciences, or fluid dynamics, or process engineering which will enable her/him to get involved at different levels of the teaching courses.

Research and technology-transfer missions:

- Initiate and carry out research projects in the fields of thermal sciences and the optimization of energy systems and their components applied to various industrial sectors such as industrial processes, buildings and/or cities, transport,
- Work effectively with other academics and supervise master/PhD students and post-docs in one or several of the core business of the Research and Innovation Center,
- Initiate cross-cutting research activities to build bridges with other IMTLD innovation and research centers and remain in synch with the areas of excellence of our school and of the Institut Mines Télécom,
- Prepare the French diploma Accreditation to Supervise Research ("Habilitation à Diriger des Recherches (HDR)" in French),
- Implement contractual research and incentive actions and facilitate knowledge transfer in partnership with economic actors,
- Promote the department's activities and ensure its thematic development while enhancing the links with our research and innovation centers,
- Undertake a scientific watch,
- Participate to the activities of regional, national and international scientific group and organize scientific events.
- Produce high quality scientific outputs : peer-review papers, patents, etc.
- Develop research and technology transfer actions with economic partners.

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 development of system modeling including the global characterization and optimization of thermofluidic systems. It is also desirable that he/she has solid skills in the implementation and use of optimization techniques and parameters estimation methods.
- Be interested in thermal sciences and fluid mechanics,
- Have very good communication and teamwork skills,
- strong teaching experience is mandatory,

- Have a good command of English (oral and written) and show negotiation and communication skills, to:
 - demonstrate a marked integration into the international community,
 - justify linguistic and cultural abilities to develop international training and research projects,
 - deliver online internet courses (MOOCS in French and English)

The candidate must hold a PhD degree in the fields of Energy Sciences (thermal sciences, fluid mechanics) or Process Engineering. This position is open to a candidate who is interested in teaching and research oriented towards thermal/fluid sciences and energy efficiency optimization of systems, components and processes. 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 and 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 - 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 : 14/09/2020.

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 :

Bougeard Daniel, Professeur de l'Institut Mines Télécom, daniel.bougeard@imt-lille-douai.fr, numéro de téléphone +33(0)3 27 71 23 74.