

Institute of Engineering and Management of Grenoble Alpes University





**Grenoble INP - UGA** is a member of **international** engineering and management education and research **networks.** It is widely recognized in national and international rankings.



8 schools + 38 laboratories

8 350 students

**1 300** teaching, research, administrative and technical staff

Grenoble INP-UGA is a renowned public institution of higher education and research, and a major player in the Grenoble ecosystem. It is the engineering and management institute of Grenoble Alpes University, and plays a leading role in the scientific and industrial community.

## Professor

Research profile field	Process engineering and environmental risks
Requested job profile	Professor
Ministerial reference for the position	62 PR 0753
CNU Section	62
Job Location	Grenoble (Saint Martin d'Hères) –14 pl. de la Résistance.
Hiring date	01/09/2024 (DD/MM/YY)
keywords	Process engineering, environment, risk assessment, eco-design

Grenoble INP - UGA is a leading public institution accredited with the French label "Initiative d'excellence". It offers innovative engineering and management programs, with an increasing internationalization of its course offers. The courses are grounded in sound scientific knowledge and linked to digital, industrial, organizational, environmental and energy transitions. The Engineering and Management Institute of Grenoble Alpes brings together more than 1300 staff members (teacher-researchers, lecturers, administrative and technical staff) and 8 350 students, located on 8 sites (Grenoble INP - Ense3, Grenoble INP - Ensimag, Grenoble INP - Esisar, Grenoble INP - Génie industriel GI, Grenoble INP - Pagora, Grenoble INP - Phelma, Polytech Grenoble, Grenoble IAE and the INP Prepa). Grenoble INP is also a highly-ranked institution of higher education and research, leading the way in the fields of engineering and management on an international scale. It is a member of a large number of international academic and research networks. It is part of the European University UNITE!.

As part of Grenoble Alpes University, Grenoble INP has associated guardianship of 38 national and international research laboratories and of technological platforms. The research conducted there benefits both its socioeconomic partners and its students. Grenoble INP is at the heart of the following scientific fields: physics, energy, mechanics and materials; digital; micronanoelectronics, embedded systems; industry of the future, production systems, environment; management and business sciences.

Grenoble INP - UGA is an equal opportunity employer committed to sustainability. Grenoble INP-UGA celebrates diversity and equity and is committed to creating an inclusive environment for all employees. All qualified applications will be considered without discrimination of any kind.

# Teaching

School: Grenoble INP – Polytech Grenoble

School website: <a href="https://polytech.grenoble-inp.fr/">https://polytech.grenoble-inp.fr/</a>

Contact: Pr. Céline Darie, Directrice, <u>celine.darie@univ-grenoble-alpes.fr</u>

### School presentation:

Polytech Grenoble is an engineering school of Grenoble INP-UGA, the engineering and management institute of Grenoble Alpes University\*. A member of the Polytech network, it is a public school accredited by the Commission des titres d'ingénieur.

The 5-year training program (bac to bac + 5), which includes a core curriculum common to all specialties, aims to acquire scientific, general and technical knowledge, as well as skills related to the professions covered by the various diplomas on offer.

The post concerns the "Risk Management" (GeRi) specialization, which is a generalist course in risk management, addressing both the safety issues associated with industrial and environmental risks, and those relating to human health in the workplace.

Based on a balanced mix of fundamental, engineering and human sciences, the Risk Management program develops skills in the identification, modeling, assessment and control of industrial, occupational and environmental risks. Regulatory aspects and management systems are also studied. More than a third of the course is taught by lecturers from the socio-economic world.

### **Teaching Profile:**

The person recruited will be part of the GeRi department's teaching team and will work in close collaboration with the other teacher-researchers. His/her main tasks will be to teach process engineering related to risk management, and in particular heat exchange, industrial pollution treatment processes, ecotoxicology and eco-design.

The person recruited will be involved in the three years of engineering training, the final year of which is offered as initial training or through work-study programs. The person recruited will be able to contribute to enriching the themes taught and the methods used. An interest in new forms of teaching, the skills-based approach and the ability to teach in English will be highly appreciated.

### Research

### Laboratory: Rheology and Processes Laboratory (LRP)

Laboratory website: https://www.laboratoire-rheologie-et-procedes.fr/

Contacts : M. Frédéric BOSSARD, Director, frederic.bossard@univ-grenoble-alpes.fr

Presentation of the laboratory :

The Rheology and Processes Laboratory (UMR 5520) is a joint research unit of CNRS, Grenoble INP and Grenoble Alpes University.

At CNRS, the LRP is attached to CNRS Ingénierie. Locally, we are part of the PEM cluster (Physics, Engineering, Materials). We are also a member of the "Galileo Galilei Grenoble" (Fed3G) research federation, on which the LabEx Tec 21 is based, and one of the five founding teams of the Institut Carnot Polynat, whose aim is to develop and promote functional bio-based materials. The laboratory's integration and major role in these local and national structures enhances its visibility and optimizes the quality of its scientific exchanges, particularly at the rheology/process engineering interface, at the heart of the laboratory's activities and project.

### **Research Profile :**

Process engineering, intensification, rheology, flow, materials.

The LRP develops multi-disciplinary activities in the fields of rheology, complex fluids, soft matter and process engineering, in particular for membrane separation processes, the shaping of bio-based materials and the intensification of transfers and reactivity by ultrasound. Approaches are mainly experimental, with a component of theoretical and numerical modeling at different scales. Applications concern the industrial sector (biorefinery, agrifood, etc.), the environment and health.

The successful candidate will be expected to propose an ambitious and innovative research and integration project involving transfer and transport phenomena at different scales, with an experimental and/or modeling approach, possibly linked to environmental and socio-economic issues.

His/her activities will be in line with one of the laboratory's scientific axes:

- Process intensification (membrane separation, ultrasound, etc.)
- Complex fluid mechanics and transfers (biowaste recovery, sludge treatment, etc.)
- Materials, Microfluidics (development of biomaterials, flow of complex fluids in porous media, ...)

The person recruited must have built up a high level of scientific expertise and be able to take on large-scale research projects and develop national and international networks and collaborations.

Position in a restricted zone: YES

(to protect the nation's scientific and technical potential, the appointment of teaching and research staff is subject to the authorization of the Defence Security Officer).

## **Specific requirements**

Administrative activities linked to the duties of the Associate Professor: teaching unit responsibilities, course or year responsibilities.

In the context of research, excellence and increasing internationalization, the quality of research activities must be attested by recent publications in the best journals or international or international conferences in their field.

# How to apply

Applicants must submit their applications on the Galaxie Platform of the French Ministry of Higher Education and Research from the 22nd of February 2024, 10 a.m. (Paris time zone) to the 29th of March 2024, 4 p.m. (Paris time zone), deadline.

Any document sent outside the Galaxie procedure will not be taken into account.

The interview will include simulation/situational exercises.

The details will be communicated when the invitation is sent out. In addition, part of the interview may be carried out in English.