

Grenoble INP, Engineering Institute of the Univ. Grenoble Alpes, labeled Initiative of Excellence, is a public institution offering engineering courses with solid basic scientific content, a high technological specialization in connection with strong societal challenges related to digital, industrial, environmental and energy transitions. and a major internationalization of its courses. Grenoble INP employs more than 1,200 people (associate and full professors, lecturers, administrative and technical staff) and has 5,500 students in its 6 engineering schools (Ense3, Ensimag, Esisar, GI, Pagora, Phelma) and the Prépa des INP. From 2020, Polytech Grenoble and Grenoble IAE join Grenoble INP and considerably expand its training offer. Grenoble INP is recognized in national rankings as one of the leaders in engineering with international visibility. It is member of international engineering networks as well as the European university UNITE!.

Grenoble INP is a mother institution of more than 30 research laboratories, some of them international, and platforms where state-of-the-art research is carried out to develop knowledge, promote it to our industrial partners and transfer it to students. Grenoble INP is thus at the heart of the technological challenges of the future: Energy and materials; Digital sciences; Micro nanotechnology; Future industry and eco-efficient production in which international rankings recognize it as a leading player.

POSITION DESCRIPTION

Short profile : Design and management of production systems of the future

Category : Full Professor

Job number :

Field of expertise : Section : 61

Recruitment date : 01/09/2020

Location : Grenoble

Restricted regime area (ZRR) : YES NO (French governmental protection of scientific and technological research program)

Key words : Production systems – Supply chain – Sustainable development – New digital technologies

School: Grenoble INP - Industrial Engineering and Management School website : <u>http://genie-industriel.grenoble-inp.fr/</u> Contact persons : <u>daniel.brissaud@grenoble-inp.fr</u>

Grenoble INP - Industrial Engineering trains engineers of the 21st century, generalists of the future production systems at the service of society in a sustainable world. They are capable of mastering the entire industrial cycle: from innovation and design of a product to its recycling, including production and distribution. The school studies the transformation of the industry to meet societal and environmental challenges. It is heavily involved in international scientific networks, relies on an Industrial Club and trains around 650 students in its engineering and master's courses.

Teaching profile :

The position is dedicated to teaching future supply chain design and management in all business sectors. In accordance with Grenoble INP – Génie industriel objective, the teaching focus is on the engineering of the production systems performance, knowing that the conditions for this performance are today transformed by new technologies (in particular digital), new forms of production and organization, and new societal and environmental demands.

The candidate will know perfectly all areas of supply chain engineering: modeling techniques and advanced quantitative tools. It can make contents evolve according to scientific advances in the field, in particular digital technologies and the smart and connected factory.

He will have a good prospective vision of the value chain stakeholders in the industrial performance achievement. He will focus on the competitiveness of companies, but also on that of global industrial ecosystems. He will thus be able to integrate the new industrial challenges of tomorrow in the field: personalization and interconnection of products, exploitation of "data" for value creation, challenges of sustainable industry.

RESEARCH

Research laboratory: G-SCOP (UMR 5272 Grenoble-INP, UGA and CNRS). Teams GCSP or ROSP Website : <u>http://www.g-scop.grenoble-inp.fr/</u> Contacts : francois.villeneuve@grenoble-inp.fr

G-SCOP is a multidisciplinary laboratory to meet the scientific challenges raised by changes in the current and future industrial world. The scope of the laboratory ranges from product design to management of production systems based on strong optimization skills. The G-SCOP laboratory is a reference laboratory in France in the field of production systems (the only CNRS UMR focused on production systems; conducting the ANR prospective reflection on the production systems of the future, ...). The laboratory actively participates in the coordination of research at national level through the two main GDRs (GDR MACS and GDR RO) and its members leads many national and international projects.

Research profile :

The candidate will have to develop work on modeling, analysis and optimization for the design and management of the production systems of tomorrow, and more particularly supply chains.

There are many research directions. First of all, the challenges of sustainable development lead to many new problems. The design of green logistics chains, new organizations (reverse logistics, short circuits, urban logistics, etc.), efficient production systems dedicated to recycling, etc. are all essential subjects. In addition, new digital technologies offer numerous opportunities for the design and management of more efficient logistics chains (demand forecasting, inventory management, proactive and reactive flow management, etc.).

These different issues lead to new challenges in terms of optimization, particularly due to the very large size and often to the stochastic nature of the problems. The candidate must therefore master the tools of operational research and discrete event systems but also integrate the possibilities of new tools of artificial intelligence in order to respond to these new challenges.

PARTICULARITIES AND CONSTRAINTS

Administrative activities linked to the functions of full professor, responsibility of teaching unit or department.

The recruited professor will animate and develop the local community but also participate in the national and international influence of both the school and the laboratory.

He will have to take significant responsibilities in the piloting of the school and / or the laboratory. Teaching will be in French and in English.

HOW TO APPLY

Online application must be done on the website Galaxie from february the 25th 2020, 10 am (GMT+1) to april the 09th 2020, 16 pm (GMT+1). Postal applications won't be accepted.

The interview will include simulation/situational exercises. The interview will be held in French; a part of it could be held in English. Further information will be provided with the letter of convocation.