



Post-doc position in Industrial Engineering and Management **Mines Saint-Étienne, Henri Fayol Institute, LIMOS UMR 6158**

Context

Mines Saint-Etienne (MSE), one of the graduate schools of Institut Mines Télécom, the #1 group of graduate schools of engineering and management in France under the supervision of the Ministry of the Economy, Finance and Industrial Sovereignty, is assigned missions of education, research and innovation, transfer to industry and scientific, technological and industrial culture.

MSE consists of 2,400 graduate and postgraduate students, 400 employees, a consolidated budget of €46M, three sites on the Saint-Etienne campus (Auvergne Rhone-Alpes region, Lyon Saint-Etienne metropolitan area), a campus in Gardanne (SUD region, Aix Marseille metropolitan area), a site in Lyon within the digital campus of Auvergne Rhone-Alpes Region, six research units, five teaching and research centres and one of the leading French science community centres (La Rotonde €1M budget and +40,000 visitors per year). The Times Higher Education World University Ranking ranked us for 2022 in the 251-300 range for Engineering and Technology. Our work environment is characterised by high Faculty-to-Student, Staff-to-Faculty and PhD-to-Faculty ratios, as well as comprehensive state-of-the-art experimental and computational facilities for research, teaching and transfer to industry.

The Laboratory of Computer Science, Systems Modelling and Optimization (LIMOS), is a Mixed Research Unit (UMR 6158) in computer science, and more generally in Science and Information and Communication Technologies (STIC). It is linked with the Institute of Information Sciences and their Interactions (INS2I) of the CNRS and in a secondary way with the Institute of Engineering and Systems Sciences (INSIS). The LIMOS belongs to the University Clermont Auvergne (UCA) and Mines Saint-Etienne (MSE). It is also a member of Clermont Auvergne INP. The scientific positioning of LIMOS is centred on Computer science, Modelling and Optimization of Organizational and Living Systems.

Founded in 2011, the Henri Fayol Institute, brings together academics in industrial engineering, IT, environment and management to work on the theme of the global performance of companies. From a sustainable development and social responsibility perspective, a company's performance must be considered not only from a technical and economic standpoint, but also from a social, environmental and territorial standpoint. Two technological platforms have been developed to validate, promote and teach the work done within the institute under near-real conditions. The first one is dedicated to the territory of the future (Territoire Platform¹) and the second one deals with the industry of the future (IT^mFactory Platform²).

Mines Saint-Etienne is recruiting a Post-doc in industrial engineering and management for 12 months in the framework of the project RAMP-UP II – Supporting agile ramp-up and ramp-down in service and manufacturing industries³. RAMP-UP II contributes to addressing the limitations of state-of-the-art

¹ <https://territoire.emse.fr/>

² <https://www.mines-stetienne.fr/entreprise/itm-factory/>

³ <https://www.future-industry.org/research/advanced-manufacturing/ramp-up/>

approaches for agile, resilient and sustainable manufacturing and service industries, in particular in uncertain situations such as crisis context. The project is funded by the German-French Academy for the Industry of the Future (GFA) within the programme “Resilience & Sustainability - Maturation phase”. The proposed position is open within the GMI (Mathematical and Industrial Engineering) department with research activities developed as part of the UMR CNRS 6158 LIMOS.

1) Candidate profile

The candidate, who holds a **PhD in industrial engineering or equivalent (received before 1 February 2023)**, must have skills in one or more of the following fields, industrial management, industrial engineering, operations management, decision support systems. The candidate should preferably be knowledgeable about industry of the future concepts. English will be the main used language in the project.

2) Missions

The Post-doc will conduct research activities within the framework of the RAMP-UP II project. More generally, the activities are in relation to the domain of industrial systems design and management with a focus on one or more of the following areas: agility, resilience, service, uncertainty, sustainability. These activities could involve various approaches depending on the Post-doc background, e.g. enterprise/process modelling, simulation (e.g. discrete event, multi-agent, hybrid), artificial intelligence. The Post-doc missions will be conducted part of the activities of ODPS axis (Decision Tools for Production and Services) of LIMOS, which relate to Operations Management, i.e. finding the best use of resources to carry out given activities, within the framework of complex organizational systems.

3) Assessment criteria

The main evaluation criteria are the following (non-exhaustive list):

- Scientific production: quality and number of publications in journals and conferences indexed by the main electronic databases (Scopus, Web of Science, PubMed, Nature Index, arXiv.org ...)
- Research experience and contribution to producing deliverables, collaborations
- Fluency in English and, if possible, international experience

4) Recruitment conditions

- Candidates must hold a doctorate or a recognized qualification at least equivalent to the national diploma required.
- The missions will be carried out in the Saint-Etienne (42) Campus of Mines Saint-Etienne.
- The duration of the contract is a 12-month fixed-term contract
- Desired start date: **01 February, 2023**

5) Application procedure

The application file includes the following:

- Application cover letter
- Curriculum vitae outlining research (and teaching if any) activities, and where appropriate relations with economic and industrial sectors (maximum 10 pages)
- Recommendation letters, at the discretion of the candidate
- Copy of the Doctorate diploma (or PhD)
- Copy of an identity document

Applications must be submitted on the RECRUITEE platform by **24 November, 2022** at the latest via the following link: <https://institutminestelecom.recruitee.com/o/postdoctorante-postdoctorant-genie-industriel-gestion-industrielle>

Candidates selected for an interview will be informed promptly and the interviews of the shortlisted candidates will take place few days after application deadline.

6) Further information

For further information concerning the position, contact:

Project coordinator

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For further administrative information, contact:

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