VERI (Who we are)

Veolia Research and Innovation (VERI) is Veolia corporate research entity with projects in the water, waste and energy domains. Thinking that smart ideas can have their part in climate change mitigation and resource preservation for this planet, we provide innovative solutions to these key challenges.

At VERI, the Modelling & Information Technologies Department is a nodal centre when it comes to renewing our business with smart and digital initiatives. Acting as a catalyst in constant connection with our business units, the department put its mission on the fast delivery of high value and user-oriented services. Scope of actions ranges from bringing performance jumps to our core processes for water or waste treatment, enabling operation excellence by better planning or decisions, fostering new digital services to extend our traditional activities and business models.

The context (What you will contribute to)

As a R&D process engineer in the System Modelling and Fluid Mechanics lab, you join multidisciplinary project teams collaborating with material scientists, process scientists, modeling scientists, project managers, chemists to lead innovative process studies, develop new knowledge on complex chemical systems or sustain the development of expert tools for process design for better recycling of valuable materials. You help to make circular economy a reality.

The Job (What you will do)

As part of your missions as a researcher, you:
- Develop fundamental understanding of processes and design, discover, adapt process models for reactor or full process line
- Initiate, develop and maintain process engineering model libraries for Veolia key activities (waste recycling, industrial water, ...)
- Support scale-up actions from lab to industrial scales; participate in industrialization groups
- Set up, instantiate and run simulations cases, analyse results with the project team, write studies report, present findings to various audience (intern and extern)
- Benchmark tools and methods from other industries and help to renew our engineering practices, by cross pollinating in-house expert groups, setting targets, leading proof of concept actions and demonstrating value.
- Create and maintain an excellent and efficient working relationship with other teams in VERI and Technical and Performance Directions in business units
- Cultivate a network of academic and private partners to bring refreshing ideas and collaborative projects to the group
Depending on taste, ability and experience, you will progressively:
- Develop an area of expertise on chemical or biological process engineering modelling and and become internal referee on related topics, ensuring an active survey of innovations and new practices, participating in international expert groups and conferences
- Empower other VERI and BU specialists to use simulation tools more broadly via technical support, teaching of tools; lead the group wide deployments of methods and tools.
- Develop new modelling and simulation workflows to increase productivity and use of simulations (data pre and post processing, sensitivity analysis, parameter estimation, optimisation, etc.)

**Expected Profile (Who we are looking for)**
We hire people who are smart and determined, and we favor ability over experience

**Competencies**
You are a young professional in process engineering and if you have a PhD, that’d be great.
You have strong appetite for numerical simulation and model development and you have demonstrated capability to be efficient in some of these. You are talented in process engineering skills, including transport phenomena, unit operations and/or reaction engineering are expected.

Previous experience or training in relevant field such as process engineering, bioprocess or chemical process engineering is expected.

You have a clear and efficient communication style, orally as well as written. Fluency in English is required (writing technical reports and participation in technical or business meetings in an international context).

**Attitude**
You deeply think that models and engineering tools can be decisive for smarter engineering practices and you are willing to contribute to this vision. And of course, you know that going back and forth from theory to simulations without looking at the data and the experiments is worthless. You are not shy to try and attempt to find the right balance between scientific rigor and genuine exploration. Your entrepreneurial spirit could drive you to innovate in areas outside the job spec. You are flexible and pragmatic enough to adapt to market needs and projects evolutions. Your open mind will make it easy for you to integrate smoothly and contribute efficiently to multidisciplinary project teams. You are self-driven and team player as you think that great ideas comes where personal intuition meets group emulation.

Does it sound familiar to you?
These are very good news: we are looking for someone like you.

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**INTITULE DU POSTE** : Chercheur Modélisation Génie des Procédés  
**SITE** : Maisons-Laffitte  
**CATEGORIE** : Cadre  
**RATTACHEMENT HIERARCHIQUE** : Pôle Mécanique des Fluides et Modélisation des Systèmes  
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