

Senior Expert Science & Technology, Upstream Cell Culture Process Development & Modeling (m/f/d)

Job ID
REQ-10065881

11月 18, 2025

Austria

摘要

LOCATION: Schafftenau, Austria

ROLE TYPE: Hybrid Working, #LI-Hybrid

Join our Drug Substance Development team in Schafftenau as Senior Expert Science & Technology and take ownership of all upstream process development activities to enable late-phase clinical and commercial manufacturing.

Bring your passion for bioprocess modeling and simulation to transform data into insights, leverage advanced modeling and Artificial Intelligence (AI) tools, and help deliver cutting-edge medicines to patients worldwide.

About the Role

We are seeking a highly motivated scientist with a strong background in bioprocessing as well as modeling & simulation to drive the transition from wet-lab centered to model-assisted in-silico process development.

This role is ideal for a technically skilled and strategically minded individual who thrives at the intersection of biotechnology and data science.

YOUR RESPONSIBILITIES:

Bioprocess Development & Innovation

- Lead and manage all project activities related to late phase development and characterization of upstream cell culture processes, including scale up and tech transfer for manufacturing of biotherapeutics. Represent own technical function as upstream processing (USP) expert within a multifunctional team.
- Design, execute, analyze and document experiments to generate high-quality data for both process understanding and model development.
- Collaborate across functions and geographies to translate lab-scale insights into robust, scalable production processes.
- Contribute to the strategic evolution of upstream platform technologies, innovation initiatives, and global guidelines.

Modeling, Simulation & Digitalization

- Develop and apply mechanistic, data-driven, and hybrid models to support in-silico process development and optimization.
- Build digital twins and simulation frameworks.
- Support model verification and validation with Quality-by-Design (QbD) oriented and risk-based strategies
- Integrate modeling approaches with Process Analytical Technology (PAT) and Model Predictive Control (MPC) strategies.
- Leverage (generative) AI to extract insights from structured and unstructured data sources (e.g., Electronic Laboratory Notebook 's (ELNs), Laboratory Information Management System (LIMS) publications).
- Collaborate with global stakeholders to align modeling strategies, share best practices, and contribute to the development of modeling platforms and standards.

Leadership & Knowledge Sharing

- Mentor and coach junior scientific associates
- Contribute to scientific publications, conference presentations and intellectual property generation.

WHAT YOU ' LL BRING TO THE ROLE:

Education & Experience

- PhD in Biotechnology, (Bio)chemical Engineering or related field with 2+ years of experience in bioprocess development, modeling and digitalization, or MSc with 6+ years of relevant experience.

Technical Expertise

- Strong foundation in bioprocessing principles and upstream cell culture operations.
- Hands-on experience in both wet-lab bioprocess development and in-silico modeling approaches.
- Proficiency in one or more of the following areas:
 - Mechanistic modeling (e.g., kinetic, metabolic, Computational Fluid Dynamics (CFD))
 - Machine learning and hybrid modeling techniques
 - Digital twin development and real-time process control
 - Chemometrics, Multivariate Analysis and Regression
- Experience with generative AI (e.g., Large Language Models (LLMs), diffusion models) for knowledge extraction, process design, or automation is a strong plus.
- Familiarity with relevant tools and platforms:
 - Programming: Python, R, MATLAB
 - Modeling software: gPROMS, Aspen Plus, Simulink
 - AI/ML frameworks: TensorFlow, PyTorch, JAX, scikit-learn

Languages

- Fluent in English; German highly preferred.

You ' ll receive:

You can find everything you need to know about our benefits and rewards in the Novartis Life Handbook. <https://www.novartis.com/careers/benefits-rewards>

In addition to a market-competitive base salary, we offer an attractive incentive program, a modern company pension scheme, childcare facilities, learning and development opportunities as well as worldwide career possibilities within the Novartis group. In accordance with Austrian law, we are obliged to disclose the minimum salary as stated in the collective bargaining agreement. For this position the minimum salary is € 65,605.54 /year (on a full-time basis).

We also offer a potential market oriented excess payment in line with your experience and qualifications.

Commitment to Diversity & Inclusion:

Novartis is committed to building an outstanding, inclusive working environment and diverse teams,

representative of the patients and communities we serve.

Adjustments for Applicants with Disabilities:

If because of a medical condition, physical disability or a neurodiverse condition you require an adjustment during the recruitment process, please reach out to disabilities.austria@novartis.com and let us know the nature of your request as well as your contact information. The support which we can provide will include advice on suitable positions as well as guidance at all stages of the application process. Austrian law provides candidates the opportunity to involve the local disability representative, Behindertenvertrauensperson (BVP), in the application process. If you would like to request this, please let us know in advance as a note on your CV.

Why Novartis: Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together? <https://www.novartis.com/about/strategy/people-and-culture>

Benefits and Rewards: Read our handbook to learn about all the ways we'll help you thrive personally and professionally: <https://www.novartis.com/careers/benefits-rewards>

部门
Development

Business Unit
Development

地点
Austria

站点
Schaftenau

Company / Legal Entity
AT33 (FCRS = AT033) Novartis Pharmaceutical Manufacturing GmbH

Functional Area
Research & Development

Job Type
Full time

Employment Type
Regular

Shift Work
No

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