The Research Center Pharmaceutical Engineering GmbH (RCPE) is a global leader in pharmaceutical engineering sciences. We help our partners create and manufacture advanced medicines for patients worldwide through optimizing products and processes.

For our team / area Advanced Formulations (Area 2) we are looking for an active, highly qualified (m/f/x)

(SENIOR) SCIENTIST

Molecular Modeling - Chemistry
PhD possible
Ref.No SK116

Duties and responsibilities

- Apply state-of-the-art molecular simulation technologies, both classical and/or DFT based approaches, to establish properties and understand/predict the behavior of materials in pharmaceutical production processes (e.g., for prediction of mechanical properties, cohesion energy density/binding energy anisotropy of API crystals, molecular descriptors for electrostatic charge of crystals, surface-specific thermodynamic and dynamic parameters, and surface disordering/amorphization of crystal surfaces)
- Develop new scientific ideas, methods and technologies
- Actively participate in project teams/ meetings/ scientific networks
- Report and present scientific/ technical results and contribute to publications & presentations

Requirements

- A technical or natural scientific MS degree (theoretical chemisty, bio-physics or similar) and 2 – 5 years research experience in a field related to the tasks of the project
- Knowledge about ab-initio/DFT, molecular mechanics and dynamics, coarse grained simulations as well as in pharmaceutical manufacturing processes
- Knowledge in programming (e.g., python) and familiarity with Unix/Linux systems
- Knowledge in experimental characterization of materials and advanced simulation methodologies (e..g, extended ensemble techniques, optimization of classical empirical force fields) as an advantage
- Professional conduct and communication skills in dealing with international clients, partners and colleagues
- Interest and experience in performing top-level and target-oriented research at the interface of basic science and industrial application

We offer

- A multidisciplinary and dynamic research environment and access to highly modern infrastructure on campus of Graz University of Technology
- Opportunities for career development at the academic and industrial level
- A competitive salary (min. € 42.000,- gross/year, overpayment depending on qualification possible).
- Possibility to work part-time

At RCPE, we place a strong emphasis on promoting diversity and inclusion.

We are also committed to encouraging women to explore opportunities within our technical environment.

We actively encourage applications from women and, when candidates possess equivalent qualifications, we give preference while considering all relevant aspects and circumstances of all applications.

We are looking forward to receiving your application including your CV and a cover letter.



