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 Modeling and Prediction we are looking for an active, highly qualified (m/f/x)

## (SENIOR / PRINCIPAL) SCIENTIST PhD possible

Computational Fluid Mechanics and Molecular Dynamics Ref.No SK 102

## **Duties and responsibilities**

- Develop and apply methods simulate nanoparticle self-assembly on different length scales using methods that take into account the constituents of the nanoparticle as well as the fluid mechanics of the production process, including:
  - o Developing competence in fluid mechanics and molecular dynamics
  - o Learning numerical methods and computational fluid dynamics
  - o Performing molecular dynamics simulations
  - o Developing and apply coarse-grained models for molecular dynamics
  - o Setting up models for multiphase computational fluid dynamics simulations
  - o Performing and analyze multiphase computational fluid dynamics simulations
  - o Actively participating in project teams and scientific networks
  - o Writing project reports and publish research in reputed journals
  - o Presenting results at internal meetings at international conferences

## Requirements

- A technical or natural scientific MS degree and interest in pursuing a PhD degree
- Interest in performing research at the interface of basic science and industrial application
- Professional conduct and communication skills in dealing with international partners and colleagues

## 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. € 39.900,- gross/year, overpayment depending on qualification possible).
- Possibility to work part-time

We are looking forward to receiving your application, indicating the ref. no., and including a cover letter, your CV, publication record and credentials.

