

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 Quality of Science
we are looking for an active, highly qualified (m/f/x)

SCIENTIST (m/f/x) – DEM-Based Mechanochemistry

Working field / project: DEM-based simulation of mechanochemical processes

PhD possible

Ref.No SK130

Duties and responsibilities

- Develop DEM simulation models for mechanochemical processes in ball mills and twin-screw extruders and analyse relevant process descriptors such as particle motion, mixing, contact forces, energy dissipation and residence time
- Support the development of modelling approaches linking mechanical energy input to reaction progress and process performance.
- Compare simulation results with experimental or literature data and contribute to model validation and documentation.
- Prepare scientific publications, technical reports and presentations in collaboration with academic and industrial partners

Requirements

- MSc degree in chemical, process, mechanical or pharmaceutical engineering, materials science, physics, computational engineering or a related field
- Background in numerical simulation, particle technology, granular materials, powder processing or related fields, with a strong interest in mechanochemistry.
- Basic familiarity with DEM, CFD, fluid mechanics, or particle/process simulation is advantageous; training will be provided for the in-house DEM code.
- Experience with programming, preferably Python, C++, MATLAB or similar; knowledge of DEM software is 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 levels
- A competitive salary (€ 47.600,- gross/year, overpayment - depending on qualification - possible).
- Possibility to work part-time

At RCPE, we place 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, a cover letter, your publication record and credentials.

Contact

<https://careers.rcpe.at/>

