

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



WE ARE OFFERING A

PAID DIPLOMA/ MASTER'S THESIS

STUDY OF POWDER MIXING IN LABORATORY-SCALE
BLENDERS PROTOTYPES – REF. NO.DA147

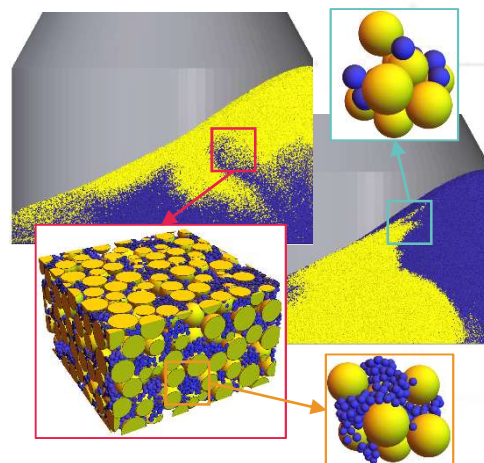
To dedicated students of Process and Particle Engineering, Materials Science, Pharmaceutical Technology, Applied Physics, or related disciplines, we offer an opportunity to write a paid Diploma/Master's thesis.

OBJECTIVE:

When mixing pharmaceutically relevant powder blends, precise knowledge of the optimal mixing time is very important, especially when cohesive powders are in use. Insufficient blending can affect downstream processes as over-blending, leading to agglomeration or particle segregation. A link between small- and large-scale blending processes is lacking, as well as guidelines for process transfer between devices of different shapes, especially for blends of cohesive powders.

This thesis work is mainly focused on experimental work and is divided in 3 parts:

- Design and construction of small laboratory-scale prototypes of blenders aimed to gather mixing data for different powder materials
- Experimental gathering of mixing data by direct measurements and image analysis
- Data analysis, interpretation and extrapolation of mixing trends



WITHIN THE FRAMEWORK OF THIS DIPLOMA/ MASTER'S THESIS WE OFFER THE FOLLOWING:

- Extensive participation in a top-level and industrially relevant research project in an international environment
- Supervised training in the task
- Assistance of experienced staff with the implementation of innovative ideas
- Access to highly modern infrastructure on campus of Graz University of Technology
- Assistance with the publication of results
- Adequate compensation and opportunities for personal and professional development

FINANCING:

- Compensation on the basis of a service contract

IF YOU ARE INTERESTED IN WRITING YOUR THESIS AT THE INTERFACE BETWEEN UNIVERSITY RESEARCH AND INDUSTRY/ BUSINESS AND TO CONTRIBUTE TO THE OPTIMIZATION OF PRODUCT AND PROCESS DEVELOPMENT IN THE PHARMACEUTICAL INDUSTRY, PLEASE CONTACT US INDICATING THE REFERENCE NUMBER.

Contact:

Research Center Pharmaceutical Engineering GmbH

Inffeldgasse 13, A-8010 Graz

Sandra Sünkel

Head of Human Resources

email: sandra.suenkel@rcpe.at - Tel.: +43 316 873 30904

LEADING PHARMA INNOVATION

rcpe.at