

PAID DIPLOMA / MASTER'S THESIS

INFLUENCE OF MATERIAL PROPERTIES ON THE MIXING BEHAVIOR IN THE FEED FRAME OF A INDUSTRIAL SCALE TABLET PRESS

Ref. No.DA179

To dedicated students of Chemical Engineering, Pharmaceutical Engineering, Pharmacy or related studies.

Objective

Nowadays, a common method for the continuous production of tablets is the direct compaction (DC). In such a DC line, the feed frame acts as the last station previous to the actual tableting process and is responsible for evenly distributing the active pharmaceutical ingredient (API) and excipients, and continuously delivering it to the matrices. However, the material properties of APIs and excipients can influence the mixing behaviour in the feed frame.

In the course of this diploma / master's thesis the impact of the material properties on the mixing behaviour in the feed frame of a tablet press in industrial scale size was investigated. Therefore, particle size, shape, density, and surface characteristics of different APIs and excipients will be analyzed and compared in terms of their mixing performance.

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

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 apply directly via our website.

Contact

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

