

Internship Opportunities

with the Particle Technology Group
at Paderborn University, Germany

– Within the framework of the Alberta-OWL-Cooperation –

- Open to:** Advanced undergraduate or graduate (preferred) students in Chemical Engineering, Materials Engineering, Engineering Physics, Chemical Technology, Nanotechnology Systems and alike.
- Applications:** April 15 for a an internship from ca. Sept 1 – Dec 15 (fall term in Alberta)
October 15 for an internship from ca. May 1 – Aug 15 (summer term in Alberta)
- Duration:** agreed individually (3 months at least)

You will be involved in a currently running research project. We are working on sophisticated scientific projects in the field of particle technology. Particles are important in nearly every product of our daily live, or at least play a major role during manufacturing of these products. Our research projects mainly focus on 4 different directions:

1. Aerosols (Characterization of complex aerosol particles, production of nanoscaled materials via aerosol routes, separation of particles from gases, simulation of aerosol behavior etc.)
2. Complex disperse systems (Behavior and production of nanoscaled bulk powder and suspensions, etc.)
3. Suspension Rheology (Flow behavior of highly concentrated suspensions, characterization of concrete, measuring in highly concentrated suspensions etc.)
4. Additive Manufacturing of plastic parts by laser powder bed fusion of polymer powders (Processability of new powders, low-temperature lasers sintering, process monitoring, powder production etc.)

Based on your experience and interests we would select an appropriate topic (selecting one research project from the above mentioned field) and direction (experimental, simulation) of your internship. Communication language will be English – or German if you wish. A mentor will give technical assistance in your intern project and will help you to accomplish all formalities and will give you support in everyday problems.

We put much emphasis on high quality research resulting in high standard publications. Ideally, in case of a successful internship we will publish the results including you as a co-author of the paper. Moreover a good team spirit, close collaboration and positive working atmosphere are of great importance for us.

Paderborn is a pleasant, mid-sized town with beautiful places right in the city center, within a 10-15min walk from the university campus. With roundabout 20.000 students and 150.000 inhabitants Paderborn is a very lively city with lots of pubs and cultural events, as for example 'Libori' (the largest public festival in the region, 2 weeks end of July) or the Music Festival at the University (typically more than 20.000 visitors).

Students are welcome to apply for an internship of at least 3 months by submitting the following documents as a single PDF file:

- Letter of motivation (please state as well desired starting date & duration, fields of interest and other preferences, e.g. experimental or theoretical work)
- CV (tabular form)
- Transcript of records

For further questions or assistance please contact Dr. Steffen Jesinghausen

( steffen.jesinghausen@upb.de)

Paderborn University is a high-performance and internationally oriented campus university with around 20,000 students. In interdisciplinary teams, we shape future-oriented research, innovative teaching and the active transfer of knowledge to society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our more than 2,300 employees in research, teaching, technology and administration a lively, family-friendly working environment with short decision-making paths and a wide range of opportunities.