

MSc or PhD position available:

Particle Engineering for Global Health

The position will emphasize **experimental work** in the area of particle engineering. The goal of this project is to design particles that can stabilize biotherapeutics for long-term room-temperature storage in global health applications. The position is funded partially by a pharmaceutical company and partially by a public funding agency, providing opportunities for collaboration with industry as well as with an international team of academic researchers.

Stabilized powders will be manufactured by spray drying. Associated evaporation and particle formation processes will be studied using an existing model system--a microdroplet chain--probed by imaging means. The dried microparticles will be examined using spectroscopy and ultramicroscopy techniques available at the National Institute for Nanotechnology.

Students with previous experience and interest in experimental work or with exceptional practical skills are encouraged to apply. Experience with or interest in microbiology is an advantage. Please list the instruments and techniques you are familiar with and describe your practical experience in detail.

Interested candidates should supply a one page statement of intent and a complete resume by email. The support level for this position is competitive. Possible start dates are January 2018 or September 2018.

Minimum GPA for these positions is 3.5 or equivalent. All students who are not native English speakers, regardless of the language of instruction in their institution, need to provide a language proficiency score that exceeds TOEFL iBT: 100, TOEFL paper based: 600, IELTS: 7.5. Applications without, or with lower, language proficiency scores will be considered only under exceptional circumstances.

Dr. Reinhard Vehring, P.Eng.
Professor and George Ford Chair in Materials Engineering
University of Alberta, Department of Mechanical Engineering
10-269 Donadeo Innovation Centre for Engineering,
9211 116th Street NW, Edmonton, Alberta, T6G 1H9, Canada

Reinhard.Vehring@ualberta.ca

Tel: +1 780 492 5180,

www.ualberta.ca/~vehring