

Open PhD Position

Materials2Simulation2Application

The **Christian-Doppler Laboratory on Particulate Flow Modelling** at the Johannes Kepler University Linz, Austria together with the international **CFDEM Project** (<u>www.cfdem.com</u>) intends to strengthen their research team with a new PhD student co-worker on the aforementioned topic, comprising:

- 1. **Particle Characterization by Dedicated Experiments**: A set of calibration experiments should be designed for identifying physical key parameters of particle flows.
- **2.** Parameter Identification in Discrete Element Method (DEM) Simulations: Based on the calibration experiments a set of trustworthy numerical parameters should be deduced for DEM simulations.
- 3. **Application to Industrial Processes**. The knowledge gained in (1) and (2) should be applied to industrial processes, where handling and processing of bulk solids play an important role (metallurgical industry: sinter plants and blast furnaces).

The PhD student will work at the CD Lab on Particulate Flow Modelling, embedded in a team of 20 researchers (6 Post-Docs) who represent the core of the Open Source based international CFDEM community. The PhD position is backed by two industrial partners. Salary will account to about 2.500€/month 14 times a year. The typical duration of such a PhD thesis is 3 to 3.5 years.

We are looking for persons from the field of **physics, mathematics or engineering science** with affection to numerical simulation and its experimental validation.



Interested candidates are required to **prepare a two page application**: While the first page should contain information on the applicant (name, photo, date of birth, email, career history, titles of selected projects and publications) the second page should contain an abstract of the applicant's Master thesis (or a selected project).

This short **application is due to November 31st 2012** and should be sent by email (pdf file) to <u>mat2sim2app@cfdem.com</u>

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