

Internship at the Institute of Fluid Dynamics, Dresden, Germany.

Topic:

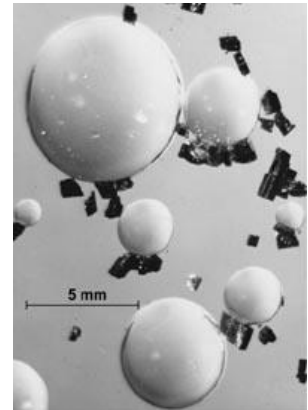
Experimental visualisation of particle-bubble interaction

Background:

Froth flotation is a separation process which plays a major role in the mining industry. Bubble-particle interactions are the very heart of this process, largely used for the capture of valuable commodities such as rare earth metals.

The Institute of Fluid Dynamics of the research centre Helmholtz-Zentrum Dresden-Rossendorf (Germany) is making a bold move towards investigating the capture of mineral particles by rising bubbles.

The Institute seeks a student to deploy high-speed imaging techniques and to observe the collision and attachment of particles falling on a bubble surface.



Tasks:

- Literature survey on particle attachment to bubble surface and froth flotation
- Visualisation with a high-speed camera of the attachment of falling solid particles on the surface of bubble
- Image processing of particle-bubble interactions

skills:

- Interest in fluid mechanics
- English and/or German
- High level of autonomous
- Enthusiasm for experimental work

duration:

4-7 Months
Starting date: January~March 2014.

financial compensation:

~ 600 Euros / month
The HZDR offers German courses free of charge

contact person:

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