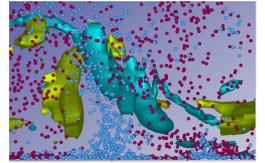




Opening for a PostDoc Position at the Environmental and Process Fluid Mechanics Group and Centro Interdipartimentale di Fluidodinamica ed Idraulica (CIFI) - University of Udine



University of Udine

Modelling and Experimentation of Deposition and Growth Processes in Porous Media

Description: Deposition and growth of a dispersed phase (be it solid or liquid) carried by a continuous phase (be it gaseous or liquid) on a solid porous medium play a crucial role in a variety of practical applications: From biomedical engineering (e.g. cellular cultures on 3D scaffolds for tissue engineering applications) to chemical engineering (e.g. in the development of catalytic filters for the abatement of volatile organic compounds) and automotive engineering (e.g. in the development of diesel particulate filters and ceramic filters for gas cleaning).

Aim of the project is to study deposition and growth mechanisms near a porous wall to improve current physical understanding and develop theoretical models for predicting formation and growth rate of deposits on porous media.

The study will be driven by numerical simulations (performed using in-house codes based on RANS and LES approaches), but also supported and complemented by experimental measurements gathered from the facilities available at the Environmental and Process Fluid Mechanics Lab.

The project is sponsored by a University grant. The successful candidate should have a PhD in a related area (Engineering or Science) and he/she is expected to interact with the laboratory research team.

The position is available for 12 months but can be extended up to 24 months.

The workplace will be at the University of Udine, in Udine, Italy.

Contact: Enquiries for further details should be sent directly to Prof. Alfredo Soldati, e-mail: soldati@uniud.it

Contract: 12 months (can be extended up to 24 months) fixed-term contract with a monthly net salary of 1450 € which can increase up to 1600 € according with experience. Health and safety insurance is covered independently by the University.

Selection: Applications should be sent BEFORE WEDNESDAY, MAY 15, 2013 to Prof. Alfredo Soldati, e-mail: soldati@uniud.it. Two recommendation letters are required.

After initial email screening of CV's and motivations (a visit can also be arranged), a written application is required to fulfill the administrative duties.

Deadline for Written Application: May 31, 2013

See also: http://www.uniud.it/ricerca/finanziamenti/dottorato/Bandi_attivi?lingua=eng

Website: <http://158.110.32.35>