

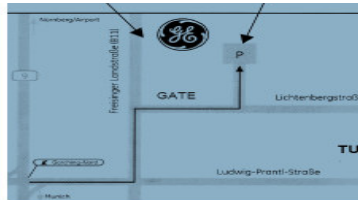
Registration

www.ercoftac.org

Location

GE Global Research Centre
Freisinger Landstrasse 50
D-85748 Garching b. Munich
Germany

The GE Global Research centre is located on the outskirts of Munich with excellent access to the centre and Munich Airport by the autobahn, ring road and train networks.



Seminar fees

€594ER COFTAC members
€995 Non-ERCOFTAC members

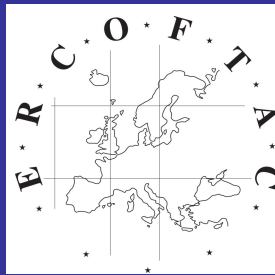
This fee includes: seminar registration, seminar material, lunch, refreshments and seminar dinner. Please note that accommodation is not included in this fee.

Registration

Please contact CADO-ERCOFTAC at the earliest opportunity to reserve a place:

Dr. Richard E. SEOUD
CADO - ERCOFTAC
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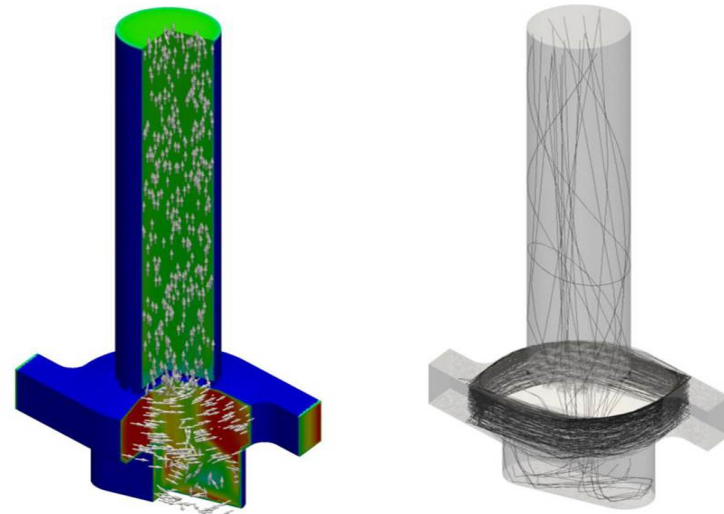
For further information : www.ercoftac.org



CFD for Dispersed Multiphase Flows, IV

SIG 12

www.ercoftac.org



Course Coordinator: Prof. Martin Sommerfeld

3-4 April 2014

GE Global Research Centre,
Munich, Germany

Information

The ERCOFTAC Association, is a global leader in the field of applied fluid dynamics. Through the guidance of its Knowledge Network Committee, is proud to announce a two day Best Practice Guidance course on:

CFD for Dispersed Multiphase Flows, IV

The simultaneous presence of several different phases in external or internal flows such as gas, liquid and solid is found in daily life, environment and numerous industrial processes. These types of flows are termed multiphase flows, which may exist in different forms depending on the phase distribution. Examples are gas-liquid transportation, crude oil recovery, circulating fluidized beds, sediment transport in rivers, pollutant transport in the atmosphere, cloud formation, fuel injection in engines, bubble column reactors and spray driers for food processing, to name only a few. As a result of the interaction between the different phases such flows are rather complicated and very difficult to describe theoretically. For the design and optimisation of such multiphase systems a detailed understanding of the interfacial transport phenomena is essential.

This course is rather unique as it is one of few in the community that is specifically designed to deliver, a) a best practice guidance and b) the latest trends in the CFD for dispersed multi-phase flows.

The course would appeal to researchers and engineers involved in projects requiring CFD for (wall-bounded) turbulent dispersed multiphase flows with bubbles, drops or particles. Moreover, on this occasion, delegates are offered the opportunity to present their work via 10 minute presentations, thereafter, the lecturers can offer prospective solutions

Lecturers

Prof. Martin Sommerfeld
University Halle-Wittenberg, Germany

Prof. René Oliemans
Delft University, The Netherlands

Prof. Berend van Wachem
Imperial College, UK

Programme

Thursday 3 April 2014

09:00	Industrial challenges for computational turbulent dispersed multiphase flows with recent examples	Rene Oliemans
10:00	Numerical methods for multi-phase flow	Berend van Wachem & Martin Sommerfeld
10:45	Refreshments	
11:15	Numerical methods for multi-phase flow	Berend van Wachem & Martin Sommerfeld
11:45	Forces on particles, droplets and bubbles	Martin Sommerfeld
12:30	Lunch	
13:30	Forces on particles, droplets and bubbles	Martin Sommerfeld
14:30	Modelling elementary processes in dispersed multi-phase flows	Martin Sommerfeld
15:45	Refreshments	
16:15	Modelling elementary processes in dispersed multi-phase flows	Martin Sommerfeld
17:30	Modelling elementary processes in dispersed multi-phase flows	Berend van Wachem
18:00	Q & A	
18:30	Close	
	Course Dinner	

Friday 4 April 2014

09:00	Euler/Euler approach	Berend van Wachem
10:15	Euler/Lagrange approach	Martin Sommerfeld
11:30	Refreshments	
12:00	Test case calculations and examples of application	Martin Sommerfeld & Berend van Wachem, Rene Oliemans
13:00	Lunch	
14:00	Test case calculations and examples of application	Martin Sommerfeld, Berend van Wachem, Rene Oliemans
15:00	Problem shooting session; presentations by participants	
16:00	Q & A including refreshments	
16:45	Close	