

Announcement for Short Courses on
Modelling and Computation of Multiphase Flows
Part I: Bases
Part IIA: New Reactor Systems and Methods
Part IIB: Computational Multi-Fluid Dynamics (CMFD)
with a new module:
Part IIC: CMFD with Commercial Codes

Zurich, Switzerland, March 14–18, 2005

Hosted by the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland

Multiphase flows and heat transfer with phase change are of interest to researchers and engineers working in power, nuclear, chemical-process, oil-and-gas, cryogenic, space, micro-technology, and other industries. Courses similar to this one have been offered in the past at Stanford University, at the University of California-Santa Barbara and for 21 years now at ETH-Zurich; some 1300 participants attended the Zurich courses.

The courses are organised in a modular form as intensive introductory courses for persons having basic knowledge of fluid mechanics, heat transfer, and numerical techniques, but also serve as advanced courses for specialists wishing to obtain the latest information.

Part I, **Bases** covers the common background material and emphasises the latest modelling and computational aspects of multiphase flows.

The **New Reactor Systems and Methods** part IIA reviews some of the most recently proposed advanced reactor system designs (including those in Generation IV) and introduces the state-of-the-art and beyond in modelling and simulation methods for core design and accident analysis.

The module IIB on **Computational Multi-Fluid Dynamics (CMFD)** reflects the growing interest in the application of CFD techniques to multi-phase flows. The module is continuously expanded to cover most new computational techniques.

A new module, **CMFD with Commercial Codes** has been added this year in response to numerous requests. This module is attached to both Parts IIA and IIB. The participants will have the possibility to meet the main commercial code developers, see demonstrations, etc.

Course language: English.

Lecturers: S. Banerjee, M.L. Corradini, G. Hetsroni, G.F. Hewitt, M. Ishii, Simon Lo, Georg Scheuerer, G. Tryggvason, Sergio A. Vasquez, G. Yadigaroglu and S. Zaleski.

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