

## Preface

This special issue is a collection of the papers the authors prepared based on the presentations they gave at the minisymposium on *Advances and Challenges in Flow Simulation and Modelling*, which was organized at the 5th World Congress on Computational Mechanics, July 7–12, 2002, Vienna, Austria. The topics covered in this collection of papers include: interface-capturing techniques for two-fluid flows; multipoint constraint methods for moving bodies; hierarchical formulations and multigrid techniques for transonic aerodynamics; integration of computation and experimental measurement; simulation of wind flows and rainfall; simulation of bubble clusters in ultrasound field; modelling of boundary conditions in cerebrovascular flows; fluid–structure interactions of parachutes; the enhanced-discretization successive update method; and application of the CIP method to fluid, solid, and gas mixtures.

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