

Foreword

This volume constitutes the proceedings of the workshop AMIS 2012, “Applied Mathematics In Savoie 2012”, whose theme was: “Multiphase flow in industrial and environmental engineering. A meeting between Engineers and Applied Mathematicians”.

This workshop was held at the Mathematics Laboratory of the Université de Savoie, Chambéry in the period 19-22 June 2012 (see <http://www.lama.univ-savoie.fr/AMIS2012/> for details).

The workshop brought together internationally leading researchers among the community of applied mathematicians and the large community of researchers in industrial and environmental engineering. The workshop has particularly focused its attention on mathematical modeling, the construction and properties of numerical methods and practical experiments.

The organizers’ intention was to provide a wide angle snapshot of this exciting and fast moving area and facilitate the exchange of ideas on recent advances in its various aspects. The numerous formal, informal and sometimes lively discussions that resulted from this interaction were for us a sign that we achieved something in the direction of fulfilling this aim.

Our second aim was to ensure that the diffusion of these recent results was not limited to established researchers in the area and present at the workshop, but also available to newcomers and more junior members of the research community. This was reflected by the presence of many unfamiliar and/or young faces in the audience. The present proceedings should hopefully complete the fulfillment of our second aim.

This workshop would not have materialised without the help and support of the following institutions.

We are very grateful to the CNRS (Centre National de la Recherche Scientifique) and the Université de Savoie for their financial supports without whom this workshop would not be accessible without fees.

We thank the “IFP Energies nouvelles” research center for its financial support.

Special thanks go to the city of Chambéry for its helpful financial support of the tour of the historical district and the gastronomic conference dinner in the center of Chambéry.

The Région Rhône-Alpes is to be thanked for ensuring that these proceedings are published at no cost for the organisers of the workshop.

Finally we would like to thank all the participants of the workshop who have made this event a success, the contributors to these proceedings and the reviewers for their hard work.

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