

Preface

The present issue of CAMES reflects the outcome of the 19th International Conference on Computer Methods in Mechanics (CMM 2011). This meeting was held on May 9–12, 2011, at the Warsaw University of Technology and gathered over 250 participants from 27 countries. The CMM 2011 had a rich scientific program encompassing 6 plenary lectures, 31 keynote lectures given within 15 minisymposia, eight thematic sessions and five ordinary sessions.

The scope of the conference covered broad spectrum of issues in computational mechanics, including numerical modeling of materials and structures, mesh-based and mesh-less methods of analysis, inverse problems and optimisation, bio- and fluid-mechanics, heat transfer, multiscale modeling and nano-mechanics.

After the conference, the authors of best contributions were encouraged by the Scientific Committee to prepare papers and to submit them for publication in scientific journals. It must be stressed that the submitted papers were considerably expanded over the material presented at the CMM 2011. They were also subject to the strict reviewing procedure of CAMES.

The present issue contains nine papers. The authors or co-authors of five of them were invited to deliver plenary lectures at the CMM 2011. These are J.-S. Chen, T.A. Kowalewski, G. Meschke, B. Schrefler and T. Uhl. The remaining contributors – P. Steinman, A.J. Nowak, V. Sladek and Th. Massart – were authors or co-authors of keynote lectures at minisymposia.

There is no doubt that the reader of this issue will get the insight into the state-of-art of many areas of contemporary computational mechanics. The authors deserve many thanks for their effort in preparing high quality papers.

Adam Borkowski
Guest Editor