

Special Issue: Advanced Computational Methods in ENgineering (ACOMEN 2022)

On behalf of the Editorial Board, we are pleased to present a selection of articles related to the 8th international conference on Advanced Computational Methods in ENgineering (ACOMEN 2022).

The ACOMEN conference series was initiated in 1998, with the aim to focus on advanced computational methods applied or applicable to problems in a wide variety of engineering disciplines, and to provide a platform where both applied mathematicians and engineers could interact. Since 1998, eight editions of ACOMEN were organized, four of them in Ghent and four in Liège.

ACOMEN 2022 was held in Liège on August 31-September 2, 2022, and welcomed 112 participants from 15 different countries. Five plenary lectures were given by worldwide recognized experts in their respective research fields:

- Marcus J Grote (Universität Basel, Switzerland) – *Explicit Local Time-Stepping Methods for Wave Propagation*
- Patrick Ciarlet (ENSTA Paris, Institut Polytechnique de Paris, France) – *T-coercivity: a practical tool for analysing variational problems*
- Weihong Zhang (Northwestern Polytechnical University, China) – *Structure Topology Optimization: Some issues and solutions*
- Anna Pandolfi (Politecnico Milano, Italy) – *Combining Optimal Transportation Theory and meshfree discretization for the simulation of advection and diffusion problems*
- Julien Yvonnet (Université Gustave Eiffel, France) – *Numerical modelling of microcracking in heterogeneous media*

We express our gratitude to all the members of the ACOMEN scientific committee, the session chairs and the minisymposium organizers, as well as to all the reviewers who provided the necessary volunteer time and expertise to conduct a fair and detailed review, ensuring high publication standards for the selected manuscripts. We also thank the staff from the *Association des Ingénieurs de Montefiore* (AIM) for their help organizing this ACOMEN edition.

The next edition will be held in Ghent, Belgium, on September 15-19, 2025. We hope to see you there!

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