40th conference with international participation

COMPUTATIONAL MECHANICS 2025

PROCEEDINGS OF COMPUTATIONAL MECHANICS 2025

November 3 - 5, 2025

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UNIVERSITY OF WEST BOHEMIA
IN PILSEN

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DOOSAN Škoda Power

PROCEEDINGS OF COMPUTATIONAL MECHANICS 2025

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PREFACE

The proceedings contain 62 conference papers of 79 talks presented at the 40th anniversary conference **Computational Mechanics 2025**, which was held at the Hotel Srní in Srní, Czech Republic, on November 3 – 5, 2025. This annual conference, which was attended by nearly 100 participants from the Czech Republic, Slovakia and from abroad, was organised by the Department of Mechanics, Faculty of Applied Sciences of the University of West Bohemia in Pilsen under the auspices of

- Miloš Železný, the Dean of the Faculty of Applied Sciences,
- Kamal Farhan, the President of the Pilsen Region,
- Czech Society for Mechanics,
- Czech National Committee of IFToMM,
- Central European Association for Computational Mechanics.

The main objective of this traditional conference is to bring together academicians, researchers and industrial partners interested in relevant disciplines of mechanics including

- solid mechanics,
- dynamics of mechanical systems,
- mechatronics and vibrations,
- reliability and durability of structures,
- fracture mechanics,
- mechanics in civil engineering,
- fluid mechanics and fluid-structure interaction,
- thermodynamics,
- biomechanics,
- heterogeneous media and multiscale problems,
- experimental methods in mechanics,

to create an opportunity for meeting, discussion and collaboration among the participants. As in the previous years, the three best papers presented at this conference were awarded the Czech Society for Mechanics Award for young researchers under 35 years of age.

To all conference participants, we offer the possibility to publish their peer-reviewed full papers in the international journal **Applied and Computational Mechanics** indexed by Scopus. This journal has been published by the University of West Bohemia in Pilsen since 2007 (see https://acm.kme.zcu.cz/).

We would like to express our gratitude to all the invited speakers for their significant contribution to the conference and the time and effort they put. Considerable acknowledgement belongs also to the members of the Organising Committee for their important work.

We strongly believe that all participants of the CM2025 enjoyed their stay in the beautiful nature of the Šumava region in a meaningful way. Finally, we would like to invite you all to come to the next conference CM2026.

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