

34th conference with international participation



BOOK OF EXTENDED ABSTRACTS

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BOOK OF EXTENDED ABSTRACTS

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PREFACE

The Book of Extended Abstracts contains 72 two-page abstracts presented at the 34th conference **Computational Mechanics 2018**, which was held at the Hotel Srní and Šumava in Srní, Czech Republic, on October 31 – November 2, 2018. This annual conference, which was attended by almost one hundred 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 under the auspices of

- Vlasta Radová, the Dean of the Faculty of Applied Sciences,
- Ivana Bartošová, the Vice-President of the Pilsen Region for Education and Tourism,
- 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 since 2007 (see <https://www.kme.zcu.cz/acm/>).

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 CM2018 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 CM2019.

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