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POLISH ACADEMY OF SCIENCES

41st Solid Mechanics Conference

Book of Abstracts

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Preface

This e-book contains abstracts of papers accepted for presentation at the 41st Solid Mechanics Conference (SOLMECH 2018). The conference was held in Warsaw, Poland, on August 27-31, 2018. More details can be found on the conference website: <http://www.solmech2018.ippt.pan.pl>

The Solid Mechanics Conferences are a series of biennial international conferences, which have been organized by the Institute of Fundamental Technological Research of the Polish Academy of Sciences (IPPT PAN) since 1953. This conference series aims at maintaining high scientific standards, while providing a friendly atmosphere that facilitates discussion of theoretical and applied research topics on solid mechanics. A set of plenary and keynote lectures is delivered by invited speakers of international recognition in their field of research.

This, the 41st edition of the conference series, was held at the Conference Center of Warsaw University, a quiet and pleasant vicinity close to the old town of Warsaw. The conference hosted 7 general lectures and 16 thematic sessions. 273 abstracts from 28 European and non-European countries (43% of them from outside Poland) were presented.

The solid mechanics of materials and structures is in itself an area of active and dynamic research, that also provides the foundation of numerous industrial applications that necessitate sophisticated computational models and methods. Naturally, the SOLMECH conference series encompass these research directions as well and this trend is clearly growing; and we foresee that it will continue to grow in the future.

Prof. K. Wiśniewski
Chairman of SOLMECH 2018

Prof. T. Burczyński
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The 41st Solid Mechanics Conferences is organized by the Institute of Fundamental Technological Research under the auspices of the Committee on Mechanics, both of the Polish Academy of Sciences.

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S03: Damage and fracture modelling of advanced materials

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S04: Plasticity, damage and fracture: microstructural aspects

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S06: Discrete and multiscale modelling in solid mechanics

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S15: Nonlinear and adaptive dynamical systems

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S16: Shells and plates

Dedicated to the anniversary of Prof. W. Pietraszkiewicz with the tribute speech by Prof. J. Badur (IMP PAN, Gdansk)

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S17: Stochastic mechanics

Dedicated to the memory of the late Professor Kazimierz Sobczyk (1939-2017)

R. Iwankiewicz (*TU Hamburg*), Z. Kotulski (*Warsaw UT*)

S18: Composite Materials and Structures

B. Brank (*U Ljubljana*), J. Hohe (*IWM Freiburg*), I. Kreja (*Gdansk UT*)

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