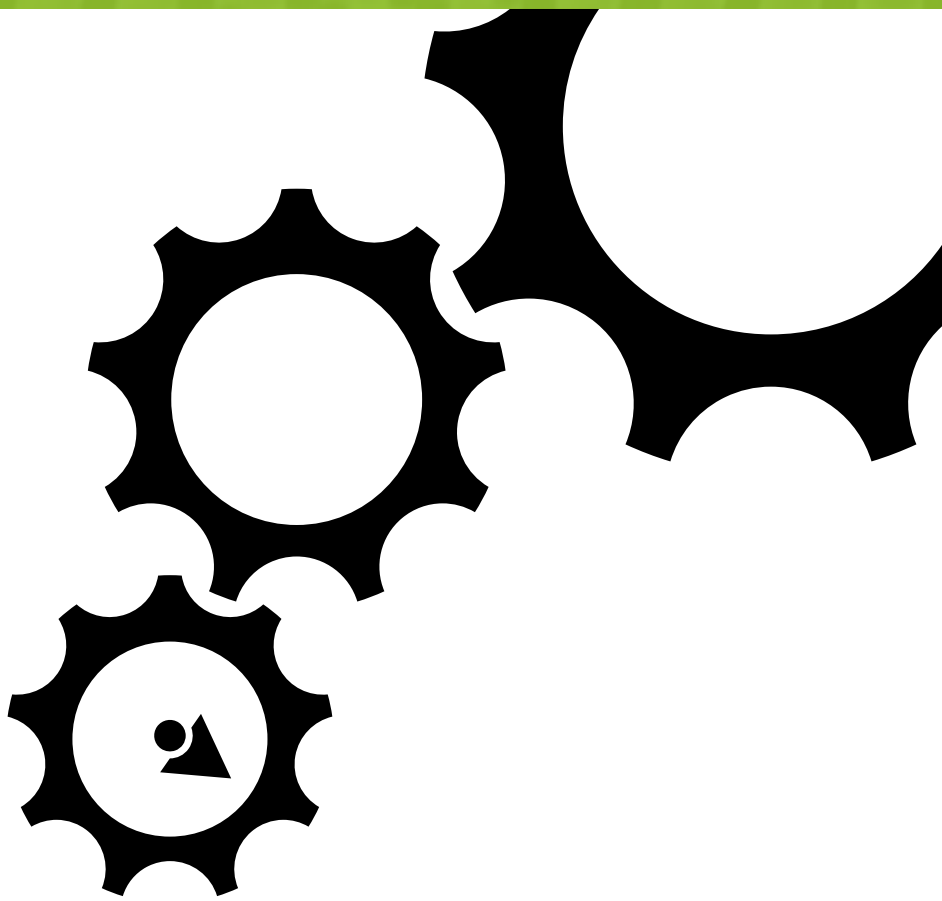
2018 AM

20th International Conference

APPLIED MECHANICS 2018

CONFERENCE PROCEEDINGS



FACULTY
OF APPLIED SCIENCES
UNIVERSITY
OF WEST BOHEMIA

20th International Conference

APPLIED MECHANICS 2018

April 9–11, 2018, Myslovice, Czech Republic

Conference Proceedings

Editors: Vladimír Lukeš, Jan Rendl, Michal Hajžman, Miroslav Byrtus

Conference organized by:

Department of Mechanics
Faculty of Applied Sciences
University of West Bohemia

Conference Partners:

NTIS – New Technologies for the Information Society
Czech Society for Mechanics
Central European Association for Computational Mechanics
Výzkumný a zkušební ústav Plzeň s.r.o.
MBtech Bohemia s.r.o.
IDIADA CZ a.s.

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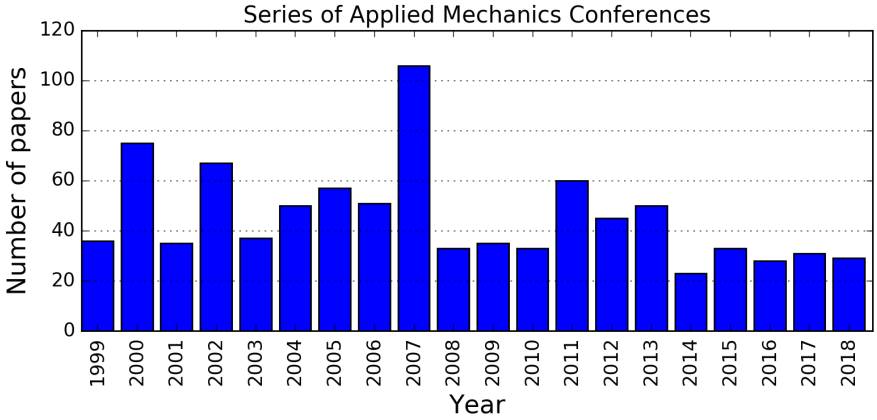
Preface

The Applied Mechanics conference series was established twenty years ago as a platform for meeting doctoral students and young scientists. The conference was to enable PhD students to present their first results, to be an opportunity to establish contacts among young scientists and, last but not least, also to obtain knowledge on the focus of individual academic institutions. “Traveling” character of the conference was inherited from the very beginning. Each event is organized by another institution, so that the participants of the conference have an opportunity to get to know the “map” of the Czech Republic and “nearby surroundings” from the point of view of (applied) mechanics. The international overlap of the event in Slovakia and Poland was thus implanted into the Applied Mechanics conference right at the beginning.

Twenty years of existence of the conference is certainly a good opportunity to look back a little. It is gratifying that the nature of the conference has not changed during the years. The conference still represents a good possibility for doctoral students to present their research results in front of their peers, to get an informal response, whether on a formal or factual side on their presentations, the international overlap of the event remained unchanged and the conference still serves as a platform for establishing the first professional contacts. During the two decades of the existence of Applied Mechanics, another aspect appears there: the conference became an opportunity for meetings of long time ago young academics, for whom the Applied Mechanics was one of the first conferences that they had participated in during their doctoral studies. While many of them have achieved high academic or executive positions at universities or research organizations, a link to common beginnings brings them back to this annual meeting. The very existence of the group of “old friends” of the Applied Mechanics conference is a good indicator that the social aspects of the conference definitely still work well.

Twenty years unchanging character of the event proves that the initial concept to bring together young scientists from different institutions focusing on (applied) mechanics is definitely right and viable. In order “to survive” the successful event for following decades, it would be enough “a detail” – enough students who want to take the mechanics in any form. That would certainly be good not only for the Applied Mechanics conference series. Let’s wish ourselves many new enthusiastic students and fruitful meetings with “old friends”.

April 2018 Luboš Náhlík, Karel Frydrýšek and Michal Hajžman



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Series of Applied Mechanics Conferences

1st	AM1999	March 16–18	Brno, Czech Republic
2nd	AM2000	April 3–6	Liberec, Czech Republic
3rd	AM2001	April 2–5	Nečtiny, Czech Republic
4th	AM2002	April 8–11	Ostrava, Czech Republic
5th	AM2003	March 24–27	Jaworzynka, Poland
6th	AM2004	March 22–25	Kočovce, Slovak Republic
7th	AM2005	March 29 – April 1	Hrotovice, Czech Republic
8th	AM2006	April 3–5	Srní, Czech Republic
9th	AM2007	April 16–19	Malenovice, Czech Republic
10th	AM2008	April 7–10	Wisla, Poland
11th	AM2009	April 6–8	Smolenice, Slovak Republic
12th	AM2010	April 19–21	Jablonec nad Nisou, Czech Republic
13th	AM2011	April 18–20	Velké Bílovice, Czech Republic
14th	AM2012	April 16–18	Plzeň, Czech Republic
15th	AM2013	April 15–18	Velké Karlovice, Czech Republic
16th	AM2014	April 14–16	Kraków, Poland
17th	AM2015	April 13–15	Kutná Hora, Czech Republic
18th	AM2016	April 11–13	Banská Štiavnica, Slovak Republic
19th	AM2017	April 25–17	Brno, Czech Republic
20th	AM2018	April 9–11	Myslovice, Czech Republic

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