

Lecture Notes in Mechanical Engineering

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Modern Methods of Construction Design

Proceedings of ICMD 2013

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Michal Petru · Ivan Mašín
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Preface

The book “Modern Methods of Construction Design” has been created on the basis of contributions of the 54th International Conference of Machine Design Departments.

This conference is one of the oldest central conferences, dealing with methods and applications in the machine design. The main aim of the conference is to provide an international forum where experts, researchers, engineers, and also industrial practitioners, managers, and Ph.D. students can meet, share their experiences, and present the results of their efforts in the broad field of machine design and related fields.

In the year 2013, the Department of Design of Machine Elements and Mechanisms of Technical University of Liberec, whose members deal above all with machine design, tribology, experimental methods and measuring, engineering analyses and products innovation, organized the 54th International Conference of Machine Design Departments on the occasion of 60th anniversary of Technical University of Liberec. The mountain town of Hejnice in Northern Bohemia was chosen for this celebratory event.

Since 1960, when the first conference was organized in Mělník by Brno University of Technology, more than 50 years have passed. The main aim of the conference was providing an opportunity for professional experiences sharing in the field of machine design, gears and transmission mechanisms. The heads of Mechanical Design Departments decided to organize these conferences annually first at the national and later at the international level. The significance of the conference has grown. Historically, the conferences were organized in different places by different mechanical design departments of Czech and Slovak technical universities:

1960	Brno University of Technology	Mělník
1961	Brno University of Technology	Brno
1962	University of West Bohemia	Plzeň
1963	Slovak University of Technology in Bratislava	Bratislava
1964	Technical University of Liberec	Liberec
1965	Technical University of Kosice	Košice

1966	Czech Technical University in Prague	Praha
1967	VŠB-Technical University of Ostrava	Ostrava
1968	University of Zilina	Žilina
1969	University of West Bohemia	Plzeň
1970	Brno University of Technology	Brno
1971	Technical University of Zvolen	Zvolen
1972	Slovak University of Technology in Bratislava	Bratislava
1973	Technical University of Liberec	Liberec
1974	Technical University of Kosice	Košice
1975	Brno University of Technology	Brno
1976	Czech Technical University in Prague	Praha
1977	Czech University of Life Sciences Prague	Praha
1978	University of Zilina	Kysucké Nové Mesto
1979	Technical University of Liberec	Liberec
1980	Slovak University of Technology in Bratislava	Smolenice
1981	Brno University of Technology	Brno
1982	Technical University in Zvolen	Šachtický
1983	Technical University of Kosice	Michalovce
1984	VŠB-Technical University of Ostrava	Podolánky
1985	Czech Technical University in Prague	Kladno
1986	University of West Bohemia	Plzeň
1987	Slovak University of Technology in Bratislava	Bratislava
1988	Brno University of Technology	Brno
1989	Technical University of Liberec	Liberec
1990	University of Zilina	Papradno
1991	Technical University of Kosice	Herľany
1992	VŠB-Technical University of Ostrava	Těšínské Beskydy
1993	Technical University of Zvolen	Zvolen
1994	Czech Technical University in Prague	Praha
1995	Brno University of Technology	Brno
1996	University of West Bohemia	Plzeň
1997	Slovak University of Technology in Bratislava	Gabčíkovo
1998	Technical University of Liberec	Liberec
1999	University of Zilina	Belušícké Slatiny
2000	Technical University of Kosice	Herľany
2001	VŠB-Technical University of Ostrava	Ostrava
2002	Technical University of Zvolen	Bielska dolina
2003	Czech Technical University in Prague	Praha
2004	Brno University of Technology	Blansko
2005	Technical University of Liberec	Sedmihorky
2006	Czech University of Life Sciences Prague	Praha
2007	Slovak University of Technology in Bratislava	Smolenice
2008	University of West Bohemia	Sní
2009	University of Zilina	Terchová
2010	Technical University of Kosice	Slovenský Ráj
2011	VŠB-Technical University of Ostrava	Sepetná
2012	Brno University of Technology	Mikulov
2013	Technical University of Liberec	Hejnice

The long history shows that meeting and exchange of views of experts from universities, research institutions, and companies contribute significantly to problems solving in a scientific field of machine design.

We firmly believe the tradition of ICMD will continue in the coming years.

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