

Preface

The International Conference on Tribology – SERBIATRIB, is traditionally organised by the Serbian Tribology Society every two years, since 1989. The previous conferences were held in Kragujevac (1989, 1991, 1993, 1999, 2005, 2007, 2011 and 2013), Herceg Novi (1995), Kopaonik (1997) and Belgrade (2001, 2003 and 2009). This year the 14th International Conference on Tribology – SERBIATRIB '15 takes place on May 13-15, 2015 in Belgrade.

This Conference is organised by the Serbian Tribology Society (STS) and the University of Belgrade, Faculty of Mechanical Engineering. Organising Scientific Conferences, STS plays a significant role in helping engineers and researchers to introduce in the fundamentals of tribology and to present their experience, solutions and research results.

Tribology is one of the sciences and technical disciplines whose development has a great influence on the reliability and life of mechanical systems. Interdisciplinary character of tribology and presence of tribological processes in most of mechanical systems demand researches in all fields of industry, where tribological activities can achieve significant technical, economical and environmental effects. The scope of the 14th International Conference on Tribology – SERBIATRIB '15 embraces the state of art and future trends in tribology research and application.

All together 83 papers of authors from 25 countries (Algeria, Belarus, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Finland, France, Germany, Greece, Hungary, Iraq, Mexico, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Switzerland, Taiwan, Turkey, UK, Ukraine and USA) are published in this Proceedings. Approximately 55 papers were submitted by the foreign authors and approx. 28 papers by the Serbian authors. Only unpublished papers were accepted, and the corresponding author is responsible for the originality of the paper. All papers are classified into eleven chapters:

- Plenary Lectures (4)
- Tribological Properties of Solid Materials (10)
- Surface Engineering and Coating Tribology (11)
- Lubricants and Lubrication (10)
- Tribotesting and Tribosystem Monitoring (8)
- Tribology of Machine Elements (8)
- Tribology of Manufacturing Processes (8)
- Design and Calculation of Tribocontacts (8)
- Biotribology / Nano and Microtribology (6)
- Other Topics Related to Tribology (8)
- Trenje, habanje i podmazivanje (2) – papers written in Serbian language

Besides presentations of these 83 papers, the Conference will have 5 presentations of the companies and 5 presentations of the papers that were not printed in the Proceedings, which make a total of 93 presentations scheduled in the Conference Programme.

The Conference is financially supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia, Bruker AXS SAS, BIOSTAR OIL GmbH, TRIGEMA d.o.o., MC Labor d.o.o., TTZH Tribologie & Hochtechnologie GmbH, Ducom Instruments (Europe) B.V., Fabrika maziva FAM a.d., Nanovea Inc. and Fluidotehnic d.o.o.

As a President of the Organising Committee I would like to thank the Scientific and the Organising Committee and all those who have helped in making the Conference and this Proceedings better. It was a great pleasure for me to organise this Conference and I hope that the Conference, bringing together specialists, research scientists and industrial technologists, and the Proceedings will stimulate new ideas and concepts, promoting further advances in the field of tribology.

I wish to all participants a pleasant stay in Belgrade and I am looking forward to seeing you all together at the 15th International Conference on Tribology – SERBIATRIB '17.

Belgrade, May 2015

Editor

Assoc. Prof. Dr. Aleksandar Vencel