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13th International Conference on Tribology

To cite this article: 2017 *IOP Conf. Ser.: Mater. Sci. Eng.* **174** 011001

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ROTRIB'16

The 13th International Conference on Tribology
September 22-24, 2016 – Galați, ROMANIA

PROCEEDINGS EDITED BY

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Selected, peer reviewed papers from the 13th International Conference on Tribology ROTRIB'16

FOREWORD

The Conference ROTRIB'16 is the 13th in a series of international scientific events on TRIBOLOGY organized in Romania. The general objective of this conference is to contribute and demonstrate fundamentals, applications and experiences in the field of Tribology. The conference provided an interdisciplinary forum for discussion, networking and initiating collaborations among specialists, about materials and Tribology and their application to product design and reliability. The exchange of ideas, theories, developments, innovations, improved methods and future trends was a key goal of this conference, by bringing together specialists from industry and academia, leading and young researchers, from various engineering and science fields.

Papers presented at ROTRIB 2016 are included in the following topics:

Friction and Wear

Contact Mechanics

Micro and nanotribology

Lubrication

Lubricants

Tribochemistry and tribocorrosion

Tribology of machine elements

Tribology in manufacturing processes

Surface metrology, surface engineering, coatings

Condition monitoring

These topics were discussed in sessions and two satellite symposia, VAREHD 2016 and DIPRE 2016. The official language of ROTRIB'16 for presenting and writing papers was English.

We have received an excellent number of submissions out of which, after a thorough peer reviewing process, a number of 75 scientific contributions has been accepted for presentation and publication. The authors of the accepted papers have been invited to present their work in the Conference and we are pleased to welcome 110 participants from 9 countries, presenting 69 papers.

The Conference program is enriched significantly by plenary presentations of renowned experts in their respective domains: Distinguished Professor. dr. Minel Braun (USA), Professor dr. Michel Fillon (France) and Emeritus Professor dr. Mircea D. Pascovici (Romania).

Conference ROTRIB'16 was organized by "Dunarea de Jos" University of Galati and the Romanian Tribology Association (ART), under the aegis of the Romanian Ministry of Education and Scientific Research. The Conference was held in Galati, ROMANIA at the Natural Sciences Museum Complex, September 22 – 24, 2016.



After 38 years since the first Romanian Conference on Tribology, "Tribotehnica", Galati, 1978, we organized ROTRIB'16 again in Galati, celebrating the 50th anniversary of Tribology. Unfortunately, in this jubilee year of Tribology, Professor Peter Jost (the "father" of Tribology and President of International Tribology Council) and Professor Branko Ivkovic (former President of Serbian Tribology Association and Balkan Tribology Association) passed away.

The Conference is financially supported by "Dunarea de Jos" University of Galati, the Romanian Tribology Association, the Romanian Ministry of Education and Scientific Research and our sponsors, which participated in ROTRIB'16 with company-profile presentations and/or product exhibitions.

We would like to express our gratitude to the authors for submitting their work. We would like to thank to all those who have contributed, in one way or another, to the success of the Conference. We are grateful to the Scientific Committee members as well as to the external reviewers for their volunteer hard work of reading and discussing the submissions. Last but not least, we would like to thank to the members of the Organizing Committee for their technical and non-technical support.

It has been a great pleasure for us to organize the Conference ROTRIB'16 and we do hope that this scientific event will stimulate future developments and innovations in the field of tribology.

We also hope that all participants have had a pleasant and fruitful time in Galati, on the banks of the Danube River.

Organising Committee
Galati, September, 2016

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Thank to our reviewers

Stelian Alaci, Gabriel Andrei, Laurentia Andrei, Emilia Assenova, Özgü Bayrak, Blaza Stojanovic, Jean Bouyer, Mihaela Buciumeanu, Sorin Cananau, Jean-Pierre Celis, Shriniwas Chippa, George Chirita, Traian Cicone, Florina Ciornei, Sorin Ciortan, Adrian Circiumaru, Liviu Ciupitu, Radu Cotetiu, Spiridon Cretu, Ana Cristescu, Lorena Deleanu, Adrian Catalin Drumeanu, Aurelian Fatu, Michel Fillon, Jean Geringer, Romeo Glovnea, Luminita Irimescu, Juliana Javorova, Baki Karamis, Magda Lakatos-Varsanyi, Victor Marian, Mathew T. Mathew, Ilie Musca, Nikolai Myshkin, Bogdan Nedic, Dumitru Olaru, Liviu Palaghian, Viorel Paleu, Chris Papadopoulos, Mircea Pascovici, Pierre Ponthiaux, Adrian Predescu, Pandora Psyllaki, Gencaga Purcek, Marius Pustan, Alexandru Radulescu, Irina Radulescu, Minodora Ripa, Razvan George Ripeanu, Yusuf Sahin, Adolfo Senatore, Samion Syahrullail, Nacer Tala-Ighil, Andrei Tudor, Radu Velicu, Mehmet Yazar, Thami Zeghloul, Peter Zentay.

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