

## Preface

The 11<sup>th</sup> International Conference on Local Mechanical Properties - LMP2014 has been organized by the Institute of Materials Research of the Slovak Academy of Sciences in Košice, Slovakia, and it was held in the Congress Centre Academia in Stará Lesná in High Tatras on November 12-14, 2014.

The conference continues the series of LMP conferences held alternatively in Slovakia or in the Czech Republic starting in Košice in 2004 and 2005 and subsequently in Plzeň (2006), Brno (2007), Herľany (2008), Telč (2009), Smolenice (2010), Olomouc (2011), Levoča (2012) and Kutná Hora (2013).

The conference officially attended 88 participants from 7 countries (Slovakia, Czech Republic, Poland, Hungary, Switzerland, Germany and France). Scientific program of the conference included 4 invited lectures, 17 oral presentations, 3 company presentations and 48 posters, which competed in three categories. They were devoted to the results of research and development in the characterization of mechanical properties of materials from nano to micro/meso-scale in wide range of materials.

The conference proceedings consist of the selected and peer reviewed papers divided into 5 chapters. They include papers focused on nanoindentation, then on the measurement of the properties of films and coatings as well as biomaterials research. Small special chapter is devoted to the application of modeling, mainly finite element analysis, to the study of mechanical properties. The last chapter, "Mechanical Properties of Materials in Micro- and Meso- Scales", encompasses mostly the poster contributions which used mechanical properties as a feedback for testing and optimization their preparation conditions, standard techniques applied to less common systems and vice versa, etc. The organizing committee hopes that the proceeding contributions will provide a valuable overview and state-of-the-art in the field of local mechanical properties in the countries of Central Europe.

The Organizing committee would like to thank all participants for their scientific contributions and to acknowledge sponsors for their support which made the conference possible.

We are looking forward meeting you at the LMP 2015 conference which will be held in November 4-6, 2015 in Liberec, Czech Republic.

František Lofaj

LMP2014 Organizing committee





**organized by**



Institute of Materials Research  
Slovak Academy of Sciences  
Košice



Technical University of Košice  
Faculty of Metallurgy

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