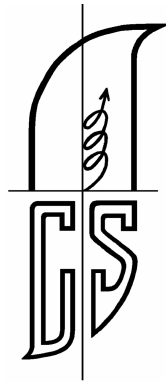


Proceedings of the
15th Czech and Slovak Conference on Magnetism

Košice, Slovakia, June 17–21, 2013



Editors of the Proceedings:
Jozef Kováč and Rastislav Varga

WARSAW

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Preface

This proceedings volume contains selected papers presented at the 15th Czech and Slovak Conference on Magnetism “CSMAG13”, which was held in Košice from June 17 to 21, 2013. The conference was organized jointly by the Faculty of Sciences of the P.J. Šafárik University in Košice and the Institute of Physics, Slovak Academy of Sciences in Košice in cooperation with Technical University in Košice, Slovak Physical Society, Czech Physical Society and Slovak Magnetic Society.

The main goal of this conference, first established in 1960, is to enable Slovak and Czech researchers as well as participants from other countries to present their most recent results and to exchange information about current trends in the field of basic and applied magnetism. The 15-th Czech and Slovak conference on Magnetism was the largest conference in the series, and thus, it was necessary to extend traditional four-day program to five full conference days. The conference attracted 320 registered participants from 20 countries, of which 137 delegates were from Slovakia, 62 from Poland, 54 from Czech Republic and the remaining part of attendees came from other European and overseas countries. Thus, the conference retained its strong international character, which was progressively developed during the last two decades. It also gave us a great pleasure to welcome at CSMAG13 a young generation of magneticians represented by graduate and PhD students. Their large participation at the conference is proof that research in magnetism has good prospects for future development.

The scientific program covered different areas of basic and applied magnetism such as theoretical problems of magnetically ordered materials, magnetization processes, amorphous and nanocrystalline soft magnetic materials, thin films, multilayers and surfaces, rare-earth and $5f$ magnetic systems, strongly correlated electron systems, molecular and low dimensional magnetism, ferrofluids, magnetic properties of superconducting materials and applications of magnetic materials. Two new topics: i) Magnetic Materials for Energy Applications and ii) Multifunctional Magnetic Materials were included into the program of CSMAG13 in order to cover the recent research activities in these rapidly growing areas of magnetism.

The 9 technical sessions comprised 12 invited and 67 contributed talks as well as 227 poster presentations. We would like to express our gratitude to the invited speakers for delivery of high level talks that covered most recent developments in the area of their scientific expertise. There is no doubt that all subjects treated in these invited lectures and also in the contributed talks were of great interest for audience. The three poster sessions presenting a number of the original scientific results were also well attended. After a rigorous review process 203 papers have been finally accepted to be included in these Proceedings.

We hope that the conference accomplished all expectations of participants regarding both scientific program and social events. We would like to express our thanks to all institutions and sponsors that have afforded a financial help to the conference. Especially, we are grateful to prof. Čížmár, rector of Technical University in Košice for providing us with suitable conditions of the university campus for the conference venue. We wish to express our special gratitude also to the CSMAG13 editors Jozef Kováč and Rastislav Varga for their effort to prepare these Proceedings.

Pavol Sovák

Ivan Škorvánek

chairmen of CSMAG'13

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