



Preface

Dear Reader,

The VIth National Crystallographic Symposium (NCS2016), held in the Grand Hall of the Bulgarian Academy of Sciences, on 05–07 October 2016 is the successive initiative of a project started in the beginning of 2009 by a group of Bulgarian crystallographers – enthusiasts and it is nowadays conducted under the auspices of the Bulgarian Crystallographic Society (BCS). During the years one of the main goals of the Symposium has been the promotion of the various crystallographic techniques, methods, programs, software to a larger audience from different scientific fields: theoretical crystallography, crystal growth, mineralogy, materials science, solid state physics, structural biology, chemical crystallography and other areas, as well. This was a memorable opportunity to review current developments in crystallography, addressing materials science challenges imposed by new materials. The progress in this direction is determined mostly by the level of experimental techniques – new possibilities emerging from new, intense, tunable and precisely focused X-ray beams, as well as from high resolution, sensitive, energy dispersive detectors – that were presented by our kind sponsors: TA instruments, Jeol, Bruker, Panalytical, Zeiss, ELTA'90, Aquachim, Labexpert, InfoLab.

Following the path, established during the previous Symposia, the organizers in conjunction with the BCS have dedicated a special honorary sign to Prof. Kostadin Petrov from the Institute of General and Inorganic Chemistry of Bulgarian Academy of Sciences (see photo). He was the first amongst the enthusiasts to start not only thinking but really to act for the establishment of an independent Crystallographic Society in Bulgaria. The National Crystallographic Committee, which was chaired by Professor Kostadin Petrov laid down the foundations for the appearance of the Bulgarian Crystallographic Society in 2009.

The lecturers of the NCS2016 were leading researchers in their respective fields: Svetlana

Mintova, ENSICAEN, France, Professor Katharina Fromm, University of Fribourg, Department of Chemistry, Professor Krzysztof Wozniak, University of Warsaw, Poland, Professor Atul Khanna, Department of Physics, Guru Nanak Dev University, India, Professor Srebri Petrov, University of Toronto, Canada, Professor Boriana Mihailova, University of Hamburg, Germany, Evdokiya Salamanova, Karolinska Institute, Department of Biosciences and Nutrition, Sweden, Professor Bogdan Rangelov, IC-BAS, Professor Pavleta Shestakova, IOCCP – BAS, Professor Radostina Stoyanova IGIC – BAS, Professor Yuri Kalvachev, IMC-BAS, Ivanina Sergeeva, IG-BAS, Professor Alexander Karamanov, IPC-BAS, Liliya Vladislavova, Otto-Schott-Institut für Materialforschung, Friedrich-Schiller-Universität Jena, Germany, Professor Tzonko Kolev, IMB-BAS, Professor Galina Gencheva, Sofia University. Their participation made the Symposium attractive and useful for a wide range of participants and showed the audience the current directions and



Professor Kostadin Petrov (on the left) receiving the honorary sign from Professor Ognyan Petrov (there is no relation between the two professors, the “Petrov” family is widespread in Bulgaria)

trends in the application and development of modern science. The audience featured more than 130 scientists (110 registered) from seven Bulgarian universities, 16 institutes of the Bulgarian Academy of Sciences and scientists from universities and institutes from Poland, Switzerland, Germany, France, Sweden, Italy, Slovakia, Spain, Estonia, Turkey, the Republic of Macedonia, Czech republic, Canada, USA and India. A total of 22 oral and 65 poster presentations involved more than 250 authors to present their investigations during the three days of the Symposium.

It is worth noting that over 50% of the participants were students, PhD students and young scientists who actively participated in the poster sessions (with very few exceptions all posters were presented by young scientists). The practice of the organizers of the National Crystallographic Symposia is to encourage and support the scientific progress of young researchers and for the second time the organizers were helped by the Ministry of Science and Education and the Bulgarian National Science Fund through a grant (ДПМНФ 01/13 – 27.09.2016 г.) especially targeting the young scientists. We would like to thank the members of the international jury who had the difficult task to select the best young scientist poster presentation namely Maria Kalapsazova for presenting “Diffraction methods for analysis of layered $\text{Na}_x\text{Ni}_{0.5}\text{Mn}_{0.5}\text{O}_2$ as cathode materials”.

The Symposium attracted the attention of several different Bulgarian Official Institutions: the Deputy-chairman of the Bulgarian Parliament Ivan Ivanov, members of the Parliament’s Commissions: for “Education and science”, “Children, Youths and Sports”, “Environment and Water”, Parliament’s Deputy Chairpersons Borislav Velikov and Vili Lilkov, The Minister of Education and Science



Maria Kalapsazova receiving the award for best young scientist poster presentation from Professor Katharina Fromm

Meglana Kuneva, the Rector of the University of Chemical Technology and Metallurgy, Professor Mitko Georgiev and the President of Bulgarian Academy of Sciences, represented by the Vice-President Corresponding member Professor Nikolay Miloshev.

We would like to announce that in 2017 two events will be organized under the auspices of the Bulgarian Crystallographic Society:

A workshop on powder diffraction basics (scheduled for June 2017)

International Autumn School on Fundamental and Electron Crystallography, 8–13 October 2017, Sofia, Bulgaria

It is our sincere hope that we are going to see you at the next Bulgarian crystallographic symposium in 2018.

*Daniela Karashanova and Boris Shivachev,
Co-chairs of the Organizing Committee*

Симпозиумът се организира със съдействието
на Фонд „Научни изследвания“,
договор № ДПМНФ 01/13 от 27.09.2016 г.