

Симпозиумът се организира със съдействието
на Фонд „Научни изследвания“,
договор № ДПМНФ 01/37/2018



Preface

Dear reader,

This special issue of the “Bulgarian Chemical Communication” journal contains selected full text articles from scientific investigations presented during the 7th National Crystallographic Symposium (NCS’18), which took place on 03–05 October, 2018 at the University of Chemical Technology and Metallurgy, Sofia. The paper selection was based on the Journal’s regular peer review procedure. The National Crystallographic Symposium is the regular meeting of the growing Bulgarian crystallographic community. It is the principal forum of the Bulgarian Crystallographic Society. These symposia became the leading scientific events, not only for the Bulgarian crystallographers, but also for participants from different countries from worldwide. The main purpose is to gather the crystallographic community in Bulgaria and to share knowledge in the fields of structural crystallography, crystal chemistry, crystal physics, mineralogy

and advanced materials science. This meeting has provided an excellent opportunity for exchanging ideas and best practices, as well as for establishing collaborations and building successful common projects.

Special guests of the Symposium were Officials from Bulgarian Institutions: Rector of the University of Chemical Technology and Metallurgy, Prof. Mitko Georgiev represented by the Vice-Rector for Research Prof. Emil Mihailov, General Scientific Secretary of the Bulgarian Academy of Sciences Prof. Evdokia Pasheva, and Mrs. Zlatina Karova, Head of the Transnational Scientific Initiatives Unit at Science Directorate, Ministry of Education and Science.

The lecturers of the NCS’18 were leading researchers and experts from Europe and USA: David L. Bish, *Indiana University, Bloomington, USA*; Mira Ristic, *Division of Materials Chemistry, Ruđer Bošković Institute, Croatia*; Beatrix-Kamelia Seidhofer, *Helmholtz-Zentrum Berlin für Materialien*



und Energie GmbH, Germany, CALIPSOplus; Vladimir Stilinović, Department of Chemistry, University of Zagreb; George Tzvetkov, Sofia University; Angel Ugrinov, Department of Chemistry and Biochemistry, North Dakota State University, USA; Ana Proykova, Sofia University; Boris Shivachev, IMC-BAS; Hristo Kolev, IC-BAS; Vladislav Kostov, IMC-BAS; Krastyo Buchkov, ISSP-BAS; Aleksandar Nikolov, IMC-BAS; Zara Cherkezova-Zheleva, IC-BAS. The presented investigations were focused on the current topics in material design and preparation, advanced characterisation techniques. 20 oral and 67 poster presentations focused on the crystallography were presented by 165 participants from 7 countries (see the photo). 39 of all 87 papers were presented by PhD students and young scientists. They took the opportunity to disseminate their research results, to discuss problems, to ask questions and to give their personal opinion. According to an established tradition the organizers of the National Crystallographic Symposia strongly encourage and support the successful scientific career of young researchers by giving an award for the best young scientist poster presentation. The members of the international jury had the difficult task to select the winner. The NCS'18 award was given to Ekaterina Serafimova. In addition, Aleksandar Nikolov, Hristina Sbirikova-Dimitrova and Totka Todorova

also received special certificates for the recognition of their achievements.

The special honorary sign of the Bulgarian Crystallographic Society has been dedicated to Prof. Michail Maleev for his overall activity and his outstanding contribution to the development of crystallography in Bulgaria.

The papers in the present issue outline the latest research developments of Bulgarian crystallographers. They cover a wide interdisciplinary range of advanced and emergency materials with a special attention paid to the synthesis procedures, investigation of their structure and properties of interest. We sincerely hope that this issue reveals the high quality work of Bulgarian crystallographers and that it is a good basis for provoking business interest in the investment in innovations and production of advanced materials.

The symposium NCS'18 has been organized with the financial support of the National Science Fund, contract № DPMNF 01/37/2018. We also acknowledge the financial support of sponsors of the 7th National Crystallographic Symposium – Malvern-PANalytical, ROFA, Aquachim, Lab-expert, InfoLab and Eurotest Control.

We are looking forward to welcome you at the 8th National Crystallographic Symposium, which will be held in Sofia, 2020.

Prof. Zara Cherkezova-Zheleva, Guest editor of the special issue of the Journal Bulgarian Chemical Communications, and Co-chair of the Organizing Committee