

## Preface

Tomáš Wágner\*

# 13<sup>th</sup> Conference on Solid State Chemistry (SSC-2018)

<https://doi.org/10.1515/pac-2019-0905>

**Keywords:** conference series; solid state and materials chemistry; SSC-2018.

The IUPAC sponsored 13<sup>th</sup> Solid State Chemistry Conference (SSC-2018) was held on 16–21 September 2018 in Pardubice, the Czech Republic. SSC-2018 was a part of the series of conferences on solid state and materials chemistry with the scope and topics of special significance and challenges at present time interlinking research, development, and technology. The conferences are held biannually alternatively in the Czech Republic and Slovakia.

SSC-2018 was organized in honor of Prof. Miloslav Frumar (University of Pardubice, Czech Republic) the founder of this conference series to celebrate his life-long scientific contribution, particularly to the field of solid state and inorganic chemistry.

Prof. Ing. Miloslav Frumar, DrSc., has dedicated his lifetime work to research, university education of qualified specialists, cultivation of his own expertise, as well as to the establishment of a school focused on new inorganic materials, in particular on crystalline and amorphous semiconductors, and on the development of new education courses for MSc and PhD level, thus contributing to the advancement of Czech tertiary education as such at the Faculty of Chemical Technology of the University of Pardubice. His school has a worldwide reputation, especially the study of crystalline and amorphous semi-conductors. His work and publications are rightfully respected and appreciated across the international community.

SSC2018 follows those held in Karlovy Vary (1986), Pardubice (1989), Bratislava (1996), Prague (2000), Bratislava (2002), Prague (2004), Pardubice (2006), Bratislava (2008), Prague (2010), Pardubice (2012), Trenčianske Teplice (2014) and Prague (2016).

The SSC- 2018 was a forum for the presentation of new research results in the area of solid state chemistry and also bridge the gap between scientific understanding and technical requirements and application, so that the enormous future potential of solid state chemistry, materials and technologies, is realized effectively.

The SSC2018 also encompassed different fields of solid state chemistry and physics, which was reflected in the conference aim of being a forum for discussion of all types of inorganic solids.

The conference series was founded by Prof. Frumar as a symposium for scientists working in the field of solid state chemistry, chemistry and physics of novel inorganic materials. New concepts, approaches, fundamental understanding, as well as the application aspects of inorganic materials have been discussed. The conference has become a truly international event with a worldwide geographical distribution of the participants.

---

**Article note:** A collection of invited papers based on presentations at the 13<sup>th</sup> International Conference on Solid State Chemistry (SSC-2018), Pardubice, Czech Republic, September 16–21, 2018.

---

**\*Corresponding author: Tomáš Wágner**, Department of General and Inorganic Chemistry, Faculty of Chemical Technology, University of Pardubice, Studentská 95, 532 10 Pardubice 2, Czech Republic, e-mail: [tomas.wagner@upce.cz](mailto:tomas.wagner@upce.cz).  
<http://www.uni-pardubice.cz>

SSC-2018 encompassed different facets of solid state chemistry, physics and related fields, and therefore attracted a wide audience. In total, 150 scientists from 25 countries around the world have participated to SSC-2018.

- The specific topics included:
- Advances in Solid State Materials Synthesis, New Solids and Compounds
- Advanced characterisation techniques
- Atomic and electronic structure of solids
- Photonic and optical properties of solids
- Electrochemistry
- Physical Chemistry of Solids
- Computation and theoretical aspects
- Advanced glasses, ceramics and polymeric materials and nano materials
- Microporous/mesoporous materials
- Chalcogenide, oxide, hydride materials
- 2D Materials, Surfaces, Interfaces, Hybrid, Nano Structured Solids
- Functional Materials
- Materials and Processes of Data Storage
- Materials for renewable energy production and storage, sensing, catalysis

The scientific program of SSC-2018 consisted of 6 plenary lectures, 21 invited lectures, 65 lectures, and 66 posters. Young authors of seven's oral presentations and 15 posters entered the sponsored Student Awards competition. In addition, Dr. Milan Drábik – chair of Slovak National Committee of Chemistry for IUPAC, gave a presentation on IUPAC activities.

To enable a broader audience to appreciate the scientific impact of SSC-2018, this Special Issue of Pure and Applied Chemistry was prepared based on the topics of the plenary and invited lectures. The personalities of the plenary speakers as well as the scientific feedback of the lecturers, quality and subjects of the invited lectures guarantee that the content of this issue of Pure and Applied Chemistry gives a representative profile not only of SSC-2018 but also of the current challenging fields of solid state and materials chemistry.

This is the fifth issue of the “Solid State Chemistry” Conference series published in the *Pure and Applied Chemistry*. The earlier issues include 5<sup>th</sup> Conference on Solid State Chemistry (SSC-2002), Bratislava, Slovakia, 7–12 July 2002, 8<sup>th</sup> Conference on Solid State Chemistry (SSC-2008), Bratislava, Slovakia, 6–11 July 2008, 11<sup>th</sup> Solid State Chemistry Conference (SSC-2014), Trenčianske Teplice, Slovakia, 6–11 July 2014 and 12<sup>th</sup> Solid State Chemistry Conference (SSC-2016), Prague, the Czech Republic, 18. 23 September, 2016.

We will be happy to see you at the next Solid State Chemistry Conference which will be held in Trenčín in Slovakia in 2020.

**We need to love chemistry and to spread this message around us. (H. Roesky)**