

illustrates the strength of thermal methods, especially when combined with other analytical techniques, in the understanding of hydrothermal reactions.

P. Šajgalík, Importance of Chemistry in High-Tech Ceramics Design. This paper deals with the role of chemistry in the design of high-tech ceramic materials; grain boundary composition of polycrystalline ceramics dictates the hardness fracture toughness and creep resistance of liquid-phase sintered silicon nitride and silicon carbide materials.

J. W. Stucki et al., Effects of Iron Oxidation States on the Surface and Structural Properties of Smectites. The oxidation state of iron in the crystal structure of smectite clay minerals profoundly alters their physical-chemical properties. Recent studies clearly reveal that the surface chemistry of the clay is also affected, which alters clay-water and clay-organic interaction mechanisms.

F. Varret F et al., Examples of Molecular Switching in Inorganic Solids, Due to Temperature, Light, Pressure, and Magnetic Field. Authors describe various molecular switching processes occurring in several types of inorganic solids: spin cross-over compounds, photomagnetic Prussian blue analogs, and valence-tautomeric system. A common description of their static properties by a two-level model is given.

The International Conference on Solid State Chemistry 2004 will be held in Prague, Czech Republic, during the summer of 2004.

For more information, contact <ssc2004@ssc2004.cz> or <grygar@iic.cas.cz>.

Pavol Šajgalík, chairman of SSC 2002, is director of the Institute of Inorganic Chemistry, Slovak Academy of Sciences. **Milan Drábik**, vice-chairman of the conference, is a professor at the same institution.

Photochemistry

by **Silvia E. Braslavsky**

The XIXth IUPAC Symposium on Photochemistry took place 14–19 July 2002 in the beautiful and pleasant capital city of Budapest, Hungary. The meetings, lectures, and posters showed again that "Photochimia vivat, floreat, crescat," as conference chairman Heinz Roth wrote in the book of abstracts from the conference.

About 400 participants from 36 Countries discussed basic and applied photochemistry. There were eight plenary lectures delivered by the following:

- R. Rigler, Karolinska Institutet, Stockholm, on single molecule spectroscopy
- W. Lubitz, Max-Planck-Institut für Strahlenchemie, Germany, on primary processes in photosynthesis studied by advanced EPR techniques
- Th. Bally, University of Fribourg, Switzerland on photochemistry of aryl nitrenes
- H. Tomioka, Mie University, Japan, on triplet carbenes
- S. E. Braslavsky, Max-Planck-Institut für Strahlenchemie, Germany, on electron transfer reactions studied by laser-induced optoacoustic spectroscopy
- S. R. Marder, University of Arizona, USA, on the utilization of two-photon excitation for 3D fabrication
- D. G. Nocera, MIT, USA, on energy conversion at a molecular level
- K. Hashimoto, University of Tokyo, Japan, on TiO₂ photocatalysis

The Porter Medal, traditionally awarded at these symposia, was given to Joseph Michl, who delivered a lecture on oligosilanes. In addition, there were 16 invited lectures, 36 oral contributions, and 280 posters, covering all areas of photochemistry. The poster sessions were lively, with younger participants engaged in long discussion with the more senior participants. Two workshops were held. One on Fast Spectroscopy of Biological Systems and the other on Theory and Calculations in Photochemistry. The conference banquet was in a very nice setting. During the whole conference we enjoyed the hospitality of the Hungarian people and the famous Hungarian cooking.

It is a real pity that more colleagues from North and South America were unable to attend for financial reasons. These IUPAC-sponsored photochemistry symposia have always been of major interest to photochemists from the whole world and have served to present the newest developments in the field as well as to enable long-lasting scientific contacts and friendships. We hope that the next symposium in the series—planned for July 2004 in Granada, Spain (the scientific chair is M. A. Miranda from Valencia)—will result in greater participation of our colleagues from the USA, Canada, and those Latin American countries in which photochemistry already has a tradition, such as Argentina, Chile, Brazil, and Venezuela.

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