

3rd International Conference on Solid State Chemistry 1996

The 3rd International Conference on Solid State Chemistry took place on 6–12 July 1996 in Bratislava, Slovakia, under the auspices of the Presidium of the Slovak Academy of Sciences. The conference was organized by the Institute of Inorganic Chemistry of the Slovak Academy of Sciences, the Faculty of Chemical Technology of the Slovak Technical University, the Faculty of Natural Sciences of the Comenius University, the Slovak Chemical Society, and the Slovak Society for Industrial Chemistry. The conference venue was the Faculty of Chemical Technology of the Slovak Technical University in Bratislava with Associate Professor *Vladimír Daněk*, DrSc. as chairman. The conference covered the research on all aspects of modern solid state chemistry and was divided into eight sections consisting of invited lectures and oral as well as poster presentations.

The first section, devoted to the high-temperature ceramic superconductors, dealt *e.g.* with phase transitions and non-linear structural and physical properties as a function of non-stoichiometry in the Y—Ba—Cu—O family (*E. Kaldis*, Switzerland), interatomic distances in barium copper-based superconductors (*X. Oudet*, France), crystal structures of high-temperature superconductors (*R. Snyder*, USA), indication of the Jahn—Teller effect participation in the transition from normal to superconducting state (*F. Hanic*, Slovakia), and film and bulk preparation of Ti-based superconductors (*G. Plesch*, Slovakia). *E. Pollert* (Czech Republic) reviewed the last decade of high-temperature superconductivity research.

In the section of layered compounds, clathrates, and intercalates the recent results on crystal growth of layered silicates and the clay synthesis (*A. Decarreau*, France), on layered structures of hexagonal tungsten oxide (*A. Jacobson*, USA), on low-temperature routes for preparing solid state materials (*S. Komarneni*, USA), on topotactic low-temperature solid state reactions (*R. Schöllhorn*, Germany), on structural properties of redox-treated clay minerals (*J. Stucki*, USA), and on the effect of changes in the oxidation state of iron on the structural OH content in nontronite (*P. Komadel*, Slovakia) were presented.

The non-oxide glasses were discussed in the third section. *C. Moynihan* (USA) referred on the nature of the glass transition, *C. A. Angel* (USA) on the synthesis and utilization of new rubbery solid inorganic materials for high-voltage electrochemical devices, *J. Lucas* (France) on non-oxide glasses for optical waveguides, *H. Eckert* (Germany) presented results on structural studies of glasses using solid state NMR, *M. Frumar* (Czech Republic) referred on the photoinduced effects in amorphous chalcogenites, and *M. Liška* (Slovakia) on the structure and properties of titania-bearing pyrolytic silicate melts and glasses.

The structure and properties of solids were the most discussed topic of the conference. The lectures on magnetic structures and phase transitions of ternary oxides (*H. Fuess*, Germany), on defect structures and transport properties of perovskites (*P. Kofstadt*, Norway), on X-ray absorption spectroscopy as a complementary tool for structural and electronic characterization of solids (*J. Etourneau*, France), on modeling the bulk and surface properties of complex inorganic solids (*R. Catlow*, UK), and on bond valence theory of semicoordination in the structures of transition element compounds (*F. Valach*, Slovakia) may be mentioned.

In the fifth section, devoted to the electron structure and chemical bonding in solids, the results on the electronic structure calculations by the full-potential LAPW method (*K. H. Schwarz*, Austria), on chemical bonding and elasticity of intermetallics (*P. Schmidt*, Germany), and on room temperature centered spin-crossover with broad hysteresis in hexacoordinated Fe(II) system (*R. Boča*, Slovakia) were the most important ones.

Solid state chemistry in two dimensions (*J. A. Schwarz*, USA) and molecular models of corrosion inhibitors (*S. Bernasek*, USA) were the themes of the two most valuable lectures in the section of surface chemistry of solids. *L. Turi Nagy* (Slovakia) referred on theoretical and experimental study of the adsorption of argon on talc.

The solid state superionics were represented by the invited lecture of *I. Riess* (Israel) on solid ionic and mixed conductors.

The last section was devoted to the problems of the local structure and bonding in cementitious binding materials. The lectures of *N. Hearn* (Canada) on microstructure and bonding in cementitious solids, *J. Sharp* (UK) on kinetics and mechanism of formation of calcium aluminates, *R. Slade* (UK) on spectroscopy for the investigation of model cements – MAS NMR, Mössbauer and electrochemical impedance, and of *M. Drábik* (Slovakia) on MDF-related compositions based on novel low-energy clinkers belonged to the most important ones.

In the conference participated 158 scientists, 119 of them from abroad. Selected lectures and poster presentations refereed by the members of the International Advisory Board will be published in a special issue of the journal *Chemical Papers*. The high scientific level of the conference was supplemented by a rich social programme presenting Slovak history and culture. The International Advisory Board decided that the next Solid State Conference will take place in the Czech Republic in 1999 and will be organized by the Institute of Inorganic Chemistry of the Academy of Sciences of the Czech Republic in Prague.

V. Daněk

15th Informal Meeting on Mass Spectrometry

organized by

CHEMICKÝ ÚSTAV SLOVENSKEJ AKADÉMIE VIED, BRATISLAVA, SLOVAKIA
MAGYAR TUDOMÁNYOS AKADÉMIA, KÖZPONTI KÉMIAI KUTATÓ INTÉZETE,
BUDAPEST, HUNGARY
CONSIGLIO NAZIONALE DELLE RICERCHE, AREA di RICERCHE, PADOVA, ITALY

The Organizing Committee cordially invites you to participate in the 15th Informal Meeting on Mass Spectrometry to be held in Smolenice from May 12 to 16, 1997.

The purpose of this meeting is to organize a forum of the mass spectrometrists working in various areas of research, to stimulate fruitful exchange of information and a creative discussion. The meetings are supposed to provide a continuous review of the progress in mass spectrometry techniques, of their application in organic and inorganic chemistry, biochemistry and medicine, environmental control, as well as chemical technologies and biotechnologies. We welcome also the contributions presenting the results of the theoretical studies on fragmentation and ion-molecular reactions of organic compounds and biomolecules.

The Smolenice Castle, where the 15th IMMS takes place, is located about 50 km northeast from Bratislava in beautiful surroundings of Small Carpathian Mountains. The intimate atmosphere of the Castle makes it an ideal place for informal meetings, discussions, personal contacts, and relaxation.

Plenary lectures:

1. Claeys, M. (Antwerpen, Belgium): New insights in the mechanisms of charge-remote fragmentation of low- and high-energy collisionally-induced dissociation.
2. Cotter, R. (Baltimore, USA) – President elect of the American Society for Mass Spectrometry: Time-of-flight mass spectrometry: Developing an important new technology for chemical/biochemical research.
3. De Angelis, F. (L'Aquila, Italy): Lignins: A world of problems and the contribution of mass spectrometry to solve them.
4. Derrick, P. (Coventry, UK): Electrospray ionization and Fourier transform ion cyclotron resonance spectrometry.
5. Favretto, D. (Padova, Italy): Electrospray mass spectrometry not only for analytical purposes.
6. Fenseleau, C. (Baltimore, USA): *The title will be announced additionally.*
7. Gelpi, E. (Barcelona, Spain) – Chairman of the 15th International Mass Spectrometry Conference, Barcelona, 2000: Protein immunoconjugates by electrospray mass spectrometry.
8. Grützmacher, H.-Fr. (Bielefeld, Germany): Gas-phase protonation of aliphatic amides and diamides – structures, conformations and proton bound clusters.
9. Harrison, A. G. (Toronto, Canada): Chemical ionization mass spectrometry. Analytical applications of ion-molecule reactions.
10. Heerma, W. (Utrecht, The Netherlands): Internal residue loss in FAB CID MS/MS fragmentation of oligosaccharides.
11. Hesso, A. (Helsinki, Finland) – Chairman of the 14th International Mass Spectrometry Conference, Tampere, 1997: Characterization of protein adducts by electrospray mass spectrometry.
12. Jalonen, J. (Oulu, Finland), Member of Organizing Committee of the 14th International Mass Spectrometry Conference, Tampere, 1996: Adducts in chemical ionization, useful species or nuisance?
13. Kuck, D. (Bielefeld, Germany): Recent results on the gas-phase ion chemistry of protonated alkylbenzenes.
14. Nibbering, N. M. M. (Amsterdam, The Netherlands) – Chairman of the Executive Committee of European Society for Mass Spectrometry: Chemical research with use of mass spectrometry.
15. Nikiforov, A. (Vienna, Austria): Computer-assisted interpretation and comparison of (LR) – and (HR) – GC-MS data sets.