



CZECH AND SLOVAK CRYSTALLOGRAPHIC ASSOCIATION

The Czech and Slovak Crystallographic Association (CSCA) organized or co-organized several conferences and traditional one-day seminars in 2004.

Seminars on problems of X-ray and neutron structure analysis (Rozhovory)

261st Seminar

Academy of Sciences of the Czech Republic,
Praha, 22. - 23. 4. 2004

50th anniversary of seminars Rozhovory

Lectures:

22. 4. 2004

Jindřich Hašek (Institute of macromolecular chemistry, AS CR, Praha): 50 years of the seminars - Rozhovory, Zdeněk Šperling (Vancouver, Kanada): Beginning of the seminars, M. Kotrlý (Institute of Criminalistics, Praha): Application of X-ray diffraction in forensic research, Václav Vávra (Faculty of Science, Masaryk University in Brno): Application of quantitative phase analysis in geology, Mariana Klementová (Institute of Inorganic Chemistry, Academy of Sciences of the Czech Republic - AS CR, Rez near Prague): Use of TEM in mineralogy, Josef Kuběna (Faculty of Science, Masaryk University in Brno), X-ray topography nad semiconductor industry, Juraj Sedláček (Institute of molecular genetics, AS CR, Praha): Protein crystallography in the Czech republic, Jiří Kameníček (Faculty of Science, Palacky University in Olomouc): X-ray analysis in the department of inorganic chemistry Faculty of Science, Palacky University in Olomouc. Structure solution of complexes of selected transition elements with dithiolates and other N,P-ligands.

23. 4. 2004

Ivo Kraus (Faculty of Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Praha): Prof. Václav Dolejšek, Jaroslav Fiala, Michal Kolega, Václav Mentla, Stanislav Němeček (University of West Bohemia, Plzeň): X-ray diffraction study of degradation of energetic equipments, Václav Studnička (Institute of Physics, Academy of Sciences of the Czech Republic, Praha): X-ray diffraction phase analysis characterization of new materials in Rotan laboratory, Veronika Šimová (Institute

of Inorganic Chemistry AS CR, Rez near Prague): X-ray powder diffraction microdiffraction in the analysis of art works, Pavel Mikula (Institute of Nuclear Physics ASCR, Rez near Prague), Laboratory of neutron diffraction in the Institute of Nuclear Physics, Karel Huml (Institute of Macromolecular Chemistry AS CR, Praha): X-ray structure analysis nad planning of polymer pharmaceuticals, Jan Walla (Faculty of Science, Palacky University in Olomouc): Application of XRD for study of polymorphism, Hana Petříčková (Zentiva a.s., Praha): Application of X-ray diffraction in pharmacy, Pavol Šutta (Research Center - New technologies, Pilsen): Comparison of results obtained by URD-6 and Bruker D8 diffractometers, Pavel Jiroušek (Institute of Nuclear Sciences and Physical Engineering, Czech Technical University, Praha, AREM Pro): Possibilities of modernization of equipments in X-ray laboratories, Nikolaj Ganev (Institute of Nuclear Sciences and Physical Engineering, Czech Technical University, Praha): X-ray tensometry at Institute of Nuclear Sciences and Physical Engineering

Organization: B. Kratochvíl, R. Kužel, J. Hašek,
P. Řezáčová, M. Dopita

262nd Seminar

Institute of Inorganic Chemistry,
Slovak Academy of Sciences,
Bratislava, 4. 6. 2004

to 75th birthday of Slavomil Ďurovič

Lectures

P. Fejdi (Bratislava): Use of Escher periodic drawings for teaching crystallography, A. Buchal (Brno): Structure refinement of quarternar perovskites, J. Majling (Bratislava): A view at sol-gel mulitte by means of thermo-optic measurements, J. Hybler (Praha): Study of polytypism for cronstedtite by means of XRD, HRTEM, SAED and EBSP, D. Hovorka (Bratislava): Inorganic raw materials from younger stone period in Central Europe and the ways of their processing, J. Fiala (Plzeň): Focussation in X-ray diffraction topography of polycrystalline materials, D. Hrivnáková (Trnava): Development of anti-corrossion austenitic steels, J. Hašek (Praha): Protein crystallography, M. Matherny (Košice): Phase composition of East-Slovakian lake sediments, M. Rieder (Praha): Are unmixed phases twinned?, E. Scholtzová (Bratislava): Model substitutions in lizardite, Z. Weiss (Ostrava): Transition of Franzini layer A and B with pressure (synthetic Rb-tetraferriannite), R. Kužel (Praha): XRD study of submicrocrystalline materials, M. Koman (Bratislava): X-ray structure analysis as a tool for chemists

38 participants

Informal meeting to Durovic birthday on June 3, evening

Organization: L. Smrčok, O. Pritula

**263rd Seminar**

Institute of Molecular Biology,
Slovak Academy of Sciences,
Bratislava, 29. 6.

Crystallography of small and large molecules - news from our laboratories*Lectures:*

Jiří Brynda (Institute of Molecular Genetics, AS CR, Praha): Structural studies of antitoxin M75 with onkogene CA IX, Pavlína Řezáčová (Institute of Macromolecular Chemistry, AS CR, Praha): Structural basis of cross reactivity of antitoxin 1696 with HIV-1 and HIV-2 proteases, Ondřej Hartman (Institute of Macromolecular Chemistry, AS CR, Praha): Complex of mutant HIV-1 protease (L63P, A71V, V82T, I84V) with Boc-Phe-psi[(R)CH(OH)CH₂NH]-Phe-Glu-Phe-NH₂ inhibitor, Jozef Kožíšek (Slovak Technical University, Bratislava): Study of charge density in coordination compounds of 3d-elements, František Pavelčík (Faculty of Science, Komenský University, Bratislava): Protein building with the aid of flexible fragments, Tereza Skálová (Institute of Macromolecular Chemistry, AS CR, Praha): Supramolecular complexes of beta galaktosidase, Jindřich Hašek (Institute of Macromolecular Chemistry, AS CR, Praha) X-ray structure analysis in Institute of Macromolecular Chemistry, Bohdan Schneider (Institute of Organic Chemistry and Biochemistry, Praha): News from PDB, Jozef Ševčík (Institute of Molecular Biology, Slovak Academy of Sciences, Bratislava): Flexibility of ribonucleases, Vladena Hlinková (Institute of Molecular Biology, Slovak Academy of Sciences, Bratislava): Complexes of RNase Sa2 with mononucleotides, Ľubica Urbániková (Institute of Molecular Biology, Slovak Academy of Sciences, Bratislava): Influence of mutations on RNase Sa crystallization

Organization: L. Urbaníková

3rd Meeting of Structural Biologists

Academic and University Center, Nové Hradky,
11. - 13. 3. 2004

Plenary lecture: ing. Josef Fulka Dr.Sc.: Mammalian cloning: From Dolly to embryonic stem cells

Other lectures:

R. Kužel, R. Ettrich, P. Flecker, F. Pavelčík, N. Špačková, F. Rážga, P. Mojzeš, I. Barvík, I. Kutá-Smatanová, J. Brynda, T. Skálová, M. Monincová, R. Hrabal, D. Štys, L. Židek, J. Kapitán, R. Dvorský, M. Otyepka, V. Sychrovský, J. Přecechtělová, P. Bouř, I. Barák, L. Bendová, P. Man, B. Schneider, J. Weiser

The main aim of the meeting is the exchange of information between groups working in different fields of structural biology (NMR, XRD, IR spectroscopy, bioinformatics, computer experiments, quantum chemistry). Usually high number of students takes part at the conference.

Number of participants: 77

Number of posters: 27

WWW page - <http://www.xray.cz/setkani/>

Organization: B. Schneider, I. Kutá Smatanová, R. Kužel, D. Štys, J. Hašek

Abstracts in Materials Structure vol. 11 (2004), no. 1.

Regional conference on powder diffraction – RPKD – 2004

Liptovský Mikuláš, 22. 9. - 24. 9. 2004

Lectures:

Tomáš Havlík: Use of X-ray diffraction for study of hydro-metallurgic processes, Veronika Šimová: Use of powder diffraction for the analysis of art works, Ondrej Pritula: Quantitative XRD and neutron phase analysis of Portland clinkers, Martin Černík: Qualitative phase analysis in US Steel Košice, David Havlíček: Dihydrogenfosforečnan diazabicyklooktánu - a new material with high proton conductivity, Ľubo Smrčo: Structure refinement of Y- sialon from neutron TOF data, Vlado Jorík: Ab initio structure solution of "complex" compounds Cu(II)(5-halogeno salicylato)2(aqua)2 from powder data, Stano Jurečka: Rietveld methods and determination of crystallite size, Ľubo Čaplovič: Influence of thermal exposure on quantitative changes of surface layers gas-turbine blades, Zdeněk Matej: X-ray diffraction study of materials prepared by severe plastic deformation, Jiří Marek: Ideal orientations of rolled and annealed sheets, Martin Černík: Analysis of residual stresses and textures in steel sheets, Milan Dopita: X-ray diffraction measurements of residual stresses in TiN thin films, Michal Kolega: Contribution to the discussion on X-ray tensometry reliability, Nikolaj Ganev: Examples of industrial applications of X-ray diffraction analysis of residual stresses, Jan Drahokoupil: Analysis of diffraction profiles of iron materials after surface treatment, Kamil Kolařík: Comparative analysis of residual stresses after non-conventional technologies of steel shaping

Number of participants: 26

WWW page - <http://www.saske.sk/RPKD/>

CSCA Scientific board

The scientific board was elected in 2003 (report in Materials Structure vol. 11 (2004) no. 1).

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CSCA Information Centre

CSCA Journal

The journal "Materials Structure in Chemistry, Biology, Physics and Technology", ISSN 1210-8529. Contributions can be published in English, Czech or Slovak. Scientific papers are reviewed usually by two independent referees. Web page of the journal: <http://www.xray.cz/ms>.

Other Journals and Proceedings

IUCr (International Union of Crystallography) Newsletter is quarterly distributed to all CSCA members.

Databases installed

The latest versions of crystallographic databases are installed in Institute of Physics and Institute of Macromole-

cular Chemistry, Academy of Sciences of the Czech Republic, Faculty of Mathematics and Physics, Charles University, Slovak Technical University Bratislava

INTERNET

The association would like to extend the use of Internet. Address of WWW page: <http://www.xray.cz>

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