# **PREVIOUS MEETINGS**

### Venues of Slovenian-Croatian Crystallographic Meetings

1<sup>st</sup> Otočec, Slovenia, 1992 2<sup>nd</sup> Stubičke Toplice, Croatia, 1993 3<sup>rd</sup> Kranjska Gora, Slovenia, 1994 4<sup>th</sup> Trakošćan, Croatia, 1995 5<sup>th</sup> Zreče, Slovenia, 1996 6<sup>th</sup> Umag, Croatia, 1997 7<sup>th</sup> Radenci, Slovenia, 1998 8<sup>th</sup> Rovini, Croatia, 1999 9th Gozd Martuljek, Slovenia, 2000 10<sup>th</sup> Lovran, Croatia, 2001 11<sup>th</sup> Bohinj, Slovenia, 2002 12th Plitvice, Croatia, 2003 13th Bovec, Slovenia, 2004 14<sup>th</sup> Vrsar, Croatia, 2005 15<sup>th</sup> Jezersko, Slovenia, 2006 16<sup>th</sup> Petrčane, Croatia, 2007 17<sup>th</sup> Ptuj, Slovenia, 2008 18th Varaždin, Croatia, 2009 19th Strunjan, Slovenia, 2010 20<sup>th</sup> Baška, Croatia, 2011 21<sup>st</sup> Pokljuka, Slovenia, 2012 22<sup>nd</sup> Biograd na Moru, Croatia, 2013 23<sup>rd</sup> Logar Valley, Slovenia, 2014 24th Bol, Croatia, 2016 25<sup>th</sup> Ljubljana, Slovenia, 2017 26<sup>th</sup> Poreč, Croatia, 2018 27<sup>th</sup> Rogaška Slatina, Slovenia, 2019 28th Poreč, Croatia, 2022 29<sup>th</sup> Topolšica, Slovenia, 2023 30<sup>th</sup> Veli Lošinj, Croatia, 2024 31st Rogla, Slovenia, 2025

#### 1st Slovenian-Croatian Crystallographic Meeting, Otočec ob Krki, Slovenia.

October 1-2, 1992.

**A. Kalman** (Budapest, Hungary)

On the nature of hypervalent S-O bonds in sulfuranes

**B.** Kojić-Prodić et al. (Zagreb Croatia)

The biological significance of conformational changes of beta-D-glucopyranose moiety in peptidoglycans

C. Kratky (Graz, Austria)

*Crystallography of B12-coenzymes* 

V. Kraševec (Ljubljana, Slovenia)

Crystallography of 2D precipitates caused by a minor phase additions in some ceramic systems

### 2nd Croatian-Slovenian Crystallographic Meeting, Stubičke Toplice, Croatia. September 30–October 1, 1993.

L. Randaccio (Trieste, Italy)

Structural and solution properties of rhodoximes: the Rh analogues of cobaloximes, a vitamin B12 model

V. Kaučič (Ljubljana, Slovenia)

The structure of zeolite and aluminophosphate molecular sieves

**K. Huml** (Prague, Czech Republic)

Crystallography in drug design

B. Gržeta and H. Toraya (Zagreb, Croatia)

Powder-pattern-fitting methods in structure determination

## 3rd Slovenian-Croatian Crystallographic Meeting, Kranjska gora, Slovenia. September 29–30, 1994.

W. Fuller, A. Mahendrasingam, and V. T. Forsyth (Keele, UK)

Structural studies of biological and industrial fibres using X-ray synchrotron radiation sources and neutron beams

A. Rečnik and D. Kolar (Ljubljana, Slovenia)

Local structure of planar faults in oxide ceramics

**T. Schirmer** (Basel, Switzerland)

Crystal structures of porins: proteins that form transmembrane pores

M. Luić and N. Brničević (Zagreb, Croatia)

Stereochemistry of hexanuclear niobium clusters with the [Nb6Cl12]2+ unit

# 4th Croatian-Slovenian Crystallographic Meeting, Trakoščan, Croatia. September 28–30, 1995.

I. Hargittai and M. Hargittai (Budapest, Hungary)

Structure of molecules and assemblies

V. Marinkovič (Ljubljana, Slovenia)

Scanning tunneling microscopy of surface structures

**H. Fuess** (Darmstadt, Germany)

Contributions of crystallography to material science

**D. Balzar** (Zagreb, Croatia)

Diffraction line broadening - nuisance or lattice-imperfections fingerprints

#### 5th Slovenian-Croatian Crystallographic Meeting, Zreče, Slovenia.

June 13-15, 1996

H. D. Flack (Geneve, Switzerland)

Mastering least-squares refinement

J. V. Brenčič (Ljubljana, Slovenia)

Structural studies of the halopyridine complexes of trivalent elements

P. Panjan (Ljubljana, Slovenia)

Interfacial reaction in multilayer structures studied with XTEM and XRD

**H. Follner** (Lienz, Austria)

Correspondence between structure and morfology and twin formation

Z. Blažina (Zagreb, Croatia)

The rare earth based intermetallics - a scientist's paradise

## 6th Croatian-Slovenian Crystallographic Meeting, Umag, Croatia. June 19–21, 1997

A. Meden (Ljubljana, Slovenia)

Crystal structure solution from powder diffraction data - state of the art and perspectives

**B. Ya. Kotur** (Lviv, Ukrayina)

Scandium binary and ternary alloy systems and intermetallic compounds

**P. Orioli** (Firenze, Italy)

Structural studies on the interactions between metal ions and biological macromolecules

M. Vinković (Zagreb, Croatia)

Synergy between crystallography and computational chemistry

### 7th Slovenian-Croatian Crystallographic Meeting, Spa Radenci, Slovenia.

June 18-20, 1998

M. Kaftory (Haifa, Izrael)

Three decades of chemical reactions in the solid state from photodimerization to methyl transfer **A. M. Tonejc** (Zagreb, Croatia)

High-resolution electron microscopy (HREM): image processing analysis of defects and grain boundaries in nanocrystalline materials

**E. Tillmanns** (Vienna, Austria)

How to avoid unnecessarily low symmetry in crystal structure determinations

K. Djinović Carugo (Ljubljana, Slovenia)

Protein function through crystallography

## 8th Croatian-Slovenian Crystallographic Meeting, Rovinj, Croatia. June 17–19, 1999

D. Yu. Pushcharovsky (Moscow, Russia)

Recent contribution and modern perspectives in XRD studies of minerals

**G. Jovanovski** (Skopje, Macedonia)

Metal sacharinates and their complexes with N-donor ligands

M. Bolognesi et al. (Pavia, Italy)

The high resolution structure of GDP-4-keto-6-deoxy-D-mannose epimerase/reductase

G. G. Dodson (York, UK)

The chemistry and evolution of the catalytic structures in serine hydrolases

A. Demšar (Ljubljana, Slovenia)

The inclusion of the ionic fluorides in soluble organometallics

### $9 th \ Slovenian-Croatian \ Crystallographic \ Meeting\ , \ Gozd\ Martuljek, \ Slovenia,$

June 17–19, 2000

C. Giacovazzo (Bari, Italia)

Phasing: from powders to proteins

**Ch. Baerlocher** (Zuerich, Switzerland)

The texture approach to structure solution from powder data

**A. Tonejc** (Zagreb, Croatia)

Crystallographic features of mechanically milled and alloyed nano-sized crystalline and amorphous materials

I. Turel (Ljubljana, Slovenia)

The crystal structures of quinolones and their metal compounds

#### 10th Croatian-Slovenian Crystallographic Meeting, Lovran, Croatia.

June 21–24, 2001

**K. Prout** (Oxford, UK)

Molecules in motion

G. Zanotti (Padova, Italy)

The transport of vitamin A in mammals: a crystallographer's view

**B. Kobe** (Brisbane, Australia):

Protein-peptide binding and its regulation

O. Milat (Zagreb, Croatia) and G. Calestani (Parma, Italy):

Crystallography of composite crystals

#### 11th Slovenian-Croatian Crystallographic Meeting, Bohinj Lake, Slovenia.

June 27-30, 2002

H. Boehm (Mainz, Germany)

Phase transitions in modulated structures

**G. Giester** (Vienna, Austria)

Five years of CCD X-ray data collection at Vienna University

E. R. T. Tiekink (Singapore, Singapore)

Adventures in engineering molecular solids

**D. Matković-Čalogović** (Zagreb, Croatia)

Some protein crystallography examples - a small molecule crystallographers view

**B. Modec** (Ljubljana, Slovenia)

Oxomolybdenum(V) clusters built of dinuclear metal-metal bonded units

### ${\bf 12th\ Croatian\ -\ Slovenian\ Crystallographic\ Meeting,\ Plitvice\ Lakes,\ Croatia.}$

June 19-22, 2003

B. Kojić-Prodić (Zagreb, Croatia)

Hydrogen bonding and supramolecular architecture

**G. Vlaic** (Trieste, Italy)

XFAS spectroscopies and chemistry: some selected results

J. P. Abrahams, N. Ban (Zuerich, Switzerland)

X-ray crystallographic structure determination of large asymmetric macromolecular assemblies

A. Golobič (Ljubljana, Slovenia)

Solving structural problems of ceramic materials

A. Danilovski (Zagreb, Croatia)

Biological and pharmaceutical solids in the crystallographic arena

#### 13th Slovenian-Croatian Crystallographic Meeting, Bovec, Slovenia.

June 16–20, 2004

R. Loris (Brussel, Belgium)

Structural basis of plasmid addiction and programmed cell death in bacteria

**D. Turk** (Ljubljana, Slovenia)

Roles of papain-like cathepsins in immune system response: exclusive interactions as the other face of selectivity

**K. Domasevitch**, J. Sieler (Leipzig, Germany)

Architecture and design of new porous networks

A. Moguš-Milanković (Zagreb, Croatia)

Structure and properties of phosphate glass

#### 14th Croatian-Slovenian Crystallographic Meeting, Vrsar, Croatia.

June 15–17, 2005

N. Lah (Ljubljana, Slovenia)

Structural diversity of copper carboxylate complexes

L. R. MacGillivray (Iowa, USA)

Molecular crystals as media for constructing molecules

**R.** Cerny (Geneva, Switzerland)

Crystal structures of inorganic compounds from powder diffraction

M. Milun (Zagreb, Croatia)

Atomic structure of surfaces and thin films

E. Libowitzky (Vienna, Austria)

Dynamics of crystal structures: results between diffraction and spectroscopy

### 15th Slovenian-Croatian Crystallographic Meeting, Jezersko, Slovenia. June 14–18, 2006.

W. L. Duax (Buffalo, USA)

The genes and amino acid sequences and crystal structures of short chain oxireductase enzymes **R. E. Dinnebier** (Stuttgart, Germany)

Powder diffraction at non-ambient conditions using 2D-detectors

G. Štefanić (Zagreb, Croatia)

Formation of high-temperature ZrO2 polymorphs at room temperature

M. Kosec (Ljubljana, Slovenia)

Ferroelectrics: from bulk to nano

### 16th Croatian-Slovenian Crystallographic Meeting, Petrčane, Croatia.

June 13-17, 2007.

C. Giacovazzo et al. (Bari, Italy)

EXPO2007: A tool for crystal structure solution and refinement from powder data

N. Tomašić (Zagreb, Croatia)

Metamict minerals: Insight into relic crystal structuires

**R. Kužel** et al. (Prague, Czech Republic)

Structural studies of submicrocrystalline materials obtaind by severe plastic deformation

**B. Kozlevčar** (Ljubljana, Slovenia)

Structural analysis of copper(II) coordination compounds and correlation with their magnetic properties

#### 17th Slovenian-Croatian Crystallographic Meeting, Ptuj, Slovenia.

June 19-22, 2008.

M. Jaskolski, K. Michalska (Poznan, Poland)

L-Asparaginases, their friends and relations

G. Pavlović (Zagreb, Croatia)

Mercury(II) coordination chemistry in the environment

**B. Kobe** et al. (Brisbane, Australia)

Two hotdogs are better than one: The structure of acy-coa thioesterase and the complementarity of structural methods

P. Strauch (Potsdam, Germany)

Solid state EPR: a structure-spectroscopy relationship

**B.** Orel et al. (Ljubljana, Slovenia)

Synthesis of polyhedral oligomeric silsesquioxane (POSS) hybrids and their applications as surface modifiers

### 18th Croatian-Slovenian Crystallographic Meeting, Varaždin, Croatia. June 17–21, 2009.

**K. Rissanen** (Jyvaeskylae, Finland)

Weak intermolecular interactions in the solid state, the supramolecular chemistry perspective

S. Petriček (Ljubljana, Slovenia)

Complexes with ethers and polyethers

P. Naumov

Direct observations of dynamic processes in crystals: from the topochemical postulate to ultrafast time-resolved diffraction

**F. Antson** et al. (York, England)

How viruses fill their capsids with DNA: crystallography of a DNA-translocating molecular motor

P. Dubček (Zagreb, Croatia)

Small angle probe into thin film

## 19th Slovenian-Croatian Crystallographic Meeting, Strunjan, Slovenia. June 16–20, 2010.

**A. L. Spek** (Utrecht, The Netherlands)

Why Crystal Structure Validation?

**Z. Dauter** (Argonne National Lab., USA)

Nobel Prizes Related to Crystallography

A. Višnjevac (Zagreb, Croatia)

Single Crystal X-ray Crystallography as a Method of Choice in Biomimetic Modelling

I. Arčon (Nova Gorica, Slovenia)

Structural Analysis of Ordered and Disordered Materials with X-ray Absorption Spectroscopy

### 20th Croatian-Slovenian Crystallographic Meeting, Baška, Island Krk, Croatia. June 15–19, 2011.

#### V. Holy (Prague, Czech Republic)

Synchrotron-related methods of investigatio of nanostructures

#### A. Šantić (Zagreb, Croatia)

Charge carrier transport in materials with disordered structures

#### T. Friščić (Cambridge, UK)

How to be efficient and environmentally-friendly at the same time: solid-state routes to materials and molecules

#### **A. Pevec** (Ljubljana, Slovenia)

Structural studies of some organotitanium(IV) complexes

#### **M.** Cetina (Zagreb, Croatia)

From self-inclusion and host-guest complexes to channel structures

### 21st Slovenian-Croatian Crystallographic Meeting, Pokljuka, Slovenia. June 14–17, 2012.

#### L. B. McCusker (ETH Zürich, Switzerland)

Powder diffraction, electron microscopy and microdiffraction - meeting the challenge of zeolite structure analysis

#### **K. R. Koch** (Univ. of Stellenbosch, South Africa)

Deceptively simple, rich platinum(II/IV) and rhodium(III) chemistry viewed through new eyes: What secrets can the <sup>195</sup>Pt/<sup>103</sup>Rh nuclei reveal about their molecular disguise in the solution and solid-state?

#### **Z. Popović** (Zagreb, Croatia)

Correlation between supramolecular interactions and structural characteristics of Ag(I) complexes

#### **F. Perdih** (Ljubljana, Slovenia)

Structural aspects of organotitanium fluorides

## 22nd Croatian-Slovenian Crystallographic Meeting, Biograd na Moru, Croatia. June 12–16, 2013.

#### C. B. Aakeröy (Kansas State University, USA)

From molecular sociology to functional materials

#### **A. Altomare** (Bari, Italy)

The challenge of the ab-initio crystal structure solution by powder diffraction data: the EXPO software

#### V. Bermanec (Zagreb, Croatia)

The importance of collecting and investigation of mineral samples from ore deposits - example of Stari Trg (Trepča) mine

#### M. Jeršek (Ljubljana, Slovenia)

Inclusions in gemstones - origin, identification and valuation

#### J. Popović (Zagreb, Croatia)

Nanocrystalline metal oxides: synthesis, structure and properties

#### 23rd Slovenian-Croatian Crystallographic Meeting, Logar Valley, Slovenia.

June 19–22, 2014.

I. R. Evans (Durham, UK)

Structural chemistry of functional materials: mobility in the solid state

J. S. O. Evans (Durham, UK)

Functional inorganic materials: synthesis, structure, properties and methods development

M. Đaković (Zagreb, Croatia)

From molecular structure to crystalline solids: non-covalent interactions as a structure directing force in supramolecular assemblies

T. Balić-Žunić (Copenhagen, Denmark)

Crystallography in mineralogy in the XXI century

G. Gunčar (Ljubljana, Slovenia)

A structural view of nanobodies

#### 24th Croatian-Slovenian Crystallographic Meeting, Bol, Croatia.

September 21–25, 2016.

L. Brammer (Sheffield, UK)

Flexibility, Dynamics and Chemical Reactions in Solids: Molecular Crystals to Framework Materials

**G. Dražić** (Ljubljana, Slovenia)

Direct imaging and quantification of crystal structures at the atomic level using Cs corrected scanning transmission electron microscope

M. Jaskolski (Poznan, Poland)

Handling crystal pathologies in macromolecular crystallography

**Ž. Skoko** (Zagreb, Croatia)

 $Thermosalient\ crystals-acrobatics\ on\ the\ nanoscale$ 

M. Zema (Pavia, Italy)

Crystallography and Society: outcomes of IYCr2014

### 25th Slovenian-Croatian Crystallographic Meeting, Ljubljana, Slovenia.

June 14–17, 2017.

**D. Stalke,** (Göttingen, Germany)

100 years of Lewis diagram – still valid in the light of charge density?

E. V. Boldyreva (Novosibirsk, Russia)

High-pressure studies of organic and coordination compounds

M. Marinšek (Ljubljana, Slovenia)

3D microstructure reconstruction from stack of 2D images demonstrated in Ni-SDC cermets

J. K. Cockcroft (London, UK)

Powder diffraction: an essential complementary tool for those skilled in the art but one with pitfalls for the unwary

K. Molčanov (Zagreb, Croatia)

Stacking of planar conjugated rings – beyond aromatics

#### 26th Croatian-Slovenian Crystallographic Meeting, Poreč, Croatia.

June 13-17, 2018.

A. Katrusiak (Poznan, Poland)

High-pressure effects in hydrogen-bonded crystals

**P. Scardi** (Trento, Italy)

SRXRD of metal nanocrystals: learning from mistakes

S. C. Tarantino (Pavia, Italy)

Crystals' warm-up, stretching and ... workout!

**Z. Štefanić** (Zagreb, Croatia)

Purine nucleoside phosphorylases: a quest for enzyme mechanism and allosteric pathways

N. Zabukovec Logar (Ljubljana, Slovenia)

Crystallography in Microporous Materials Research

### 27th Slovenian-Croatian Crystallographic Meeting, Rogaška Slatina, Slovenia. June 19–23, 2019.

P. Bombicz (Budapest, Hungary)

Synthon/property-engineering of calixarenes (supramolecular interactions, shape and symmetries)

M. Vrankić (Zagreb, Croatia)

Ambient and non-ambient driven X-ray powder diffraction: Insights into the structure-property relationship in powders

P. Macchi (Bern, Switzerland)

Are there molecules in crystals?

M. Lozinšek (Ljubljana, Slovenia)

*Noble-gas chemistry in 21<sup>st</sup> century* 

#### 28th Croatian-Slovenian Crystallographic Meeting, Poreč, Croatia.

September 7–11, 2022.

A. Bacchi (Parma, Italy)

Smart materials for the release of liquid ingredients

A. Moliterni (Bari, Italy)

Crystallography, a powerful lens for Materials Science

M. Klementová (Prague, Czech Republic)

Structure determination of nanomaterials from electron diffraction data

J. Kljun (Ljubljana, Slovenia)

Development of bioactive metal compounds: structural insights into design and molecular modes of action

### 29th Slovenian-Croatian Crystallographic Meeting, Topolšica, Slovenia.

June 14-18, 2023.

**D.** Cinčić (Zagreb, Croatia)

Crystal engineering of organic and metal-organic multicomponent halogen-bonded solids

K. Djinović Carugo (Grenoble, France)

Order from Disorder: Towards molecular architecture of the muscle Z-disk assembly

A. Kokalj (Ljubljana, Slovenia)

DFT modeling of materials and crystal structures using periodic-boundary conditions

**S. Parsons** (Edinburgh, UK)

High pressure phase transitions in molecular crystals

### 30th Croatian-Slovenian Crystallographic Meeting, Veli Lošinj, Croatia. June 12–16, 2024.

I. Halasz (Zagreb, Croatia)

In situ powder X-ray diffraction and Raman spectroscopy for monitoring of ball-milling mechanochemistry

L. Cendron (Padua, Italy)

A structural view of SOS response in bacteria: how it works and how to block it

**D. Pelc** (Zagreb, Croatia)

Diffuse scattering and nanoscale correlations in quantum materials

C. Esterhuysen (Stellenbosch, South Africa)

The role of intermolecular interactions in chemical processes

M. Dragomir (Ljubljana, Slovenia)

Synthesis and structure-property relationships of selected quantum materials

## 31st Slovenian-Croatian Crystallographic Meeting, Rogla, Slovenia. June 18–22, 2025.

R. Boehler (Tennessee, USA)

The power of the laser-heated diamond cell combined with electron microscopy

A. Čobić (Zagreb, Croatia)

Complete recrystallization of metamict allanite matrices under hydrothermal conditions

M. Gemmi (Pontedera, Italy)

Single crystal electron diffraction on hard and softmatter

M. Mazaj (Ljubljana, Slovenia)

Exploring dynamics and interactions in metal organic frameworks

E. E. McCabe (Durham, United Kingdom)

Designing functional materials: mechanisms and consequences of broken inversion symmetry