

Time	A-05MH (MS 1)	F-12CH (MS 2)	D-1003 (MS 3)
9:55-10:00 Opening Remarks	Large macromolecular complexes Chairs: L. Malinina, J. Ding	Advances in grazing incidence, reflectivity and diffuse scattering Chairs: A. Allen, M. Ree	New algorithms for single crystal and powder diffraction Chairs: F. Izumi, R. Cooper
10:00-10:30	MS.01.1(C15) M. G. Rossmann: The maturation pathway of flaviviruses studied by crystallography and electron microscopy	MS.02.1(C16) P. Muller-Buschbaum: Recent developments in GISAXS and GISANS - nanobeams and <i>in-situ</i> kinetic investigations	MS.03.1(C18) R. W. W. Hoof: Reliable determination of absolute structure using small Bijvoet differences
10:30-11:00	MS.01.2(C15) W. A. Hendrickson: Structural insights into molecular chaperone activity	MS.02.2(C16) T. Matsushita: Quick X-ray reflectometry in simultaneous multiwavelength dispersive mode	MS.03.2(C18) L. J. Bourhis: Small molecule toolbox
11:00-11:30	MS.01.3(C15) M. Yusupov: Structures of the ribosome on different functional states	MS.02.3(C17) B. Lee: Structural characterization using the multiple scattering effects in GISAXS	MS.03.3(C18) L. Palatinus: The charge-flipping algorithm and related dual-space structure solution methods
11:30-12:00	MS.01.4(C15) D. G. Vassilyev: Structural basis of transcription: Structures of the bacterial RNA polymerase elongation complexes	MS.02.4(C17) A. Takahara: Neutron reflectively study of chain conformation in polyelectrolyte brushes at the liquid interface	MS.03.4(C19) H. O. Sorensen: Closing the gap between single crystal and powder diffraction
12:00-12:30	MS.01.5(C16) N. Numoto: Ligand-induced structural changes of giant hemoglobin	MS.02.5(C17) R. Lazzari: Following growth and catalytic reaction of oxide supported metal nanoparticles with GISAXS	MS.03.5(C19) C. Giacovazzo: Advances in methods and algorithms in EXPO2008

C-1001, 2 (MS 4)	G-1202 (MS 5)	B-05SH (MS 6)	E-1009 (MS 7)
Hydrothermal growth of crystals Chairs: K. Byrappa, S. Feng	Modelization of structure of molecular compounds and implications for reactivity Chairs: M. J. Calhorda, N. E. Ghermani	Computational methods Chairs: G. Murshdov, V. Lunin	Water clusters in molecular crystals, coordination polymers and biological macromolecule Chairs: K. Biradha, L. Infantes
MS.04.1(C19) T. Adschiri: Supercritical hydrothermal synthesis of organic inorganic hybrid nanoparticles	MS.05.1(C21) K. Kirchner: Solid-state vs solution reactivity of iron complexes: Stereospecific and reversible CO binding	MS.06.1(C22) P. D. Adams: Macromolecular refinement at subatomic resolution with interatomic scatterers	MS.07.1(C24) J. L. Atwood: Supramolecular stabilization of well-ordered water clusters
MS.04.2(C19) D. Ehrentraut: Acidic ammonothermal growth of bulk GaN crystals	MS.05.2(C21) K. Tatsumi: A new synthetic route to iron-sulfide clusters modeling the active site of nitrogenase	MS.06.2(C23) P. Emsley: Macromolecular model-building and validation using Coot	MS.07.2(C24) M. Nakasako: Hydration structure changes around proteins at work
MS.04.3(C20) K. Kajiyoshi: Vapor-phase hydrothermal preparation of titanate fibers and nanotubes	MS.05.3(C21) N. Bouhaida: Advances in electrostatics and application to molecular reactivity	MS.06.3(C23) S. X. Cohen: Advances in automatic model building and structure completion in the context of ARP/wARP	MS.07.3(C24) C. Ruiz-Pérez: Water embedded in metal-polycarboxylate crystal host
MS.04.4(C20) M. Kakihana: Selective synthesis of nano-crystalline TiO ₂ polymorphs from new water-soluble titanium complexes	MS.05.4(C22) M. M. Kubicki: Structural chemistry of 2-aza-1,3-dienes	MS.06.4(C23) D. Turk: MAIN 2008: Real space model fitting - as good as it gets	MS.07.4(C25) Y. Sugawara: Diffused scattering and dynamic disorder observed nucleotide hydrates
MS.04.5(C20) J. Riegler: Simple processing of functional ZnO from solution - route towards designed nano-hybridmaterials	MS.05.5(C22) J-C. Daran: Iridium catalyzed hydrogenation with chiral ferrocenyl P-S ligands. X-ray structure of precatalysts	MS.06.5(C23) E. A. Merritt: Beyond crystallographic refinement: Broader application of TLSMD to model protein dynamics	MS.07.5(C25) T. Ozeki: Incompatible host-guest strategy to enclathrate water clusters into polyoxometalate crystals

Time	A-05MH (MS 8)	F-12CH (MS 9)	D-1003 (MS 10)
14:45-14:50 Opening Remarks	Protein-nucleic acid interactions Chairs: N. Verdagner, R. Sankaranarayanan	Macromolecular structural studies by powder diffraction, AFM, etc. Chairs: J. Helliwell, R. Thorne	Decision making and algorithms for automation of data acquisition Chairs: J. Wang, J. F. Britten
14:50-15:20	MS.08.1(C25) W. Yang: Stop-action movie of UvrD helicase unwinding DNA	MS.09.1(C27) R. Von Dreele: Seeing the first stages of protein crystal nucleation through to a full powder pattern	MS.10.1(C28) B. H. Toby: Automation of the APS 11-BM high-resolution and high-throughput powder diffractometer
15:20-15:50	MS.08.2(C25) O. Nureki: Stop codon recoding mechanism revealed by the suppressor tRNAPyl/PylS complex structure	MS.09.2(C27) D. A. Shapiro: Serial crystallography: Use of a micro-jet for diffraction of protein nano-crystals or molecules	MS.10.2(C28) L. M. Daniels: Start to finish: Algorithms and parameters for successful robotic data collection
15:50-16:20	MS.08.3(C26) M. Coll: DNA transfer machines	MS.09.3(C27) Y. Hosokawa: Femtosecond laser etching of protein crystal to process and to isolate the single crystal	MS.10.3(C29) J. Kaercher: True walk-away automation in chemical crystallography
16:20-16:50	MS.08.4(C26) J. Li: RNA-protein interactions in the U4 snRNP core domain	MS.09.4(C27) S. Basso: Features of the secondary structure of protein molecules from powder diffraction data	MS.10.4(C29) S. K. Burley: Rapid synchrotron X-ray crystallography for drug discovery using the SGX-CAT beamline at the APS
16:50-17:20	MS.08.5(C26) P. M. Alzari: Structural basis of lipid biosynthesis regulation in Gram-positive bacteria	MS.09.5(C28) P. Batat: Characterization of spider silks weaved by different species living in the Black sea region of Turkey	MS.10.5(C29) M. Cianci: The interdependence of wavelength, redundancy and dose on a sulfur sad experiment

C-1001, 2 (MS 11)	G-1202 (MS 12)	B-05SH (MS 13)	E-1009 (MS 14)
Pitfalls and successes in crystallographic teaching Chairs: D. Watkin, P. Spadon	Liquid crystals and crystallography: A tribute to Pierre-Gilles de Gennes (1932.10.24-2007.5.18) Chairs: B. Donnio, A. Crispini	Growth of single crystals for neutron and X-ray investigation by the floating zone and other techniques Chairs: H. Dabkowska, I. Tanaka	Symmetry, asymmetry and chirality in molecular aggregation Chairs: W. Kaminsky, I. Hisaki
MS.11.1(C30) A. Linden: Hands-on crystallographic teaching: The Zurich School of Crystallography - Bring your own crystals	MS.12.1(C31) P. Davidson: X-ray scattering studies of liquid-crystalline suspensions of anisotropic mineral nanoparticles	MS.13.1(C33) J. M. Tranquada: Exploring the phase diagram of $\text{La}_{2-x}\text{Ba}_x\text{CuO}_4$: Spins, stripes, and superconductivity	MS.14.1(C34) R. Kuroda: Chirality realized only in the crystalline state: Inorganic and organic compounds
MS.11.2(C30) T. Wagner: Conquering superspace - A beginner's guide to modulated structures	MS.12.2(C31) G. Ungar: Crystallography of 2D and 3D structures in liquid crystal amphiphiles and nanocomposites	MS.13.2(C33) G. Balakrishnan: High quality single crystals for neutron experiments	MS.14.2(C34) V. S. Minkov: Structure-property relationship in the crystals of chiral amino acids and their racemic counterparts
MS.11.3(C30) K. A. Kantardjiev: Sustaining crystallography in the 21st century: Education policies and use of cyberinfrastructure	MS.12.3(C32) K. Saito: Molecular aggregation structure of exotic liquid crystals formed by thermotropic mesogen BABH(n)	MS.13.3(C33) H. Eisaki: Tailor-made single crystal growth of high-Tc superconductors for characterization by spectroscopy	MS.14.3(C35) H. Koshima: Chiroptical properties of N-benzoylglycine crystals
MS.11.4(C31) M. M. Julian: Use of images from neolithic art, clip art, digital cameras, and MATLAB® in teaching crystallography	MS.12.4(C32) Y. Shimizu: Mesophase semiconductors: Design for 3D-mesophases with effective paths for electronic charge hopping	MS.13.4(C33) E. V. Pomjakushina: Layered and cubic cobaltites grown by floating zone, structural and magnetic properties study	MS.14.4(C35) C. H. Görbitz: A solution to the problem why chiral hydrophobic amino acids form crystals with $Z' = 2$
MS.11.5(C31) I. D. Williams: Teaching crystallography: Approaches for non-crystallographers and non-native speakers in Asia	MS.12.5(C32) T. Kato: Functional nanostructured liquid-crystalline assemblies	MS.13.5(C34) R. Fittipaldi: Micro-crystallographic structure of $\text{Sr}_2\text{RuO}_4/\text{Sr}_3\text{Ru}_2\text{O}_7$ eutectic crystals grown by floating zone method	MS.14.5(C35) M. Sakamoto: Control of chirality by spontaneous crystallization and absolute asymmetric synthesis in fluid media