MICROSYMPOSIA

Aperiodic crystals

	Seattle 1996 / 102 microsymposia	Glasgow 1999 / 97 microsymposia	Geneva 2002 / 95 microsymposia
	9 (8.8%) + 1 shared	8 (8.2%) + 1 shared	6 (6.3%) + 1 shared
1	Advanced Ceramics and Composites	Ferroic Structures V.Wadhawan, Y.Ishibashi	Diffraction and Symmetry Aspects of Aperiodic Crystals M.Ohmasa, M. De Bossieu
2	Non Crystalline Systems	Perovskite Materials P.Woodward, E.Antipov	Polymers I.Hamley, T.Waigh
3	Aperiodic Structures and Incommensurate Phases	Aperiodic and Incommensurate Structure I S.Van Smaalen, W.Paciorek	Diffraction by Non-Periodic Structures G.Chapuis, T.Janssen
4	Pore Framework Structures	Perovskite and Related Materials J.Jorgensen, P.Attfield	Amorphous Materials and Glasses V.Petkov, P.Lamparter
5	Local Order and Defect Scattering in Crystals	Aperiodic and Incommensurate Structure II T.Janssen, G.Chapius	Diffuse Scattering T.R.Welberry, F.Frey
6	Phase Transitions I	Symmetry V.Kopsky, E.Koch	Dynamics and Mechanism of Structural Phase Transitions M.Glazer, J.C.Toledano
7	Phase Transitions II	Advances in Liquid Structure Determination M.A.Ricci, A.K.Soper	
8	Synthetic Polymers	Short Range Order and Diffuse Scattering H.Boysen, J.L.Finney	
9	Non Periodic And Disordered Polymers		

Biological Macromolecules

	Seattle 1996 / 102 microsymposia	Glasgow 1999 / 97 microsymposia	Geneva 2002 / 95 microsymposia
	24 (23.5 %) + 1 shared	17 (17.5%) + 6 shared	21 (22.1%) + 4 shared
1	Macromolecular Cryo Crystallography	Macromolecular Machines and Organelles A.Yonath, A.Liljas	Hot Structures I E.Baker, A.Mattevi
2	Detectors and Data Processing I:Macromolecular	Motor Proteins and Muscles K.Wakabayashi, A.Houdusse	Combining X-ray Crystallography and Electron Microscopy H.Saibil, A.Engel
3	Combined Cryo Electron Microscopy and X-Ray Diffraction of Macromecules	Membrane Protein and Transmembrane Signalling S.Buchanan, S.R.Sprang	Viruses and Anti-Viral Strategy P.Colman, M.Murthy
4	Laue\Time Resolved Macromolecular Crystallograp	Structural Enzymolgy and Unusual Chemistry W.H.E.Saenger, G.Oliva	Enzyme Evolution and Enzyme Mechanism M.James, H.Holden
5	Enzymes	Structural Motifs and Multidomain Proteins O.Herzberg, M.Safro	Protein-Protein and Protein-Nucleic Acid Interactions S.Burley, K.Morikawa
6	Metalloenzymes	Protein-Nucleic Acid Interactions S.Burley, S.Neidle	Kinetic Macromolecular Crystallography R.Sweet, D.Burgeois
7	Membrane Proteins I:Workshop On Methods	Crystallography and NMR of RNA D.Moras, D.Lilley	Protein and Immune System I.Wilson, J.Varghese
8	Membrane Proteins II	Endocytosis and Exocytosis A.T.Brunger, T.Kirchausen	Nanomachines Macromolecular Assemblies A.Yonath, T.Tsukiara
9	Nucleic Acids	Molecular Basis of Disease and Toxicity W.Hol, S.Muchmore	Crystal Structures of DNA and RNA E.Westhof, W.Hunter
10	Protein-DNA	The Immune System and Designed Enzymes D.Fremont, R.Stevens	Structural Genomics in Quest of Function O.Herzberg, S.Yokoyama
11	Protein-RNA	Viruses and Viral Proteins Y.Jones, W.Hendrickson	Nuclear Hormone Receptors D.Moras, H.Einspahr
12	Hot Macromolecular Structures I	Protein-Carbohydrate Interactions and Cell Adhesion F.A.Quiocho, P.Van Roey	Structure and Function of Membrane Proteins S.Iwata, N.Adir
13	Hot Macromolecular Structures II	Cellular and Molecular Regulation B.DeVos, E.Goldsmith	Atomic Force Microscopy and Single Molecule Analyses of Macromolecule I.Sagi, A. McPherson
14	Macromolecular Assemblies	Hot Macromolecular Structures I N.Isaacs, J.L.Martin	Protein Transport S.Wakatsuki, D.Fass
15	Viruses	Time-Resolved Diffraction and Protein Dynamics I.Schlicting, J.Helliwell	Structures in Cell Cycle Regulation J.Endicott, N.McDonald
16	Receptors\Signal Transduction	Hot Macromolecular Structures II C.I.Branden, M.Bolognesi	Signal Trasduction J.Hurley, J.Cherfils
17	Protein-Carbohydrate Structures	Data Accuracy and Detectors W.Minor, H.Graafsma	Hot Structures II B.Dijkstra, Y.Jones
18	Drug Design II: Macromolecule Based		MAD, SAD and Difficult Phasing R.Read, A.Thompson
19	Muscle and Motor Proteins		Structural Studies in Neurobiology J.Sussman, Y.Bourne
20	Protein Design and Engineering		Metalloproteins by Crystallography and Other Methods D.Ohlendorf, M.Carrondo
21	Immune System		Conformational Changes and Allostery J.Remington, M.Cygler
22	Protein Folding and Extremophiles		
23	Analysis and Stuctures of Macromolecules		
24	Fiber Diffraction of Biological Polymers		

Charge, spin, momentum density	11 (10.7%)	3 (3.0%) + 3 shared	7 (7.2%) + 5 shared
	1 Multipole and Maximum Entropy Refinement	**1** Chemical Insights from Charge Density Studies M.Spackman, T.Koritsanszky	**1** X-Ray and Neutron Magnetic Crystallography F.Tasset, M.Costa
	2 Comparison of Theory with Experiment	**2** Dynamic Aspects of Molecular Crystals C.K.Prout, C.P.Brock	**2** Molecular and Crystal Properties from Charge and Spin Densities C.Gatti, M.J.Cooper
	3 New Information on Crystal from Electron Diffractior	**3** Magnetic and Inelastic Scattering M.J.Cooper, G.H.Lander	**3** Molecular Magnets A.Powell, J.Miller
	4 Magnetizazion and Momentum Density		**4** Solid State Reactions T.Borowiak, V.Belsky
	5 High Tc Superconducting Materials		**5** X-Ray Diffraction Topography: Use of Coherent Beams J.Baruchel, J.Gronkowski
	6 Giant Magnetoresistive Materials		**6** Microtomography and High Resolution Imaging: from Absorptionto Phase S.Wilkins, A.Snigirev
	7 Optic\Electronic Materials		**7** Resonant Scattering J.P.Attfield, H.Ehrenberg
	8 Analysis of Atomic Displacement Parameters		
	9 Diffraction Physics II: Magnetic Structures with Neutron and Synchrotron Radiation		
	10 Group Theory and Topology		
	11 Critical Point		
Powder diffraction	1(0.9%) + 2 shared	6 (0.9%) + 4 shared (6.1%)	4 (4.1%) + 3 shared
	1 Powder Diffraction	**1** Changelling Rietveld Refinements R.B.Von Dreele, D.Louer	**1** High Energy X-Ray Powder Diffraction A.Wilkinson, R.Dinnebier
		2 Industrial On-Line X-Ray Analysis M.Bellotto, D.Taylor	**2** Application of Powder Diffraction to Pharmaceuticals G.Stephenson, J.Tremayne
		3 *In situ* Studies Using Powder Diffraction G.Artioli, P.Barnes	**3** Nanomaterials L.Brammer, R.Tenne
		4 Applications of Line Broadening D.Balzar, R.Delhez	**4** Non-Ambient Powder Diffraction and Kinetics Studies J.Evans, P.Norby
		5 Non-Structural Applications of Rietveld Analysis D.K.Smith, I.Madsen	
		6 Thick Coatings P.Scardi, W.Reimers	
Small angle scattering	5 (4,9%)	2 (2.0%) + 1 shared	4 (4.1%) + 1 shared
	1 Tools and Techniques	**1** Amorphous Materials: Small Angle Scattering G.Kostorz, J.S.Pedersen	**1** Analysis of Crystallite Size Microstrain and Macrostress E.Mittemeijer, I.C.Noyan
	2 Applications	**2** Catalysts and Surfaces L.Leiserowitz, R.O.Gould	**2** NanoStructural Characterization Using Small-Angle Scattering J.S.Pedersen, I.L.Torriani
	3 Surface and Interface Crystallography		**3** Soft Matter Studies by Small-Angle Scattering T.Zemb, P.Schurtenberger
	4 Thin Films and Multilayers		**4** Structure of 2D Crystals at the Air-Water Interface L.Leiserowitz, J.Als-Nielsen
	5 X-Ray and Neutron Reflectivity		

Structural chemistry	13 (12,7%) + 1 shared	8 (8.2%) + 2 shared	11(11.3%) + 5+G167 shared
	1 Detectors and Data Processing II	**1** Difficult Structures D.J.Watkin, P.T.Beurkens	**1** Metal Complexes and Catalysis G.C.Diaz de Delgado, F.J.Lahoz
	2 Difficult Crystals:Data Collection, Reduction and Refinement	**2** Structure-Property Relationships in Chiral Compounds K.Stadnicka, C.C.Wilson	**2** Drug Design - Small Molecule Based C.Chidester, T.Hambly
	3 Drug Design I: Small Molecules Based	**3** Polymorphism and Isomorphism J.Bernstein, J.Anwar	**3** Structure Property Relationship in Molecular Crystals C.C.Wilson, J.A.K.Howard
	4 Organic Compounds	**4** Crystal Engineering G.R.Desiraju, R.D.Rogers/M.Zaworotko	**4** Coordination Chemistry G.Punte, D.Levendis
	5 Exotic Molecules: Organic	**5** Drug Discovery and Design P.Fitzgerald, P.Colman	**5** New X-ray Sources and Optics A.Freund, T.Ishikawa
	6 Organometallic Chemistry and Coordination Compound	**6** Intermolecular Interactions K.Suwinska, J.C.A.Boeyens	**6** Horizons in Hydrogen Bond Research T.Steiner, A.Nangia
	7 Hot Structures	**7** Pseudo-symmetry and Twinning H.D.Flack, A.J.Blake	**7** Structure-Based Drug Design C.Abad-Zapatero, H.I.Jiang
	8 Fullerenes	**8** Real Time *in situ* Reaction Chemistry Y.Ohashi, R.Boese	**8** Twins, Disorders and other Demons D.Schwarzenbach, J. Flippen-Andersen
	9 Molecular Recognition		**9** Detectors Y.Amemya, H.Graafsma
	10 Chemical Crystallography of the Future: Open Commission		**10** Polymorphysm and Isomorphysm P.Erk, V.R.Pedireddi
	11 Intermolecular Interactions		**11** Crystal Engineering - Supramolecular Assemblies I.Goldberg, J.Lipkowski
	12 Chiral Compound of Industrial Interest		
	13 Dynamic Properties in Molecular Crystals		
Synchrotron radiation	3 (2.9%)	2 (2.0%) + 5 shared	1 (1.0%) + 3 shared
	1 Synchrotron Radiation I: Instrumentation and Techniques	**1** X-Ray Optics A.Authier, K.Lal	**1** X-Ray Microdiffraction N.Tamura, H.Padmore
	2 Synchrotron Radiation II: Macromolecules	**2** Topography H.Klapper, J.W.Hu	
	3 Synchrotron Radiation III: Application Time Resolved Micro-crystal High Energy		
High pressure	6 (5.8%)	6 (6.1%) + 0 shared	3 (3.1%) + 1 shared
	1 Element and Simple Compounds	**1** High Pressure Structures and Phase Transitions O.Shimomura, M.I.McMahon	**1** Extreme Pressure and Temperatures R.Hemley, G.Figuet
	2 Microbeam Techniques	**2** Structures and Techniques at Extreme Pressure and Temperatur R.J.Hemley, A.K.Singh	**2** Novel Materials and Physical Properties at High Pressure P.McMillan, Y.Fujii
	3 Molecules, Ices and Minerals	**3** Physical Properties and Novel Materials Under High Pressure I.N.Goncharenko, Y.Fujii	**3** Structure and Phase Transition at High Pressure J.Loveday, S.Desgreniers
	4 Pressure Cells and Sample Conditions	**4** High Pressure Data Acquisition and Analysis M.Kunz, W.F.Kuhs	
	5 New Frontiers	**5** High Pressure Studies of Biological and Other Soft Materials R.Winter, S.M.Gruner	
	6 Data Collection and Analysis	**6** New Frontiers in High Pressure Crystallography J.B.Parise, D.Hausermann	

Electron diffraction	2 (1.9%) + 1 shared	2 (2.0%) + 2 shared	6 (6.3%)+ 1 shared
	1 Electron Diffraction from Surfaces: LEED, RMEED, PED, etc	**1** Structure from Pictures: Direct Macromolecular Structure Determination by Electron Microscopy H.Saibil, R.Henderson	**1** Holography and X-ray Microscopy J.Miao, G.Schneider
	2 Strain and Stress Measurements	**2** Quantitative Electron Diffraction and Microscopy D.Van Dick, J.Gjonnes	**2** Electron Diffraction H.Zanderbergen, Fang-Hua Li
			3 Free Electron Lasers and Other Pulsed Sources J.Kitamura, J.Schneider
			4 Electron Channeling Effects on X-ray and EELS Spectra: Alchemi J.C.H.Spence, M.Terauchi
			5 High Resolution Electron Microscopy D.Van Dyck, Y.Matsui
Inorganic and mineral structures	1 (0.9%)+ 1 shared	5 (5.1%) + 3 shared	5 (5.2%) + 0 shared
	1 Inorganic and Mineral Compounds	**1** Physical Properties and Structural Relationships M.Catti, P.Paufler	**1** Magnetoresistance Materials C.Miravitles, J.Rodriguez-Carvajal
		2 Crystallography and Geosciences E.Salje, S.Ghose	**2** Mineralogical Crystallography D.Y. Pushcharovsky, M. Nespolo
		3 Molecular Magnets O.Kahn, L.K.Thompson	**3** Zeolite and Microporous Materials L.McCusker, O.Terasaki
		4 Microporous Materials H.Van Koningsveld, H.Gies	**4** Superconductors C.Bourgeroi-Chaillout, M.Alario-Franco
		5 Opto-Electronic Materials L.Bohaty, G.Marnier	**5** Solid State Spectroscopy A.Bansil, R.Wappling
Neutron scattering	4 (3.9%)	4 (4.1 %) + 0 shared	1 (1.0%) + 3 shared
	1 Neutron Scattering I: Applications	**1** Neutron Studies of Stress/Strain T.Holden,M.Hutchings	**1** Advanced Materials Science and Neutron Scattering B.Toby, A.Hewat
	2 Neutron Scattering II: Instrumentation and Techniqu	**2** X-Ray and Neutron Complementarity B.Lebech, J.W.White	
	3 Advanced Battery and Fuel Cell Materials	**3** Advanced Battery and Fuel Cell Materials P.Bruce, T.Kamiyama	
	4 Diffraction Physics I: Neutron and X-Ray Optics	**4** Interfacial Structures S.Satija, J.Penfold	
Crystallographic teaching	2 (1.9%)	1 (1.0%) + 0 shared	1 (1.0%) + 0 shared
	1 Teaching Crystallography	**1** Teaching Crystallography K.Crennel, K.El Sayed	**1** Teaching Crystallography K.El-Sayed, C.P.Brock
	2 Years of X-Ray		
XAFS	1 shared (0%)	2 (2.0%) + 0 shared	0 (0.0%) + 2 shared
		1 Metalloproteins, Electron Transport and EXAFS J.M.Guss, B.G.M.Hedman	
		2 Combined Powder Diffraction, EXAFS and DAFS G.N.Greaves, G.Shankar	
Crystallographic nomenclature	0.0%	0.0%	0.0%

Crystal growth and characterization material	4 (3.9%)	6 (6.1%) + 2 shared	3 (3.1%) + 0 shared
	1 Macromolecular crystallization Workshop	**1** Nanomaterials R.Nesper, O.Nittono	**1** Preparation of Crystals for Pharmaceutical Applications: High-throughput and Combinatorial Techniques C.Lehmann, C.Kidd
	2 Fundamentals	**2** Polymorphism in Industry N.Shankland, W. DeCamp	**2** In Situ Monitoring of Crystal Growth Processes N.Blagden, L.G.Kuzimina
	3 Methods-Materials	**3** New Frontiers in Macromolecular Crystallisation F.Snell, N.Chayen	**3** Crystal Growth of Soluble and Membrane Macromolecules G.Gilliland, E.Landau
	4 Controlling and Predicting Crystal Morphology	**4** Why Low Resolution? Methods and Outcomes A.Podjarny, V.Lunin	
		5 Growth of Mesoscopic Crystals Nai-Ben Ming, Y.Arakawa	
		6 Bulk Crystal Growth and Surface Phenomena I.Smolsky, M.Muehlberg	
Crystallographic computing	13 (12.7%)	9 (9.2%) + 4 shared	5 (5.2%) + 8 shared
	1 Direct Methods of Phase Determination	**1** 30 Years of Rietveld Refinement R.Hill, A.W.Hewat	**1** Automation of Phasing T.Terwilliger, V.Lanzin
	2 MAD and MIR Macromolecular Phasing	**2** Optimisation Methods K.Shankland, R.Glen	**2** New Developments in Direct Methods and Maximum Entropy I C.Giacovazzo, M.Takata
	3 Structure Determination Using Powder Data	**3** Bio-information and Databases S.Fortier, S.Bryant	**3** Structure Validation: Small, Large and In-Between A.L.Spek, C.Haltiwanger
	4 Macromolecular *Ab Initio* Phasing	**4** Prediction, Docking and Pattern Recognition J.Thornton, M.Eisenstein	**4** Databases H.Berman, J.Rodgers
	5 The Internet	**5** Structure Solution from Powder Data: Molecular Compounds W.I.F.David, R.Dinnebier	**5** New Developments in Visualization of Macromolecules A.Olson, G.Vrend
	6 General Advances and Application	**6** *Ab Initio* and Molecular Replacement Phasing Methods J.Navaza, G.Bricogne	
	7 Macromolecular Map Fitting and Modification	**7** Absorption Corrections M.M.Woolfson, A.L.Spek	
	8 Macromolecular Refinement/Water/ High Resolution Structures	**8** The MAD Method C.Ogata, A.Thompson	
	9 Macromolecular Homology Modelling, Structural Families and Docking	**9** *Ab Initio* Structure Prediction C.R.A.Catlow, P.Verwer	
	10 Materials Research		
	11 Small Molecule		
	12 Inorganic, Powder, Polymer, Other		
	13 25 Years of PDB		

Shared Topics

4 (3.9%)

1 Techniques, Real Time *in situ* Reaction Chemistry

Aperiodic Crystal, Powder diffraction

2 Metalloproteins X-Ray and EXAFS Studies

Biological Macromol., XAFS

3 Solid State Reactions: Structural Thermodynamics and Kinetic Aspects

Powder Diffraction, Structural chemistry

4 Characterization of Defects, Microstructure and Texture

Inorganic and min. struc., Electron Diffraction

16 (16.4%)

1 Giant Magneto Resistance Materials
F.Tasset, A.Balagurov
Aperiodic Crystal, Charge, spin, momentum density

2 Preservation and Decay at Cryo-Temperatures
D.Theil, E.Garman
Biological Macromol., Synchrotron radiation

3 Engineering Macromolecules for Crystallization
K.Nagai, Graigi
Biological Macromol., Crystal growth

4 Large Unit Cells: Sources, Detectors and Data
S.Ealick, A.Leslie
Biological Macromol., Synchrotron radiation

5 Problematics in Macromolecular Structure II: Fitting and Refinement
E.Dodson, T.A.Jones
Biological Macromol., Cryst. Computing

6 Macromolecules at High Resolution:Refinement and Validation
K.S.Wilson, G.J.Kleywegt
Biological Macromol., Synchrotron radiation

7 Synchrotrons and Charge Density Analysis
F.K.Larsen, H.P.Weber
Synchrotron radiation, Charge, spin, momentum density

8 Strong Closed Shell Interactions in Crystals
A.Vegas, P.Pyykko
Charge, spin, momentum density, Structural Chemistry

9 Micro-Structures and Texture of Real Materials
F.Frey, S.Billinge
Powder diffraction, Synchrotron radiation

10 Structure Solution from Powder Data: Inorganic Materials
Ch. Baerlocher, J. Ruis
Powder Diffraction//Cryst. Comp.// Inorg. and Min. structures.

11 Structure Solution from Powders Using Electron and Powder Diffraction Techniques
S.Hovmoeller, R.J.Cernik
Powder Diffraction, Electron diffraction

12 Interfaces, Thin films and Multilayers
P.Fewster, S.P.Sen Gupta
Powder diffraction, Small angle Scattering

13 Organometallic and Co-ordination Chemistry
A.G.Orpen, C.Kruger
Inorganic and min. struc., Structural Chemistry

14 The Phase Problem in Electron Crystallography
D.Dorset, R.Vincent
Electron diffraction, Cryst. Computing

15 Phase Transitions
J.M.Pèrez-Mato, U.Bismayer
Inorganic and min. struc., Crystal growth

16 Problematics in Macromolecular Structures I: Phasing
R.Read, Z.Otwinoski
Biological Macromol., Cryst. Computing

18 (18.9%)

1 Liquids and Amorphous Structures at High Pressure
C.Benmore, O.Shimomura
Aperiodic Crystal, High Pressure

2 Macromolecular Applications of Neutron Scattering and Neutron Sources
J.Zaccai, N.Niimura
Biological Macromol., Neutron Scattering

3 The Role of Bioinformatics in Structural Genomics
J.Moult, J.Thornton
Biological Macromol., Cryst. Computing

4 High Throuhput Innovations in Structural Genomics
U.Heinemann, J.Norvell
Biological Macromol., Synchrotron radiation

5 Fundamental and Applied Aspects of Cryocrystallography & Radiation Damage(in memory of J.Kroon)
P.Gros, H.Hope
Biological Macromol., Synchrotron radiation

6 Quantum Crystallography: Electronic Correlation and Bonding
G.Loupias, S.Mannimen
Charge, spin, momentum density, Cryst. Computing

7 X-ray and Electron Standing Wave Methods
D.P.Woodruff, I.Vartanyants
Charge, spin, momentum density, Electron Diffraction

8 New Developments in Direct Methods and Maximum Entropy II
C.Gilmore, S.L.Chang
Charge, spin, momentum density, Cryst. Computing

9 Low Temperature Crystallography; Methodology and Application
A.Goeta, R.Destro
Charge, spin, momentum density, Structural Chemistry

10 Battery and Fuel Cell Materials
T.Bruce, T.Kamiyama
Powder Diffraction, Neutron Scattering, XAFS

11 Ab Initio Structure Solution Using Powder Data
W.David, A.Fitch
Powder Diffraction, Cryst. Computing

12 Beyond Classical Applications of the Rietveld Method
I.Madsen, R.Cernick
Powder Diffraction, Cryst. Computing

13 Methods for the Characterization of Layered Structures
D.Balzar, D.Rafaia
Small angle Scattering, XAFS

14 Modeling and Crystal Structure Prediction
M.U.Schmidt, S.Motherwell
Structural Chemistry, Cryst. Computing

15 Transition Metal-Hydrogen Interactions
T.Koetzle, A.Albinati
Structural Chemistry, Neutron scattering

16 Real-Time Probing of Structural Changes and Excited Molecules
Y.Ohashi, J.M.Cole
Structural Chemistry, Charge, spin, momentum density

17 **Atomic Resolution Protein Structures**
P.Fitzgerald, K.Wilson
Synchrotron radiation, Cryst. Computing

18 Molecular Dynamics of Crystals and of Phase Transitions
A.Gavezzotti, L.Nassimbeni
Structural Chemistry, Cryst. Computing

KEYNOTES

	Seattle 1996 \ 24Keynotes+8 Nobel Lec.	Glasgow 1999 \ 32Keynotes	Geneva 2002 \ 29Keynotes
Aperiodic crystals **6.45%**	**3 (9,3%)** 1 **SK12 \ J.M.Dubois** Applied Physics of Quasicrystals and Applications 2 **SK18 \ J.A.Subirana** Helical Polyamides and Rings: a Bridge Between Nylons and Proteins 3 **SK20 \ A.Monnier** Structural Chemistry of Organic-Inorganic Mesophases	**2 (6,2%)** 1 **GLK0703 \ T.R.Welberry** Diffuse Scattering 2 **GLK1203 \ W.Steurer** The Hidden Order of Aperiodic Crystals	**1 (3,5%)** 1 **D.Shechtman** Quasi-Periodic Crystals-The role of Electron Diffraction
Biological Macromolecules **33.85%**	**10 (31,2%) + 1 shared** 1 **SK01 \ W.A.Hendrickson** Multiwavelenght Anomaluos Diffraction (MAD) in Macromolecular Structure Determination 2 **SK04 \ T.A.Jones** Reliability of Protein Structure Determination 3 **SK07 \ S.C.Harrison** Lessons from the High-Resolution Crystallography of Protein-DNA Complexes 4 **SK10 \ A.G.W.Leslie** The Structure of Bovine Mitochondrial F1-ATPase- An Example of Rotational Catalysis? 5 **SK13 \ S.Yoshikawa** Crystallization and Crystal Structure of Beef Heart Cytochrome C Oxidase 6 **SK19 \ D.C.Wiley** Studies on the Loading and Recognition of Antigens on MHC Molecules 7 **SK22 \ J.M.Thornton** Protein Structures: Their Validation Fold Classification and Interactions 8 **SN02 \ J.Deisenhofer** Light, Charge, and Protein Structures 9 **SN07 \ W.N.Lipscomb** The Ideal Allosteric Enzyme 10 **SN08 \ H.Michel**	**12 (37,5%)** 1 **GLK0502 \ T.J.Richmond** Nucleosomes 2 **GLK0504 \ K.C.Holmes** Molecular Mechanism of Muscle Contraction 3 **GLK0602 \ J.Deisenhofer** Memrane Protein Structure, an Exciting Frontier 4 **GLK0704 \ P.B.Sigler** Chaperonin Assisted Protein Folding: the Final Step in Genetic Expression 5 **GLK0802 \ D.B. McKay** Small Ribozyme Structure and Mechanism 6 **GLK0804 \ J.Moult** Protein Structure Modeling in the Era of Structural Genomics 7 **GLK0904 \ S.Cusack** Accuracy in Translation:tRNA and Aminoacid Recognition by Aminoacyl-tRNA Synthetases 8 **GLK1102 \ I.A.Wilson** Structural Basis of Immune Recognition 9 **GLK1104 \ A.R.Ferre-D'Amare** Crystal Structure of Hepatitis Delta Virus Ribozyme: Clues to RNA Catalysis 10 **GLK1204 \ S.H.Kim** Structural Genomics of a Hyperthermophile: a Feasability Test 11 **GLK1302 \ K.Moffat** Nanosecond Time-Resolved Crystallography 12 **GLK1304 \ J.Wark** Pico-second X-Ray Diffraction	**11 (31.2%) + 2 shared** 1 **W.G.J.Hol** Inhibitor Design and the Cholera Toxin Family-FromWater Puzzles to 10KD spiders 2 **K.Namba** Structural Mechanisms of Self-Assembly and Polymorphic Supercoiling of the Bacterial Flagellum 3 **V.Ramakrishnan** Crystallographic Lessons and Functional Insights from the Structure of the 30S Subunit 4 **A.Yonath, V. Ramakrishan, T. Steitz** The ribosome Symposium 5 **M.J.E.Sternberg** Exploiting Protein Structure in the Post-Genoma Era 6 **T.K. Sixma** Insights in Nicotinic Receptors through Acetylcholine Binding Protein Structures 7 **A.Wittinghofer** The GTPase Switch: a Familiar Conserved Module with Unexpected Variations 8 **G.Dodson** Max Perutz-Crystallographe, Chemist, Biologist and Scientist 9 **D. Stuart** Viruses 10 **W. Hendickson** Structural Biology of Cell Invasion and Immune evasion by HIV 11 **R. Stroud** Glycerol Channel
Charge, spin, momentum density **8.05%**	**1shared** 1	**2 (6.2%) + 2 shared** 1 **GLK1201 \ P.G.Radaelli** Colossal Magneto-Resistance 2 **GLK0902 \ Y.Wang** Charge Density Analysis and Bond Characterization of 3-D Transition Metal Complex	**3 (9,3%) + 1 shared** 1 **V.Tsirelson** New Frontiers in Charge Density Studies 2 **J.Akimitsu** New Superconductors MgB2 and Related Compounds 4 **W.Weyrich** Chemical Bonding as Electronic Coherence

Powder diffraction **5.40%**	**1 (3,2%)** **1 SK11 \ D.Louer** Modern Powder Diffraction in Material Science	**2 (6,2%) + 1 shared** **1 GLK0601 \ D.E.Cox** The Impact of Powder Diffraction on Material Science **2 GLK0901 \ C.A.Fyfe** Solid State NMR as a Complementary Technique to X-Ray Diffraction	**1 (3,1%) + 1 shared** **1 P.Scardi** Crystallography and Engineering: Residual Stress and Microstructure of Materials
Small angle scattering **1.60%**	**1 shared**	**1 (3,1%)** **1 GLK0603 \ M.V.Kovalchuk** X-Ray Standing Wave Technique-Structure-Sensitive Surface Spectroscopy	
Structural chemistry **9.15%**	**3 (9,3%) + 1 shared** **1 SK03 \ V.K.Belsky** Preferences and Exceptions in Organic Crystal Packing Modes **2 SK06 \ G.R.Desiraju** Designer Crystals: Intermolecular Interactions, Network Structures and Supramolecular Synthons **3 SK15 \ A.Gavezzotti** The Crystal Packing of Organic Small Molecules	**3 (9,4%)** **1 GLK0503 \ E.V.Boldyreva** Solid State Reactions **2 GLK1301 \ J.Lipkowski** Supramolecular Hydrates: Hydrophilic *versus* Hydrophobic Hydration of Molecules in the Solids **3 GLK1303 | H.B.Burgi** Frontiers in Chemical Crystallography	**2 (6,2%)** **1 L.R.Nassimbeni** Structure-Reactivity Relationship of Inclusion Compounds **2 J.M.Lehn** Self-Organized Supramolecular Architectures
Synchrotron radiation **4.85%**	**1 (3,2%) + 1 shared** **1 SK09 \ C.I.Branden** New Opportunities in X-Ray Crystallography at Third Generation Synchrotron Sources	**1 (3,1%)** **1 GKL0702 \ W.Thomlinson** X-Ray Imaging:from Amplitude to Phase	**1 (3,1%) + 2 shared** **1 G.Schmahl** Recent Developments in X-Ray Microscopy
High pressure **5.90%**	**1 (3,2%)** **1 SK02 \ Y.Fujii** Novel Crystal Physics Under Pressure	**2 (6,2%)** **1 GLK0803 \ W.F.Kuhs** Water Structures in Ice and Clathrates: Theme and Pressure Variations **2 GLK1103 \ D.Hausermann** Crystallography in Extreme Conditions of Pressure and Temperature:Myth or Reality?	**2 (6,2%) + 1 shared** **1 A.Katrusiak** Pressure-Tuned Crystal Chemistry: H-Bonds vs Central Forces at Phase Transitions and in Polymorphs **2 J.B.Parise** What High Pressure Can Do for You?
Electron diffraction **2.15%**		**1 (3,1%)** **1 GLK0604 \ M.Van Heel** Cryo-Electron Microscopy of Single Particles: the Structure of the E.Coly Ribosome	**1 (3,1%)** **1 D.L.Dorset** Electron Crystallography
Inorganic and mineral structures **4.85%**	**2 (6,4%) + 1 shared** **1 SK08 \ R.J.Hemley** Crystallography of Earth and Planetary Interiors **2 SK17 \ R.E.Newnham** Sensors and Actuators:Smart Crystals	**1 (3,1%) + 1 shared** **2 GLK0903 \ P.Thomas** Crystallography and Non-Linear Optics	**1 shared**
Neutron scattering **4.85%**	**3 (9,3%)** **1 SK24 \ T.F.Koetzle** Neutron Diffraction Studies of Coordination and Organometallic Compounds **2 SN06 \ C.G.Shull** **3 SN04 \ B.N.Brockhouse** The Development of Slow Neutron Spectroscopy: 1950-1965	**1shared**	**1 (3,1%)** **1 J.Jorgensen** Neutron Diffraction from High-Temperature Superconductors and Colossal Magnetoresistive Materials
Crystal growth and characterization material **3.75%**	**1 (3,2%)** **1 SK21 \ P.Bennema** Growth, Characterizations and Applications of Diamond Films	**1 shared**	**2 (6,2%)** **1 GK26 \ M.Lahav** Stereochemical Approach to Crystal Nucleation **2 GK04 \ R.Boese** In Situ Crystallization Techniques: Tools for Crystal Engineering and Co-Crystallization of Gaseous Compounds

Crystallographic computing
8.60%

3 (9,3%) + 2 shared

1 **SK23 \ G.M.Sheldrick**
Direct Methods in Real and Reciprocal Space
2 **SN01 \ H.Hauptman**
The SAS Maximum Principle
3 **SN03 \ J.Karle**
Direct Methods

1 (3,1%) + 1 shared

1 **GLK1101 \ C.Giacovazzo**
Structures Solution from Powders

3 (9,3%)

1 **K.A.Nugent**
The Non-Crystallographic Phase Problem and Opportunities with Free-Electron Lasers
2 **S.L.Price**
Computer Predictions of Organic Crystals Structures and Properties
3 **G.M.Sheldrick**
The Contribution of Direct Methods to Macromolecular Structure Determination

XAFS
0.55%

1shared

Crystallographic teaching
0.0%

Crystallographic nomenclature
0.0%

Shared Topics

4 (12,4%)

1 **SN05 \ J.Kendrew**
Protein Crystallography and Computing: Recollections of the 50s
Biological Macromol.//Crystall. Computing
2 **SK14 \ C.Chaillout**
The Role of Crystallography for Better High Tc Superconductors
Charge ….density//Inorganic Miner. Struct.
3 **SK05 \ R.Feidenhans'l**
Structure of Surfaces Studied by X-Ray Diffraction
Small angle // Synchrotron Radiation
4 **SK16 \ F.R.Salemme**
The Integration of Structure-Based Drug Design and Combinatorial Chemistry for Efficent Drug Discovery
Structural Chemistry//Crystall. Computing

4 (12,4%)

1 **GLK1202 \ M.Parrinello**
Role and Perspectives of ab-initio Molecular Dynamics in Crystallography
Charge,….. Density//Crystall. Computing
2 **GLK0701 \ J.D.Dunitz**
Polymorphism: the Same Yet Different
Powder Diffraction//Crystal Growth
3 **GLK0801 \ J.Thomas**
Crystallography and the Litium-Ion Battery
Neutron Scattering//Inorganic and Mineral Structures
4 **GLK0501 \ J.F.Scott**
Crystallographic Aspects of Ferroelectric Thin-Film Memories
Charge,spin,momentum density // XAFS

1 **Z.Dauter**
The Good, the Bad, the Ugly: Experiences at the Synchrotron
Biological Macromolecules-Synchrotron Radiation
2 **K.Heremans**
Pressure, Life and Molecules
Biological Macromolecules-High Pressure
3 **P.Villars**
Material Design
Charge,spin,momentum density-Inorganic and Mineral Structures
4 **I.Robinson**
Phasing of Coherent X-Ray Diffraction from Nanomaterials
Powder Diffraction-Synchrotron Radiation