

Structural Database obtained from the Cambridge Crystallographic Data Centre. And the ICDD-NIST Database contains metal and alloy patterns calculated from information received from the National Institute of Standards and Technology. The four individual editorial processes are highlighted in this poster.

PDF-4/Organics 2002 Database and Search/Retrieve Software

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PDF-4/Organics 2002 Database and Search/Retrieve Software is a joint effort between the International Centre for Diffraction Data and Cambridge Crystallographic Data Centre. Both experimental and calculated powder diffraction data are accurate and of high quality. An Organic Functional Group Search example for the pharmaceutical substance AZT is used to illustrate its powerful search capabilities. The comprehensiveness of the data in the database is also shown in the search result of this example.

Powder X-ray diffraction for asbestos analysis

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Powder X-ray diffraction (XRD) is a powerful tool for many aspects of asbestos analysis, including identification of mineral species and quantitative analysis. The use of unit-cell dimensions for identification of specific amphiboles, particularly the winchite asbestos found in Libby, MT, is described. In addition, recent XRD analysis of the unusual fibers from New York State talc is described; these fibers were present in crayons and identified in the popular press as asbestos. The XRD phase analysis is consistent with refrac-

tive index data that indicate the fibers are dominated by talc, rather than by anthophyllite (a regulated asbestos mineral). To improve quantitative analysis of asbestos, a new sample preparation technique is presented for eliminating the XRD pattern overlap between kaolinite and chrysotile asbestos. Heating samples at 460 °C for 40 h converts kaolinite to amorphous metakaolinite, while retaining the diffraction intensity of chrysotile. This procedure can be viewed as a general-purpose procedure to concentrate chrysotile and thus lower the detection limit to less than 0.01 mass fraction.

Phase formation study of Ba₂YCu₃O_x films (prepared by the “BaF₂ process”) using high temperature X-ray diffraction

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The “BaF₂ process” using e-beam co-evaporated BaF₂-Y-Cu-precursor films on rolling-assisted biaxially textured metal substrates (RABiTS), followed by postannealing in the presence of H₂O vapor, has demonstrated the potential for producing high quality, long length Ba₂YCu₃O_x (Y-213) superconductors. The phase equilibria and the phase evolution of the Y-123 phase in the multicomponent Ba-Y-Cu-F-OH system, however, are not completely understood. High-temperature X-ray experiments can provide critical information on phase evolution of Y-213 during the BaF₂ process, and have been conducted on amorphous precursor BaF₂-Y-Cu films prepared at the Oak Ridge National Laboratory. A theta-theta geometry Siemens 5000 diffractometer equipped with a custom-designed vacuum and gas flow system was used for this study. HTXRD investigations have been conducted on the conversion of 0.3- and 1.0-mm-thick BaF₂-Y-Cu precursor films to Y-213 in the presence of water vapor. Our results indicated that the thickness of film has a strong influence on the texture of the Y-213 film: a 0.3 mm film showed mainly (001) texture, whereas a 1.0 mm film showed a greater volume fraction of (*h*00) texture.

Calendar of Meetings

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8–13 June 2002

39th Annual Meeting of the Clay Minerals Society. Boulder, Colorado, USA. Includes a workshop, “Teaching Clay Sciences” (June 8) and a field trip, “Clays and the Front Range” (June 13). [Contact: Kathryn Nagy, Department of Geological Sciences, University of Colorado, Boulder, CO 80309, USA. Tel: 1 (303) 492 6187; Fax: 1 (303) 492 2602;

E-mail: kathryn.nagy@colorado.edu; Info: <http://www.colorado.edu/geolsci/cms/>].

16–21 June 2002

Vapor Phase Synthesis of Materials IV. Barga, Italy. The vapor phase synthesis of fine powders and thin films, with special focus on nanoparticles and nanocrystalline powders.

[Contact: United Engineering Foundation, Three Park Avenue, 27th Floor, New York, NY 10016-5902, USA. Tel: 1 (212) 591 7836; Fax: 1 (212) 591 7441; E-mail: engfnd@aol.com; Info: <http://www.engfnd.org/2av.html>].

23–24 June 2002

Minerals 2002. London, England, UK. [Contact: John Bowles. E-mail: john@mineralscience.demon.co.uk].

23–27 June 2002

American Conference on Neutron Scattering. Knoxville, Tennessee, USA. This is the first American conference, analogous to the European and International conferences. It will showcase recent scientific results in neutron science in a wide range of fields, and will fulfill many of the objectives of a facility “users’ meeting,” but on a national scale. [Contact: Info: <http://www.sns.gov/acns>].

30 June–4 July 2002

Trends in Sample Preparation: Development and Application. Seggau, Styria, Austria. The venue is Steggau Castle; the conference language is English. The scientific program is dedicated to all chemists working on topics associated with uncertainties in sample preparation. [Contact: Thomas Wenzl, Institute for Analytical Chemistry, Graz University of Technology, Technikerstrasse 4, Graz 8010, Austria. Tel: 43 (316) 873 8301; Fax: 43 (316) 873 8304; E-mail: trisp@analytchem.tu-graz.ac.at; Info: <http://www.analytchem.TUGraz.at>].

4–6 July 2002

XIII Simposio del Grupo Especializado de Cristalografía. Nuevas Tecnologías para la Caracterización de Materiales: Instrumentación, Detección, y Fuentes de Radiación. Oviedo, Spain. [Contact: Dr. Juan Fco. Van den Maelen Uría, Departamento de Química Física y Analítica, Universidad de Oviedo, Avenida Julián Clavería 8, E-33006 Oviedo, Spain. Fax: 34 (9) 8510 3125; E-mail: fvu@sauron.quimica.uniovi.es; Info: <http://www11.uniovi.es/gec/13simposio/index2i.htm>].

8–11 July 2002

12th International Conference on Quantitative Surface Analysis. Guildford, Surrey, UK. [Contact: QSA-12 Conference Secretariat, University of Surrey, School of Mechanical Engineering and Materials, Guildford, Surrey GU2 7XH, UK. Tel: 44 (1483) 876 293; Fax: 44 (1483) 876291; E-mail: P.Briggs@surrey.ac.uk; Info: <http://www.surrey.ac.uk/MME/QSA>].

9–11 July 2002

Micro 2002. London, England, UK. [Contact: Allison Winton, Royal Microscopical Society, 37/38 St. Clements, Oxford OX4 1AJ, UK. Tel: 44 (1865) 248 768; Fax: 44 (1865) 791 237; E-mail: exhibition@rms.org.uk; Info: <http://www.rms.org.uk>].

14–18 July 2002

CIMTEC 2002 10th International Ceramics Congress and Third Forum on New Materials. Florence, Italy. [Contact: CIMTEC 2002 Secretariat, Post Office Box 174, Corso Mazzini 52, I-48018 Faenza, Italy. Tel: 39 (0546) 664 143;

Fax: 39 (0546) 664 138; Info: <http://www.dinamica.it/cimtec>].

14–19 July 2002

PCI 2002 International Conference on the Physics and Chemistry of Ice. St. John’s, Newfoundland, Canada. [Contact: Joanne Myrick-Harris, Hatcher House, Memorial University of Newfoundland, St. John’s, Newfoundland A1B 3P7, Canada. Tel: 1 (709) 737 7922; Fax: 1 (709) 737 3520; E-mail: jharris@mun.ca; Info: <http://www.housing.mun.ca/conf/pci>].

29 July–2 August 2002

51st Annual Denver X-ray Conference. Colorado Springs, Colorado, USA. [Contact: Denise Flaherty, Conference Coordinator, International Centre for Diffraction Data, 12 Campus Boulevard, Newtown Square, PA 19073-3273, USA. Tel: 1 (610) 325 9814; Fax: 1 (610) 325 9823; E-mail: dxc@icdd.com; Info: <http://www.dxcicdd.com/02>].

1–3 August 2002

Crystal Chemistry of Materials and Soft Matter Studied by Synchrotron and Neutron Diffraction. Grenoble, France. This is a satellite meeting preceding the XIX IUCr International Congress in Geneva (6–15 August 2002). Held at the joint ILL-ESRF site in Grenoble. [Info: <http://www.ill.fr/dif/iucr>].

1–5 August 2002

3rd Rigi Meeting on Crystal Physics: Measuring, Calculating, and Predicting the Physical Properties of Crystals. Rigi, Switzerland. This is a satellite meeting preceding the XIX IUCr International Congress in Geneva (6–15 August 2002). [Contact: Dr. Jürgen Schreuer, Laboratorium für Kristallographie, ETH Zürich, Sonneggstrasse 5, CH-8092 Zürich, Switzerland. Tel: 41 (1) 632 3752; Fax: 41 (1) 632 1133; E-mail: schreuer@kristall.erdw.ethz.ch; Info: <http://www.kristall.ethz.ch/rigi2002>].

4–6 August 2002

Neutron and Synchrotron X-ray Scattering in Condensed Matter Research. Villigen, Switzerland. This is a satellite meeting preceding the XIX IUCr Congress in Geneva (6–15 August 2002). Held at the Paul Scherrer Institut. The official language will be English. Limited to 100 participants. [Contact: Ms. Christine Schütz, NSCmr2002, Paul Scherrer Institut, CH-5232 Villigen PSI, Switzerland. Tel: 41 (56) 310 3178; Fax: 41 (56) 310 3151; E-mail: christine.schuetz@psi.ch; Info: <http://www.psi.ch/sls>].

4–9 August 2002

ACCGE-14 14th American Conference on Crystal Growth and Epitaxy. Seattle, Washington, USA. Sponsored by the American Association for Crystal Growth. [Contact: ACCGE-14 Secretariat, Tony Gentile *at* aacg@lafn.org; Info: <http://www.crystalgrowth.org/conferences/acceg14>].

4–9 August 2002

Microscopy and Microanalysis 2002. Québec City, Québec, Canada. [Contact: Dr. Pierre M. Charest, Département de Phytologie, Pavillon C.-E. Marchand, Université Laval, Qué-

bec City, Québec G1K 7P4, Canada. Tel: 1 (418) 656 7792; Fax: 1 (418) 656 7176; E-mail: pcharest@rsvs.ulaval.ca; Info: <http://msc.rsvs.ulaval.ca/2002/2002.html>].

6–15 August 2002

19th IUCr General Assembly and International Congress of Crystallography. Geneva, Switzerland. *Note the change in venue from Jerusalem to Geneva.* [Contact: Secretariat XIX IUCr, Post Office Box 50006, Tel Aviv 61500, Israel. Tel: 972 (3) 514 0000; Fax: 972 (3) 514 0077; E-mail: iucr@kenes.com; Info: <http://www.kenes.com/iucr>].

11–15 August 2002

ICPR 2002 16th International Conference on Pattern Recognition. Québec City, Québec, Canada. [Contact: ICPR 2002 Secretariat, c/o Agora Communication, 2600 Boulevard Laurier, Tour Belle Cour, Suite 2680, Sainte-Foy, Québec G1V 4M6, Canada; Info: <http://www.icpr2002.gel.ulaval.ca>].

18–23 August 2002

12th Annual Goldschmidt Conference. Davos, Switzerland. Covering the earth sciences, environmental chemistry, geochemistry, cosmochemistry, biogeochemistry, and tectonics. The conference language is English. [Contact: Cambridge Publications, Post Office Box 27, Cambridge CB1 8TR, UK. E-mail: gold2002@campublic.co.uk; Info: <http://www.goldschmidt-conference.com/gold2002>].

25–29 August 2002

Twelfth International Conference on Small Angle Scattering. Venezia, Italy. This is a satellite meeting following the XIX IUCr International Congress in Geneva (6–15 August 2002). [Contact: Dr. A. Benedetti, Università di Venezia, Dipartimento di Chimica Fisica, Calle Larga S. Marta D. D. 2137, I-30123 Venezia, Italy. Fax: 39 (041) 257 8594; E-mail: sas2002@unive.it; Info: <http://www.unive.it/sas2002>].

29–31 August 2002

Natural Glasses 4: Glasses in Geoscience, Environmental Science, and Archeometry. Lyon, France. [Contact: Prof. Bernard, Champagnon, LPCML, 12 rue Ampère, 69622 Villeurbanne, France. E-mail: natglasses@univ-lyon1.fr; Info: <http://natglasses.univ-lyon1.fr>].

1–6 September 2002

IMA 2002 18th General Meeting of the International Mineralogical Association. Edinburgh, Scotland, UK. [Contact: The Mineralogical Society, 41 Queen's Gate, London SW7 5HR, UK. Tel: 44 (20) 7584 7516; Fax: 44 (20) 7823 8021; E-mail: info@minersoc.org; Info: <http://www.minersoc.org/pages/meetings/IMA2002.html>].

1–6 September 2002

ICEM-15 Fifteenth International Congress on Electron Microscopy. Durban, Kwazulu-Natal, South Africa. Sponsored by the International Federation of Societies for Electron Microscopy and the Microscopy Society of South Africa. Includes all aspects and applications of microscopy and microanalysis. [Contact: Robin Cross, ICEM-15 Secretariat, Electron Microscopy Unit, Rhodes University, Post Office

Box 94, Grahamstown 6140, South Africa. Tel: 27 (46) 603 8168; Fax: 27 (46) 622 4377; E-mail: r.cross@ru.ac.za; Info: <http://www.icem15.com>].

4–6 September 2002

Synchrotron Radiation in Polymer Science II. Sheffield, England, UK. [Contact: Elaine Shaw, Department of Chemistry, University of Sheffield, Sheffield, UK. Tel: 44 (114) 222 9301; Info: <http://www.polymercentre.org.uk/srps>].

8–11 September 2002

3rd International Conference on Inorganic Materials. Konstanz, Germany. [Contact: Dr. Martin Jansen, Max-Planck-Institut für Festkörperforschung, Heisenbergstrasse 1, D-70569 Stuttgart, Germany. Tel: 49 (711) 689 1500; Fax: 49 (711) 689 1502; E-mail: martin@jansen.mpi-stuttgart.mpg.de].

8–12 September 2002

80. Jahrestagung der Deutschen Mineralogischen Gesellschaft. Hamburg, Germany. [Contact: Info: <http://www.rz.uni-hamburg.de/DMG2002>].

8–13 September 2002

Euroanalysis 12: European Conference on Analytical Chemistry. Dortmund, Germany. [Contact: Conference Secretariat Euroanalysis, Gesellschaft Deutscher Chemiker, Post Office Box 90 04 40, D-60444 Frankfurt am Main, Germany. Tel: 49 (69) 7917 358; Fax: 49 (69) 7917 475; E-mail: tg@gdch.de; Info: <http://www.euroanalysis.de/index.html>].

10–14 September 2002

Sixth Biennial Conference on High Resolution X-ray Diffraction and Topography. Grenoble-Aussois, France. [Contact: Claudine Brun, X-Top 2002, BP 220, 6 rue Jules Horowitz, 38043 Grenoble Cedex, France. Tel: 33(4) 7688 2027; Fax: 33 (4) 7688 2160; E-mail: xtop2002@esrf.fr; Info: <http://www.lmcp.jussieu.fr/lmcp/reunions/xtop2002>].

22–26 September 2002

116th AOAC International Annual Meeting. Los Angeles, California, USA. [Contact: Maria Donovan, AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877-2417, USA. Tel: 1 (301) 924 7089; Fax: 1 (301) 924 7089; E-mail: mdonovan@aoac.org; Info: <http://www.aoac.org>].

30 September–3 October 2002

Third Mediterranean Clay Meeting. Jerusalem, Israel. Devoted to the chemistry, physics, and geology of clay minerals in the Mediterranean region, and their applications. English will be the official conference language. [Contact: Dr. Zev Gerstl, Institute of Soil, Water, and Environmental Chemistry, Volcani Center, ARO, Post Office Box 6, Bet Dagan 50250, Israel. Tel: 972 (3) 968 3272; Fax: 972 (3) 960 4017; E-mail: zgerstl@volcani.agri.gov.il; Info: http://www.agri.huji.ac.il/clay_meeting/].

October 2002

Pittsburgh Diffraction Meeting. Pittsburgh, Pennsylvania, USA. [Contact: geib@pitt.edu].

6–10 October 2002

The Minerals, Metals & Materials Society Fall Meeting. Columbus, Ohio, USA. [Contact: TMS, 184 Thorn Hill Drive, Warrendale, PA 15086, USA. Tel: 1 (724) 776 9000; Fax: 1 (724) 776 3770; E-mail: ckobert@tms.org; Info: <http://www.tms.org>].

13–17 October 2002

29th Annual Conference of the Federation of Analytical Chemistry and Spectroscopic Societies. Providence, Rhode Island, USA. [Contact: Cindi Lilly, FACSS National Office, 1201 Don Diego Avenue, Santa Fe, NM 87505, USA. Tel: 1 (505) 820 1648; Fax: 1 (505) 989 1073; E-mail: jsjoberg@trail.com; Info: <http://facss.org/facss/index.php>].

30 October–1 November 2002

International Seminar on Physics and Chemistry of Solid Materials. Agadir, Morocco. Language: French/English. [Contact: H. Benyaich, Ecole Supérieure de Technologie d'Agadir, Faculty of Sciences, BP 28/S Cite Dakhla, Agadir 80000, Morocco. Tel: 212 (0) 4822 0957; Fax: 212 (0) 4822 0100; E-mail: remces9@esta.ac.ma; Info: <http://www.esta.ac.ma/remces9>].

2–6 December 2002

Fall Meeting of the Materials Research Society. Boston, Massachusetts, USA. [Contact: Materials Research Society, 506 Keystone Drive, Warrendale, PA 15086-7573, USA. Tel: 1 (724) 779 3003; Fax: 1 (724) 779 8313; E-mail: info@mrs.org; Info: <http://www.mrs.org>].

March 2003

International Centre for Diffraction Data, Spring Meeting. Newtown Square, Pennsylvania, USA. [Contact: Linda Shertz, International Centre for Diffraction Data, 12 Campus Boulevard, Newtown Square, PA 19073-3273, USA. Tel: 1 (610) 325 9814; Fax: 1 (610) 325 9823; E-mail: shertz@icdd.com; Info: <http://www.icdd.com>].

2–6 March 2003

132nd Annual Meeting of the Minerals, Metals & Materials Society. San Diego, California, USA. [Contact: TMS, 184 Thorn Hill Drive, Warrendale, PA 15086, USA. Tel: 1 (724) 776 9000; Fax: 1 (724) 776 3770; E-mail: ckobert@tms.org; Info: <http://www.tms.org/Meetings/Annual-03/AnnMtg03Home.html>].

14–17 April 2003

British Crystallographic Association Annual Meeting. York, England, UK. Held at York University. [Contact: Info: <http://bca.cryst.bbk.ac.uk/BCA/index.html>].

7–11 June 2003

Clay Minerals Society 40th Annual Meeting. Athens, Georgia, USA. Joint meeting with the **Mineralogical Society of America**. [Contact: Paul A. Schroeder, University of Georgia, Athens, GA, USA. Tel: 1 (706) 542 2384; E-mail:

schroe@gly.uga.edu; Info: <http://www.gly.uga.edu/CMS2003>].

22–26 June 2003

Euroclay 2003. Modena, Italy. [Contact: Maria Franca Brigatti, Dipartimento di Scienza della Terra, Università di Modena e Reggio Emilia, Largo S. Eufemia 19, I-41100 Modena, Italy. Fax: 39 (059) 205 5887; E-mail: ec2003@unimo.it; Info: <http://www.unimo.it/euroclay2003>].

26–31 July 2003

ACA'03 American Crystallographic Association Annual Meeting. Cincinnati, Ohio, USA. [Contact: Jeanette Krause Bauer, Department of Chemistry, Post Office Box 210172, Cincinnati, OH 45221-0172, USA. Tel: 1 (513) 556 9226; Fax: 1 (513) 556 9239; E-mail: jeanette.krause@uc.edu; Info: <http://nexus.hwi.buffalo.edu/ACA/ACA-Annual/futuremeetings.html>].

30 July–2 August 2003

Microscopy and Microanalysis 2003. San Antonio, Texas, USA. Sponsored by the Microscopy Society of America and the Microbeam Analysis Society. [Contact: MSA Business Office, Bostrom Corporation, 230 East Ohio, Suite 400, Chicago, IL 60611, USA. Tel: 1 (312) 644 1527; Fax: 1 (312) 644 8557; E-mail: businessoffice@msa.microscopy.com; Info: <http://www.msa.microscopy.com>].

10–13 August 2003

CRYSTAL 23 Joint meeting of the Society of Crystallographers in Australia and New Zealand and the Asian Crystallographic Association. Broome, Western Australia, Australia. [Contact: Syd Hall, Crystallography Centre, University of Western Australia, Nedlands 6009, WA, Australia. Tel: 61 (8) 9380 2725; Fax: 61 (8) 9380 1118; E-mail: srh@crystal.uwa.edu.au; Info: <http://www.crystal.uwa.edu.au/CrystalsDownUnder>].

24–30 August 2003

ECM-21 21st European Crystallographic Meeting. Durban, South Africa. [Contact: Prof. Andreas Roodt, Free State University. E-mail: RoodtA@sci.uovs.ac.za; Info: <http://www.ecm21-africa.co.za>].

2–6 September 2003

ECNS 2003 European Conference on Neutron Scattering. Montpellier, France. [Contact: René Vacher, CNRS-SPM, Montpellier, France. Tel: 33 (4) 6714 3449; Fax: 33 (4) 6714 3498; E-mail: rene@ldv.uni-montp2.fr; Info: <http://www.sfn.asso.fr>].

8–13 September 2003

Aperiodic 2003. Belo Horizonte, Minas Gerais, Brazil. [Contact: Secretaria do Aperiodic 2003, Departamento de Física, Universidade Federal de Minas Gerais, CP 702, Belo Horizonte 30123-970, Minas Gerais, Brazil. Tel: 55 (31) 3499 5672; Fax: 55 (31) 3499 5600; E-mail:

ap2003@fisica.ufmg.br; Info: <http://www.fisica.ufmg.br/~ap2003>].

14–18 March 2004

133rd Annual Meeting of the Minerals, Metals & Materials Society. Charlotte, North Carolina, USA. [Contact: TMS, 184 Thorn Hill Drive, Warrendale, PA 15086, USA. Tel: 1 (724) 776 9000; Fax: 1 (724) 776 3770; E-mail:

ckobert@tms.org; Info: <http://www.tms.org/Meetings/Annual-04/AnnMtg04Home.html>].

August 2005

20th IUCr General Assembly and International Congress of Crystallography. Florence, Italy. [Contact: Carlo Mealli. E-mail: mealli@fi.cnr.it].

Calendar of Short Courses & Workshops

7–12 June 2002

Eighth European Summer School on Electron Crystallography. Tampere, Finland. Venue is the conference and education center of Murikka, located about a half-hour by car from Tampere in the peaceful Finnish lake wilderness. See <http://www.murikka-opisto.fi>. Registration is limited to 50. [Contact: Minnamari Vippola, Tampere University of Technology, Centre for Electron Microscopy, Post Office Box 589, 33101 Tampere, Finland. Tel: 358 (3) 3115 2350; Fax: 358 (3) 3115 2330; E-mail: minnamari.vippola@tut.fi; Info: <http://www.conferences.tut.fi/ecschool2002>].

10–14 June 2002

ICDD X-ray Clinic: Advanced Methods in X-ray Powder Diffraction. Newtown Square, Pennsylvania, USA. The second week of an integrated two-week course in theoretical and experimental X-ray powder diffraction. This session is designed for the experienced user and focuses on computer-based methods of qualitative and quantitative phase analysis. Previous attendance at the first session is recommended. [Contact: Education Coordinator, International Centre for Diffraction Data, 12 Campus Boulevard, Newtown Square, PA 19073-3273. Tel: 1 (610) 325 9814; Fax: 1 (610) 325 9823; E-mail: clinics@icdd.com; Info: <http://www.icdd.com/education/xrd.htm>].

17–22 June 2002

Sixth International School and Symposium on Synchrotron Radiation in Natural Science. Ustron-Jaszowiec, Poland. Including sessions on X-ray absorption, fluorescence, diffraction, scattering, and imaging microscopy, among others. [Contact: Ms. Halina Granat, ISSRNS 2002 Secretariat, Institute of Physics, Polish Academy of Sciences, Al. Lotnikow 32/46, 02-668 Warsaw, Poland. Tel: 48 (22) 843 6034; Fax: 48 (22) 843 0926; E-mail: synchro@ifpan.edu.pl; Info: <http://info.ifpan.edu.pl/ISSRNS2002.html>].

19–21 June 2002

11th Annual Fibre Diffraction and Non-crystalline Diffraction Workshop. Staffordshire, England, UK. Held at Keele University. [Contact: Matthew J. Rodman, Daresbury Laboratory. Tel: 44 (1925) 603 626 or a.mutch@dl.ac.uk; Info: <http://www.srs.dl.ac.uk/ccp13>].

29 July–2 August 2002

Workshops at the 51st Annual Denver X-ray Conference. Colorado Springs, Colorado, USA. Includes sessions in: X-ray Optics; Polarized X-ray Optics; Thin Films; Rietveld Applications; Advances in Database Technology; Line Broadening; Methods of Phase Identification; Texture Analysis; Fundamentals of XRF; Quantitative XRF; TXRF; and Specimen Preparation. [Contact: Denise Flaherty, Conference Coordinator, International Centre for Diffraction Data, 12 Campus Boulevard, Newtown Square, PA 19073-3273, USA. Tel: 1 (610) 325 9814; Fax: 1 (610) 325 9823; E-mail: dxcc@icdd.com; Info: <http://www.dxcicdd.com/02>].

6 August 2002

Workshops at the 19th IUCr General Assembly and International Congress of Crystallography. Geneva, Switzerland. Includes sessions in: Scattering Methods for Nano-scale Structure Characterization (Small Angle Scattering); Twinning and the CRYSTALS Program; and the Cambridge Crystallographic Data Centre. [Contact: Secretariat XIX IUCr, Post Office Box 50006, Tel Aviv 61500, Israel. Tel: 972 (3) 514 0000; Fax: 972 (3) 514 0077; E-mail: iucr@kenes.com; Info: <http://www.kenes.com/iucr>].

28 August–6 September 2002

Summer School in Synchrotron Radiation Science. Chester, England, UK. Held at Chester College and the Daresbury Laboratory, Warrington. Six days of lecture and three of practical hands-on experience. [Contact: Alison Mutch, Daresbury Laboratory, Synchrotron Radiation Department, Warrington, Cheshire WA4 4AD, UK. Tel: 44 (1925) 603 363; Fax: 44 (1925) 603 124; E-mail: a.mutch@dl.ac.uk].

23–26 September 2002

Second European Workshop on Clay Mineralogy. Jena, Germany. [Contact: Andreas Bauer, Forschungszentrum Karlsruhe, Institut für Entsorgung, P.O. Box 3640, D- 76021 Karlsruhe, Germany. Tel: 49 (7247) 82 6293; Fax: 49 (7247) 82 3927; E-mail: bauer@ine.fzk.de; Info: <http://www.uni-jena.de/chemie/geowiss/tagungen/clay2002/clay2002.html>].

23–27 September 2002

Analyse Structurale par Diffraction des Rayons X: Structures Absolues, Macles, Incommensurables. Toulouse,