INTERNATIONAL REPORT

Regional Correspondents

Australia

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Norberto Masciocchi Dipartimento di Chimica Strutturale e Stereochimica Inorganica Universita' di Milano 20133 Milano, Italy

Calendar of Meetings

Donald R. Petersen Greenleaf Associates 6210 Siebert Street Midland, MI 48640-2724

16-20 March 1998

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].

26-27 March 1998

Cambridge Mineralogical Society Clay Conference. Cambridge, England, UK. [Contact: Dr. C. V. Jeans, University of Cambridge, Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ, UK. Tel: 44 (1223) 333 400; Fax: 44 (1223) 333 450].

5-8 April 1998

British Crystallographic Association Annual Spring Meeting. St. Andrews, Scotland, UK. [Contact: Dr. Philip Lightfoot, School of Chemistry, University of St. Andrews, Purdie Building, St. Andrews, Fife KY16 9ST, UK. Tel: 44 (1334) 463 841; Fax: 44 (1334) 463 808; E-mail: pl@st-and.ac.uk; Info: http://speedy.st-and.ac.uk/~naismith/bca.html].

13-17 April 1998

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Materials Research Society Spring Meeting. San Francisco, California, USA. [Contact: Materials Research Society, 506 Keystone Drive, Warrendale, PA 15086. Info: http://www.mrs.org/meetings/spring98/cfp/contents.html#contents].

Includes, among about thirty other symposia, Symposium V: Application of Synchrotron Radiation Techniques to Materials Science. [Contact: S. Mini, Department of Physics, Northern Illinois University, DeKalb, IL 60115, USA. E-mail: mini@anl.gov].

26 April-1 May 1998

Nonstoichiometric Ceramics and Intermetallics. Kona, Hawaii, USA. [Contact: Engineering Foundation, 345 East 47th Street, Suite 303, New York, NY 10017-2375, USA. E-mail: engfnd@aol.com; Info: http://www.engfnd.org/8an.html].

27 April-1 May 1998

American Vacuum Society: 25th International Conference on Metallurgical Coatings and Thin Films. San Diego, California, USA. [Contact: Bob Finnegan, American Institute of Physics. Tel: 1 (516) 576-2430; Fax: 1 (516) 576-2481; E-mail: rfinneg@aip.org].

3-6 May 1998

100th Annual Meeting American Ceramic Society. Cincinnati, Ohio, USA. [Contact: ACerS Customer Service Department, Post Office Box 6136, Westerville, OH 43086-6136, USA. Fax: 1 (614) 899 6109; E-mail: customersrvc@acers.org; Info: http://www.acers.org].

24-29 May 1998

First Russian Crystal Chemistry Conference. Chernogolovka (near Moscow), Russia. Conference languages Russian and English, with simultaneous translation of Russian to English. [Contact: A. N. Utenyshev, Institute of Chemical Physics at Chernogolovka, Russian Academy of Science, 142432 Chernogolovka, Moscow Region, Russia. Fax: 7 (095) 515 3588; E-mail: atom@kon.icp.ac.ru].

25-27 May 1998

ISPAC-11 Eleventh International Symposium on Polymer Analysis and Characterization. Santa Margherita Ligure (near Genoa), Italy. [Contact: Prof. Oscar Chiantore, Department of Chemistry IPM, University of Torino, Via Giuria 7, 101025 Torino, Italy. Tel: 39 (11) 670 7558; Fax: 39 (11) 670 7855; E-mail: chiantore@ch.unito.it; Info: http://www.chem.cmu.edu/ispac].

26-29 May 1998

High Temperature Structural Silicides. Hyannis, Massachusetts, USA. [Contact: Engineering Foundation, 345 East 45th Street, Suite 303, New York, NY 10017-2375, USA. E-mail: engfnd@aol.com; Info: http://www.engfnd.org/8as.html].

26-29 May 1998

Seventh European Conference on Non-destructive Testing. Copenhagen, Denmark. [Contact: Bjarne Larsen, 7 CNDT, Park Allé 345, DK-2056 Brøndby, Denmark. Fax: 45 () 4396 2636].

3-6 June 1998

ECCM-8 Eighth European Conference on Composite Materials. Napoli, Italy. The conference language is English. Linked to CIMTEC-98. [Contact: Prof. A. Langella, ECCM-8, DIMP-University of Naples, Pizzale V. Tecchio, 80125 Naples, Italy. Tel: 39 (81) 768 2370; Fax: 39 (81) 761 4212; E-mail: crivisco@unina.it; Info: http://www.eccm98.etruria.net].

4-10 June 1998

Sixteenth Annual Conference on Crystal Growth and Epitaxy. Fallen Leaf Lake, California, USA. A meeting of the Western Regional Section of the American Association for Crystal Growth. [Contact: Katie Blackmore, E-mail: kab@aml.arizona.edu; Info: http://www.aml.arizona.edu/aacgw98.html].

6-10 June 1998

Clay Minerals Society Meeting. Cleveland, Ohio, USA. Includes special symposia, a short course on the molecular modeling of clays, and field trips. [Contact: Prof. Sam Savin, Department of Geological Sciences, Case Western Reserve

University, Cleveland, OH 44106-7216, USA. Tel: 1 (216) 368 6592; E-mail: sms7@po.cwru.edu].

14-19 June 1998

MML'98 Third International Symposium on Metallic Multilayers. Vancouver, British Columbia, Canada. Held jointly with the EMRS Symposium on Magnetic Ultrathin Films and Ultrathin Film Nanostructures. [Contact: MML/EMRS 1998 Symposium, Conference Services, Halpern Centre, Simon Fraser University, 8888 University Drive, Burnaby, BC, Canada V5A 1S6. E-mail: conference-services@sfu.edu].

14-19 June 1998

CIMTEC-98 World Ceramics Conference and Forum on New Materials. Firenze, Italy. Linked to ECCM-8. [Contact: CIMTEC-98, Post Office Box 165, 48018 Faenza, Italy. Tel: 39 (546) 664 143; Fax: 39 (546) 663 362; Info: http://www.dinamica.it/cimtec98].

16-19 June 1998

Twentieth Annual Symposium on Applied Surface Analysis and Tenth Annual Symposium of the Pacific Northwest Chapter of the American Vacuum Society. Richland, Washington, USA. [Contact: Ms. Bonnie Williams, Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory, Post Office Box 999, Richland, WA 99352. Tel: 1 (509) 376 1518; Fax: 1 (509) 376 5106; E-mail: bj_williams@pnl.gov; Info: http://www.vacuum.org/surfanal98.html].

20-25 June 1998

Tenth International Symposium on Molecular Recognition and Inclusion. Warsaw, Poland. [Contact: Kinga Suwinska, Symposium Secretary, Institute of Physical Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, PL-01 224 Warsaw, Poland. Tel: 48 (22) 632 7343; Fax: 48 (22) 632 5276; Email: ismri-10@ichf.edu.pl or klatrat@ichf.edu.pl; Info: http://www.iucr.ac.uk/cww-top/ismri-10.html].

29 June-1 July 1998

16th Biennial Conference of the Australian Clay Minerals Society. Brisbane, Australia. To be held on the Gardens Point campus of the Queensland University of Technology. Includes a field trip on the second day, and a post-conference field trip looking at the clay mineral regions in southeast Queensland. [Contact: 16ACMS Secretariat, Centre for I&D Chemistry, Queensland University of Technology, GPO Box 2434, Brisbane, Queensland 4001, Australia. E-mail: r.frost@qut.edu.au; Info: http://www.sci.qut.edu.au/physci/conference/ACMS].

5-10 July 1998

Twelfth International Zeolite Conference. Baltimore, Maryland, USA. [Contact: D. H. Olson, Department of Chemical Engineering, 311A Towne Building, University of Pennsylvania, Philadelphia, PA, 19104. Tel: 1 (215) 573 4201; Fax: 1 (215) 573 2093; E-mail: dholson@seas.upenn.edu].

5-11 July 1998

ICCE/5 Fifth International Conference on Composites Engineering. Las Vegas, Nevada, USA. Covering "...all areas of composite materials research, including polymer matrix, ceramic matrix, metal matrix, plastics, electronic, and concrete materials and their characterization..." [Contact: Prof. David Hui, Department of Mechanical Engineering, University of New Orleans, New Orleans, LA 70148. Tel: 1 (504) 280 6652; Fax: 1 (504) 280 5539; E-mail: dxhme@uno.edu; Info: http://www.uno.edu/~engr/composites.html].

7-9 July 1998

MICRO 98 Royal Microscopy Society Conference and Exhibition. London, UK. [Contact: R. Morden, Royal Microscopy Society, 37/38 St. Clements, Oxford OX4 1AJ, UK. Tel: 44 (1865) 248 768; Fax: 44 (1865) 791 237; Email: info@rms.org.uk; Info: http://rms.org.uk].

18-23 July 1998

ACA'98 American Crystallographic Association Annual Meeting. Washington, DC, USA. [Contact: T. A. Vanderah, National Institute of Standards and Technology, Ceramics Division, Building 223 Room A256, Gaithersburg, MD 20899, USA. Tel: 1 (301) 975 5785; Fax: 1 (301) 990 8729; E-mail: terrell@credit.nist.gov or V. L. Karen, NIST, Materials Science and Engineering Laboratory, Materials Building Room, A215, Gaithersburg, MD 20899, USA. Tel: 1 (301) 975 6255; E-mail: karen@tiber.nist.gov; Info: http://www.hwi.buffalo.edu/aca].

26-31 July 1998

Twelfth International Conference on Crystal Growth, held concurrently with the Tenth International Conference on Vapor Growth and Epitaxy. Jerusalem, Israel. [Contact: ICCG 12, c/o International Travel & Congresses, Ltd., 9 Rothschild Boulevard, Post Office Box 29313, Tel Aviv 61292, Israel. Tel: 972 (3) 510 2538; Fax: 972 (3) 516 0604; E-mail: 100264.2432@CompuServe.com: Info: http://www.technion.ac.il/~iccg12].

3-7 August 1998

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47th Annual Denver X-ray Conference. Colorado Springs, Colorado, USA. [Contact: Denise Flaherty, 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].

3-7 August 1998

International Centre for Diffraction Data, Fall Technical Meeting. Colorado Springs. Colorado, USA. Held concurrently with the 47th Annual Denver X-ray Conference. [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].

10-14 August 1998

IMA'98 17th General Meeting of the International Mineralogical Association. Toronto, Ontario, Canada. The meeting will be centered on extensive scientific sessions. preceded and followed by field trips across Canada and the United States including important mineral locations, ore deposits, sites of impact craters, and classic petrologic locations. [Contact: IMA '98, Department of Geology, University of Toronto, Earth Sciences Centre, 22 Russell Street, Toronto, ON, Canada M5S 3B1. Tel: 1 (416) (416)3306: Fax: 1 978 3938; E-mail: ima98@quartz.geology.utoronto.ca; Info: http:// opal.geology.utoronto.ca:80/ima98].

10-14 August 1998

XAFS X Tenth International Conference on X-ray Absorption Fine Structure. Chicago, Illinois, USA. Held at the Illinois Institute of Technology. [Contact: Prof. T. I. Morrison, c/o Toni Mitchell, Center for Synchrotron Radiation Research and Instrumentation, IIT, 3101 South Dearborn Street, Chicago, IL 60616, USA. Tel: 1 (312) 567 3580; Fax: 1 (312) 567 3494; E-mail: xafsx@ixs.iit.edu; Info: http://ixs.iit.edu/~xafsx/index.html].

16-20 August 1998

ECM-18 18th European Crystallographic Meeting. Praha, Czech Republic. The conference language is English. [Contact: Radomir Kuzel, Conference Secretariat, Faculty of Mathematics and Physics, Charles University, Ke Karlovu 5, 121 16 Praha 2, Czech Republic. Fax: 42 (2) 367 981; E-mail: kuzel@karlov.mff.cuni.cz; Info: http://krystal.karlov.mff.cuni.cz/ecm/ecm.htm or Jindrich Hasek, Conference Chairman, Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Heyrovskeho nam. 2, 162 06 Praha 6, Czech Republic. Tel: 42 (2) 360 341 x390; Fax: 42 (2) 367 981; E-mail: hasek@imc.cas.cz; Info: http://www-xray.fzu.cz/ ecm/ecm.htm].

21-22 August 1998

Can Crystal Structures Be Predicted? Dresden, Germany. An ECM-18 satellite meeting, held under the aegis of the

Deutsche Akademie der Naturforscher Leopoldina. The conference language is English. Invited lectures and discussion. [Contact: Dr. Axel Nelles, Deutsche Akademie der Naturforscher Leopoldina, Postfach 11 05 43, D-06019 Halle (Saale), Germany. Tel: 49 (345) 202 5014; Fax: 49 (345) 202 1727; E-mail: nelles@leopoldina.uni-halle.de; Info: http://www.phy.tu-dresden.de/leopoldina.html].

22-25 August 1998

EPDIC-6 Sixth European Powder Diffraction Conference. Budapest, Hungary. [Contact: Prof. Tamás Ungár, Department of General Physics, Eötvös Loránd University, Múzeum krt 6–8, H-1008 Budapest, Hungary. Tel: 36 (1) 266 9833; Fax: 36 (1) 266 7927; E-mail: ungar@ludens.elte.hu; or epdic6@power.szfki.kfki.hu; Info: http://www.kfki.hu/~epdic6].

24-27 August 1998

ICXOM-XV Fifteenth International Conference on X-ray Optics and Microanalysis. Antwerp, Belgium. [Contact: ICXOM-XV Secretariat, University of Antwerp, Department of Chemistry, Universiteitsplein 1, B-2610 Antwerp-Wilrijk, Belgium. Fax: 32 (3) 820 2376; E-mail: vantdack@uia.ua.ac.be].

25-29 August 1998

General Conference of the Condensed Matter Division of the European Physical Society. Grenoble, France. Held concurrently with Journées de la Matière Condensée de la Societe Française de Physique. [Contact: CMD17-JCM6 Secretary General, Laboratoire Louis Néel, BP 166X, F-38042 Grenoble, France. Tel: 33 (4) 7688 9002; Fax: 33 (4) 7688 9004; E-mail: cmd17@labs.polycnrs-gre.fr; Info: http://www.polycnrs-gre.fr/eps.html].

9-11 September 1998

X-TOP 98 Fourth European Conference on High Resolution Diffraction and Topography. Durham, UK. [Contact: Prof. Brian Tanner, Department of Physics, University of Durham, South Road, Durham DH1 3LE, UK. Fax: 44 (191) 374 2111; E-mail: physics.chair@durham.ac.uk].

11-16 October 1998

25th Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies. Austin, Texas, USA. [Contact: FACSS, 1201 Don Diego Avenue, Santa Fe, NM 87505, USA. Tel: 1 (505) 820 1648; Fax: 1 (505) 989 1073; Info: http://facss.org/info.html].

13-15 October 1998

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AsCA'98 Third Conference of the Asian Crystallographic Association. Bangi, Selangor, Malaysia. [Contact: Shih-Lin Chang, Physics Department, National Tsing Hua University, Hsinchu, Taiwan 300. Fax: 886 (3) 572 3052;

E-mail: slchang@alpha1.srrc.gov.tw; Info: http://gandalf.otago.ac.nz:800/rweavers/asca/asca98.htm].

25-30 October 1998

Rare Earths 98. Fremantle (near Perth), Australia. [Contact: Erica Jago, Materials Institute of Western Australia, 133 Salvado Road, Wembley, WA 6014, Australia. Tel: 61 (9) 387 9590; Fax: 61 (9) 383 9639; E-mail: re98@miwa.org.au; Info: http://www.miwa.org.au/IREC98].

30 November-4 December 1998

Fall Meeting of the Materials Research Society. Boston, Massachusetts, USA. [Contact: Materials Research Society, 506 Keystone Drive, Warrendale, PA 15086, USA. E-mail: info@mrs.org; Info: http://www.mrs.org].

5-9 April 1999

Spring Meeting of the Materials Research Society. San Francisco, California, USA. [Contact: Materials Research Society, 506 Keystone Drive, Warrendale, PA 15089, USA. E-mail: info@mrs.org; Info: http://www.mrs.org].

22-27 May 1999

ACA'99 American Crystallographic Association Annual Meeting. Buffalo, New York, USA. [Contact: Dr. G. David Smith, Hauptman-Woodward Institute, 73 High Street, Buffalo, NY 14203-1196, USA. Tel: 1 (716) 856 9600; Fax: 1 (716) 852 4846; E-mail: smith@hwi.buffalo.edu; Info: http://www.hwi.buffalo.edu/aca].

26-30 July 1999

ICSOS-6 Sixth Annual Conference on Structure of Surfaces. Vancouver, British Columbia, Canada. [Contact: K. A. R. Mitchell, Department of Chemistry, University of British Columbia, Vancouver, BC, Canada V6T 1Z1; Tel: 1 (604) 822 5831; Fax: 1 (604) 822 2847].

4-13 August 1999

18th IUCr General Assembly and International Congress of Crystallography. Glasgow, UK. Satellite meetings in connection with the Congress will include: Synchrotron Radiation, Structural and Dynamic Aspects of Molecular and Ionic Solids Using Neutrons, Cambridge Crystallographic Database, and the Crystallographic Computing School. [Contact: Dr. C. J. Gilmore, Department of Chemistry, University of Glasgow, Glasgow G12 8QQ, UK. Tel: 44 (141) 339 8855, Fax: 44 (141) 330 4888; E-mail: iucr99@chem.gla.ac.uk or Prof. J. A. K. Howard, University of Durham, Department of Chemistry, South Road, Durham DH1 3LE, UK. Tel: 44 (191) 374 4647, Fax: 44 (191) 374

y3745; E-mail: j.a.k.howard@durham.ac.uk; Info: http://www.chem.gla.ac.uk/iucr99].

23-28 October 1999

26th Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies. Vancouver, British Columbia, Canada. [Contact: FACSS, 1201 Don Diego Av-

enue, Santa Fe, NM 87505, USA. Tel: 1 (505) 820 1648; Fax: 1 (505) 989 1073; Info: http://facss.org/info.html].

29 November-3 December 1999

Fall Meeting of the Materials Research Society. Boston, Massachusetts, USA. [Contact: Materials Research Society, 506 Keystone Drive, Warrendale, PA 15086, USA. E-mail: info@mrs.org; Info: http://www.mrs.org].

Regional Reports

Over Thirty Years Old Tradition of Round Robin on Quantitative Phase Analysis in the Czech and Slovak Republics. J. Fiala, SKODA Research Ltd., 31600 Plzen, Czech Republic

Recently, an editorial in *Powder Diffraction* announced a Round Robin on Quantitative Phase Analysis (RR-QPA), which is initiated and organized by the IUCr Commission on Powder Diffraction (*Powder Diffraction*, Vol. 12, 1997, pp. 1-2), a landmark in this field representing one of the most important branches of applied crystallography. At this opportunity, we recall the history of round robins on quantitative phase analysis which has been organized in our countries in the past.

In 1965, two (bulk) sample of steel of different composition and thermal treatment (containing some 25% and 50% of austenite) were analyzed in a number of laboratories, and the ratio of the alpha- and gamma-phase was determined using both X-ray diffraction and various non-diffraction methods. Fourteen independent X-ray diffraction measurements were performed in three laboratories, and the ESD of the results (austenite content) was 5% abs. for the sample containing about 25% of austenite, and 2% abs. for the second sample containing some 50% of austenite. The details on experimental design, data collection and analysis are given in a rather thick volume (171 pages) entitled "Quantitative Determination of Alpha- and Gamma-Phase in Steels and Alloys" (in Czech), ed. By J. Homolka, that appeared in Prague (Czechoslovakia) in 1965.

In 1987, three powder mixtures containing calcite, quartz, periclase and tungsten were analyzed in seven (X-ray diffraction) laboratories. Eleven independent results were submitted for each mixture. The overall mean deviation from the true content was 8% abs. (for all phases in all mixtures); the errors of 59% of results did not exceed this level (8% abs.); the maximum error was 27% abs. The report on this round robin "Quantitative Phase analysis Round Robin METEFA 1987" (in Czech), written by Z. Weiss, appeared in the Bulletin of Czechoslovak Crystallographers, Prague, 1988, pp. 21–24.

Last year, 1996, two mixtures of corundum, quartz and calcite were analyzed in a number of Czech and Slovak laboratories which performed 21 independent measurements. The

mean value of the estimated standard deviation (ESD) of results from the corresponding true values was about 3% abs. (through the whole set of results); the maximum error did not exceed 10% abs. The detailed report on this round robin, that was executed in cooperation with the International Centre for Diffraction Data, was written by D. Rafaja and V. Valvoda and appeared as an English written booklet "Round Robin on the Quantitative Phase Analysis," Prague, 1996, (ISBN 80-901748-3-).

This recent round robin organized on a regional basis served as a training of the Czech and Slovak crystallographers which are looking forward to the Ian Madsen's samples and to the results of the first QPA RR organized on such a broad international basis. Will these results alter the statement of Andre Guinier ("Theorie et Technique de la Radiocristallographie," Dunod, Paris 1956) that the uncertainty of the quantitative determination of phase composition by X-ray diffraction is seldom less than several percent absolute?

Report on the ICDD 1997 Technical Meetings held at the 1997 Denver X-ray Conference. Ting C. Huang, ICDD Technical Committee Chairman

The Fall Technical Meetings were convened the week of the 1997 Denver X-ray Conference, 4–8 August, at the Sheraton Steamboat Springs Report, Steamboat Springs, Colorado, USA. One of the advantages of meeting at the Denver Conference was to permit and to encourage participation by other powder diffraction leaders and scientists who attend the Denver Conference, but can't justify spending the travel funds required to also attend our Fall Technical meetings which traditionally meet in October at the ICDD Headquarters at Newtown Square, Pennsylvania.

Nine of fifteen subcommittees of the Technical Committee (namely: Ceramics; Crystallographically derived Patterns; Data Collection/Analysis and Diffraction Problems; Metals and Alloys; Minerals; Organic and Forensic; Target Systems for Technical Committee Activities; and X-ray Fluorescence subcommittees as well as the PDF Editorial Staff) met at Steamboat Springs. The meetings were very exciting and were well received by the attendees. One of the