

SEPTEMBER 1984

No. 10

CRYSTALLOGRAPHY NEWS

BRITISH CRYSTALLOGRAPHIC ASSOCIATION

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I U Cr HAMBURG : 9 - 18 August 1984

The Hamburg meeting was a huge success. Credit must be given to the Organizing Committee chaired by Professor Saalfeld, and to Professor Bonse and his International Programme Committee. Thanks are of course also due to the International Union of Crystallography and to Professor Jerry Karle and the Executive Committee. All their hard work is much appreciated.

1519 participants, and more than a hundred and fifty accompanying persons, attended the meeting. Many stayed at the Hamburg Plaza Hotel which adjoins the Conference Centre. There were thirty exhibitors at the commercial and non-commercial exhibition. A typical morning consisted of a choice of listening to one or other of the two main lectures from 9 to 10 o'clock, and then from 10.30 to 1 p.m. there were five (and on one day, six) parallel sessions or microsymposia. For those with varied interests, choices were sometimes difficult. On each of six afternoons, from 2.30 to 6 p.m., there were over two hundred posters to be seen ! Some of these were works of art. It was a pity there was no specific artistic display and that several posters were missing. The number of presentations, oral and visual, totalled 1398.

The Opening Ceremony on Thursday 9th August included P. Brammer's ingenious slide show of minerals and mountains merging into one another accompanied by music, and Professor Bertaut's talk "Commensurate - Incommensurate"; after which there was a reception. After two and a half days of crystallography, Sunday afternoon was free : the Kunsthalle was full of crystallographers peering at paintings.

Wednesday was also a day off. Six hundred went by a fleet of luxury coaches on the Conference Excursion to the Mediaeval town of Lübeck and were entertained to a recital by Ernst-Erich Stender at the femous organ of St. Mary's Cathedral. A three course lunch was laid on at Travemünde on the Faltic Sea, after which some participants bought the traditional Lübeck marzipan. Some crystallographers, in their quest for all three dimensions, took the view from the top of the thirty-three floors of the Maritim Hotel, and a few even explored parts which other beers never reach. The day out was a welcome break from four and a half solid days of trying to absorb so much information, and with another two and a half still to go.

On the second Thursday evening (16th.) we were again entertained to wine and cheese, this time in the Jeological Institute and Museum. Much fine white wine flowed and there was no shortage of cheese. After feeding the multitude, twelve baskets of bread rolls were taken up.

After such a memorable meeting, people are now talking about Perth 1987 and Bordeaux 1990.

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THE INSTITUTE OF PHYSICS Solid State Physics Sub-Committee - Annual Conference 1984

BIOLOGICAL STRUCTURES GROUP OF THE BCA

Autumn Meeting 1984 - Announcement

This meeting will be held on Monday 12th November, 10.30 am - 5.15 pm, at Birkbeck College, London and will be entitled

POSITION SENSITIVE ELECTRONIC DETECTORS

The last few years have seen an upsurge in the developement and usage of position sensitive electronic detectors for the study of biological macromolecules in solution or in crystals as well as for studies in other areas including Materials Science. This one day meeting will draw together experiences with a variety of existing detector systems and the associated software and should be of interest to anyone involved in diffraction measurements.

The day's talks will be split into three areas covering hardware (TV and MWPC), software and user experiences. Speakers have been invited from Europe, Japan and the USA and a commercial exhibition is being arranged. Facilities for displaying posters will be available. Refreshment, (cold buffet), is included in the registration fee.

A registration form is enclosed with this newsletter. Please return this form to:

Dr. P.F.Lindley. Department of Crystallography, Birkbeck College, Malet St., London WC1E 7HX. the Boldrewood Conference Centre, Southampton University from 19th - 21st December 1984. The conference will be run on the lines of the highly successful 1983 meeting in Oxford and will include the following symposia:

The 1984 Solid State Physics Conference will take place at

Symposium

Electronic Structure and Materials Science

Electron-Phonon Interactions

Statistical Mechanics

Amorphous Metals

Neutron Scattering and Magnetism

Liquids

Optical Excitations in Semiconductors

General

Organiser

Dr. P. Strange H.H. Wills Physics Laboratory Royal Fort, Tyndall Avenue Bristol BS8 ITL

Professor L.J. Challis Department of Physics University of Nottingham University Park Nottingham NG7 2RD

Dr. D. Sherrington Department of Physics Imperial College Queen's Gate London SW7 2AZ

Professor E.W. Lee Department of Physics The University Southampton SO9 5NH

Dr. B.D. Rainford Department of Physics The University Southampton SO9 5NH

Dr. D.J. Tildesley Department of Chemistry The University Southampton SO9 5NH

Dr. B. Cavenett Hull University Hull HU6 7RX

Dr. J. Chalker Department of Physics The University Southampton SO9 5NH

PROPOSED IEE/IOP MEETING ON IMAGE PROCESSING

Following an initiative from the IOP/BCA Physical Crystallography Group the IEE is organising a meeting on Image Processing in collaboration with the Optical Group of the Institute of Physics. The meeting will be in January 1985. Further information may be obtained from

Dr Parry

Department of Electronics & Electrical Engineering University College Torrington Place London WC1E 7JE

IOP/BCA PHYSICAL CRYSTALLOGRAPHY GROUP COMMITTEE 1/10/1984 - 30/9/1985

| Chairman | Dr B.T.M. Willis | AERE Harwell |
|-------------------------------|-----------------------|---|
| Vice Chairman | Dr R.W.H. Small | University of Lancaster |
| Hon. Secretary & Treasurer | Dr J.C. Halfpenny | Dept. of Applied Chemical Sciences Napier College, Colinton Road Edinburgh EH10 5DT |
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| | Dr P.F. Fewster | Philips Research Laboratories |
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| | Mrs M.A.G. Halliwell | British Telecom Research Labs. |
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| | Dr M.T. Hutchings | AERE Harwell |
| | Prof. A.J. Leadbetter | SERC Rutherford Appleton Lab. |
| | Mr P.B. McAllister | BICC |
| | Dr A.M. Moore | Royal Holloway College |

CHEMICAL CRYSTALLOGRAPHY GROUP

Following the 1984 AGM at Nottingham, the Group Committee comprises the following:

| nairman | Dr M B Hursthouse (Queen Mary College, London) |
|--------------------|--|
| eputy Chairman | Dr O Kennard (Cambridge) |
| ecretary/Treasurer | Dr B Beagley (UMIST) |
| embers | Dr M J Begley (Nottingham) |
| | Dr C J Gilmore (Glasgow) |
| | Dr A G Orpen (Bristol) |
| | Dr D R Russell (Leicester) |
| | Dr A J Smith (Sheffield) |
| ecretary of PCG | Dr J C Halfpenny (Napier College. Edinburgh) |
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<u>Programme</u>. The Group is participating in the 1985 BCA Spring Meeting at Bristol. where the chemical session will be on the publication of crystallographic results, both in journals and in data bases. The session is being organised by Dr A G Orpen (Department of Chemistry, University of Bristol, Cantock's Close, Bristol, BS8 1TS) to whom all relevant correspondence should be addressed.

In the autumn of 1985. it is hoped to hold a one-day meeting in London. highlighting an important area of Chemical Crystallography.

I am always happy to receive comments from members on possible topics for further meetings, or indeed any other matters concerning the Group.

Brian Beagley Department of Chemistry, UMIST, PO Box 88, Manchester, M60 1QD

BRITISH CRYSTALLOGRAPHIC ASSOCIATION - ANNUAL MEETING 1985

SCHOOL OF CHEMISTRY, CANTOCKS CLOSE, BRISTOL BS8 1TS, MARCH 25th-27th 1985

Scientific Program: The Programs for each of the four groups are summarised below and the appropriate committee member's address given therein.

<u>Plenary Lecture</u>: Professor Dorothy Hodgkin O.M., F.R.S., Chancellor of Bristol University will deliver the Plenary Lecture on Tuesday, March 26th at 5.30, after the main A.G.M. of the B.C.A.

<u>Call for papers</u>: Contributed papers are invited by each group, to represent <u>ALL</u> aspects of crystallography as well as those papers specifically continuing the theme of the main speakers.

Titles are requested by DECEMBER 14th 1984, and full abstracts should be sent to the appropriate committee member by JANUARY 14th 1985. These will be published in the Conference Handbook. There will be plenty of space for posters, and these can remain on display throughout the Conference in the common coffee/ commercial exhibit areas. Poster boards will be in position at lunchtime on Monday, March 25th for those participants who have their oral session that afternoon.

<u>Commercial Exhibition</u>: This will be held, throughout the meeting, in the Foyer of the School of Chemistry, common to the oral and poster sessions as well as the coffee/tea area. Exhibitors wishing to hire space for display of their products should contact:- JOHN HARDING, BRITISH RAII RESEARCH, DERBY. Telephone 0332 - 42442 Exn. 3727,

Accommodation:

Exhibitors wishing to hire space for display of their products should contact:- JOHN HARDING, BRITISH RAIL RESEARCH, DERBY. Telephone 0332 - 42442 Exn. 3727, as soon as possible, with their anticipated requirements.

Delegates will be housed in Goldney Hall, Clifton in single rooms with hand-washing facilities. Six rooms share communal bathroom, kitchen and lounge areas. Continental breakfast is provided in each common area in the mornings. As there are no lifts, please indicate at the time of registration whether you will require ground floor accommodation and also if you would prefer to share a suite of rooms with other non-smokers. Participants who prefer to make their own arrangements should ask the conference organisers for the hotel list. There are several small hotels and guest houses within walking distance of chemistry. Lunches:

A limited number of <u>buffet lunches</u> will be available daily in the <u>Chemistry</u> Department. Tickets will be issued only to those participants who have prepaid on registration. There are also restaurants and pubs in the immediate vicinity. Lists of these and maps will be available. Lunch will be available from 12.15 p.m. on Monday, March 25th.

- 2 -

Social Activites:

Transport:

Monday, March 26th: There will be a welcoming reception supported by the University with the Chancellor, Professor Dorothy Hodgkin, O.M., F.R.S. present. This will be followed by a recital in the University Great Hall (adjacent) given by the celebrated organ recitalist Jennifer Bate. Dinner will follow immediately afterwards in Goldney Hall.

Tuesday, March 26th: The Conference Dinner (with wines) will be held in the Orangery at Goldney Hall following the Plenary lecture. The Bar will be open.

Bristol is at the centre of several major road networks, easily reached by the M4, M32 and M5 motorways.

There are two British Rail Stations which serve the City, but be warned, Parkway station is out of town some 5 miles and requires a bus ride, an expensive taxi fare or a friend to enable you to reach Chemistry. Temple Meads is the City Centre Railway Station, a short bus ride or reasonable taxi fare from the Hall and Chemistry.

National Coaches run an hourly (inexpensive) service to Bristol from London and regular services from many other major cities. The Coach Station is only 10 minutes from the Chemistry Department (but note it is uphill slightly if you are carrying luggage).

Car parking Facilities:

Parking is rather limited at Goldney Hall itself, but there is local parking in Clifton, close to the Hall for those delegates who arrive by car. We would discourage you from driving to Chemistry as the parking there is virtually non-existant. There is an NCP half-way between, and we hope to run a mini-bus at strategic times for participants with a disability.

This information will be summarised again in the next B.C.A. newsletter (November) when the <u>REGISTRATION FORMS</u> will be available. Any further information can be obtained from the appropriate group program organiser or the local organiser at Bristol; Dr. Judith Howard (0272 - 24161 Exn. 424)

Block Plan for B.A.C. 25th-27th March, 1985.

| Monday 25th Tuesday 26th Wednes | day 27th |
|-------------------------------------|---|
| | |
| FREE Industrial Group Biolog | ical Group |
| Oral Session Oral S | ession |
| SUINAU A.G.M. | (B.S.G.) |
| LUNCH | POSTER |
| Physical A.G.MIndustrial Gp. Chemic | al Crystallography |
| Group Oral A.G.MChemical Gp. Oral S | ession |
| Session | THROU |
| A.G.M. (P.G.) A.G.M for B.C.A. | GHOU |
| NOON | T I |
| Plenary lecture Closin | al Crystallography ession g remarks |
| *(Schools lecture | NG |
| in parallel in | |
| Physics Department) | And the second second |
| SOCIAL EVENTS | |
| Reception CONFERENCE | |
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| Dinner | No constantino della |

THE INSTITUTE OF PHYSICS

ASSOCIATION



Physical Crystallography Group

CRYSTALLOGRAPHIC

Hon Secretary: Dr J. C. Halfpenny

BRITISH

Department of Chemistry Napier College Colinton Road Edinburgh EH10 5DT

Call for Contributions for the

Physical Crystallography Group Session on Monday 25 March to be held during the BCA Meeting, University of Bristol, 25-27 March 1985. Contributions in the form of Poster Displays are required on all aspects of Physical Crystallography. In addition, short verbal contributions (15 mins) are requested on the subject of Thermal Vibrations.

The invited speakers for the afternoon session will include: Professor D. W. J. Cruickshank UMIST, Manchester "Introduction and Review"

Dr M. S. Lehman ILL, Grenoble "Experimental determination of Thermal Diffuse Scattering"

Dr G. S. Pawley University of Edinburgh "Computer Simulation of Molecular Motion in Solids"

Dr B. T. M. Willis Harwell
"Correction of Bragg Intensities for Thermal Diffuse Scattering"

Dr A. H. Windle University of Cambridge "Thermal Vibrations in Polymers"

Provisional titles for both verbal and poster contributions are required by 30 November 1984 and abstracts by 31 December 1984. These should be sent to:

> P. B. McAllister BICC Research & Engineering Ltd 38 Wood Lane London W12 7DX



BRITISH CRYSTALLOGRAPHIC ASSOCIATION INDUSTRIAL GROUP

Secretary/ Treasurer: Dr. J. 1. Langford, Department of Physics, University of Birmingham, Birmingham B15 2TT, Tel. (021-) 472 1301 ext. 3498/3471

Call for Contributions

for the

Industrial Symposium: 26th March 1985

to be held during the BCA Meeting, Bristol University, 25th-27th March 1985

Contributions are requested on all aspects of <u>Industrial/Applied</u> Crystallography for:

- (a) verbal presentation (20 mins) in the morning session and/or
- (b) in a form suitable for poster display. ALL ATTENDEES ARE URGED TO PARTICIPATE ACTIVELY BY SUBMITTING A POSTER.

The invited speakers in the morning session will be

Professor G J Davies: University of Sheffield

"Methods and Applications of Quantitative Texture Analysis Based on the Use of the Crystallite Orientation Distribution Function".

Dr J Steed: University of Bristol

"Application of Convergent Beam Electron Diffraction to the Identification of Phases in Alloys and Semiconductors"

Mr D Wood: BP Research Centre, Sunbury-on-Thames

"Quantitative Analysis of North Sea Well Core Samples"

Provisional titles for both verbal and poster contributions are required by 1st November 1984 and abstracts by 1st December 1984. These should be sent to:

Mr B A Bellamy Materials Development Division Building 393 AERE Harwell Didcot Oxon OX11 ORA

Tel: 0235 24141 ext 4524

British Crystallographic Association

Biological Structure Group

Electron Microscopy and Diffraction of Biological Molecules

Wednesday, March 27th, 1985

9.00 J. Seymour

Image Processing Methods and their application to electron micrographs of biological macromolecules.

9.45 E.D.T. Atkins

Naturally occurring fibrous composites : Chitin-protein complexes in insect cuticle.

10.30 Coffee

11.00 Contributed Papers.

Contributions for presentation either orally or as posters are invited.

12.45 A.G.M. of Biological Structure Group.

Abstracts should be sent to Dr. H. Muirhead, Dept. of Biochemistry, University of Bristol, Bristol, BS8 1TD.



THE ROYAL SOCIETY OF CHEMISTRY

BRITISH CRYSTALLOGRAPHIC ASSOCIATION CHEMICAL CRYSTALLOGRAPHY GROUP

Call for Contributions

for the

Chemical Crystallography Group session to be held on Wednesday 27th March as part of the 1985 BCA meeting in Bristol. Contributions on all aspects of Chemical Crystallography are requested for presentation as posters.

The theme of the session will be the utilisation of crystallographic results in chemistry and their publication and presentation in the chemical literature. As in the past, the format of the session allows for a panel-led discussion period to follow three invited lectures.

The invited speakers for the afternoon session are:

Dr. F.H. Allen

University of Cambridge.

"Crystallographic Data Bases: What's in them for You."

Dr. P. Murray-Rust GLAXO Group Research. "Chemical Applications of Crystallographic Data Files"

Dr. M.B. Hursthouse

Queen Mary College.

"Publication of Crystallographic Results"

Provisional titles for poster contributions are requested by 1st December 1984 and full abstracts by 1st January 1985. These should be sent to:

> Dr. A.G. Orpen School of Chemistry The University BRISTOL BS8 1TS

International Tables for Crystallography

Volume A: Space-Group Symmetry edited by TH. HAHN, Institut für Kristallographie, RWTH, Aachen, Federal Republic of Germany

1983, xvl + 854 pp. Cloth Dfl. 385 - / US \$165.00 / £80.00 ISBN 90-277-1445-2

The Commission on International Tables of the International Union of Crystallography has, since 1973, been preparing the material for a totally revised and extended edition of the tables of symmetry groups. The results of these years of collaborative effort have led to the production of completely new tables on the 17 plane groups and 2.30 space groups, comprising about 630 printed pages. This work is complemented by a comprehensive introduction in which symmetry is discussed and the theory and use of the tables is described in detail.

Still Available

International Tables for X-Ray Crystallography

Volume II: Mathematical Tables

xx + 444 pp. Cloth Dfl. 130.- / US \$56.50 / £27.00 Order ref. no. 90-277-9074-1

Tables of functions, formulae and geometrical diagrams for use during the many stages of a crystal-structure determination.

Volume III: Physical and Chemical Tables

xvi + 362 pp. Cloth Dfl. 155 .- US \$67.50 / £32.00 ISBN 90-277-1532-7

Tables of X-ray wavelengths, atomic scattering factors, absorptions, interatomic distances and other quantities required in the structural and textural examination of crystal specimens.

Volume IV: Revised and Supplementary Tables for Volumes II and III

xll + 366 pp. Cloth Dfl. 155.- / US \$67.50 / £32.00 Order ref. no. 90-277-9075-2

Revised values for atomic scattering factors. X-ray wavelengths and atomic absorption coefficients. Also material on diffractometer calculations, analysis of thermal motion in crystals, and some aspects of direct methods for phase determination. A cumulative index for all four volumes is included.

Published for the INTERNATIONAL UNION OF CRYSTALLOGRAPHY by D. REIDEL PUBLISHING COMPANY, PO Box 17, 3300 AA Dordrecht, The Netherlands

Individuals are entitled to purchase these volumes at reduced prices: DR. 215.-/US \$90.00 / £45.00 for Volume A; DR. 77.-/US \$3.50 / £16.00 for volume II: DR. 105.-/US \$45.50 / £22.00 for volumes III and IV. They should declare that the volume(s) is (are) for their personal use only and will not be put at the disposal of any library. All individual orders must be prepaid.

Copies may be ordered directly from the publishers, from Polycrystal Book Service, PO Box 27, Western Springs, Ill, 60558, U.S.A., or from any bookseller.

CRYSTALLOGRAPHY IN NORTH AMERICA

Edited by D. McLachlan and J. P. Glusker, with contributions by 91 authors

Published by the American Crystallographic Association

1983, x + 479 pp., 22 plates and numerous line drawings, large format: $84 \times 11^{"}$, price \$50.00 post paid in USA, \$53.00 elsewhere

Audience: Older crystallographers (for nostalgia), younger crystallographers (for information), all who are interested in the history of science (for source materials), science libraries and libraries in the history of science.

Contents: Introduction

Accounts of some Crystallographic Laboratories In Memory of some Past-Presidents Organizations of Crystallographers Apparatus and Methods Internal Properties of Matter Applications of Various Sciences Indices (63 pages)

Scope: The history of crystallography in North America is explored by numerous authors (among them Buerger, Ewald, Lipscomb, Pauling and Wyckoff) in articles on different aspects of the science. Some contributions deal with individual crystallographers, some with laboratories, while others explore crystallographic concepts, the equipment used in crystallographic studies, or deal with applications to various related sciences. The volume clearly documents a North American approach to X-ray crystallography that was different from that in Europe. Apart from anthologies, this is the first systematic collection of source materials on the history of crystallography since the publication of *Fifty Years of X-ray Diffraction* by P. P. Ewald in 1962.

Available only from:

Polycrystal Book Service P.O. Box 27 Western Springs, IL 60558 USA Telephone (312) 246-3818

A copy is available for inspection in the Book Exhibition

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UNIVERSITY OF BRISTOL

H.H. WILLS PHYSICS LABORATORY

POST-DOCTORAL RESEARCH ASSISTANT

to work on

SYNCHROTRON X-RAY DIFFRACTION STUDIES OF CRYSTAL IMPERFECTIONS

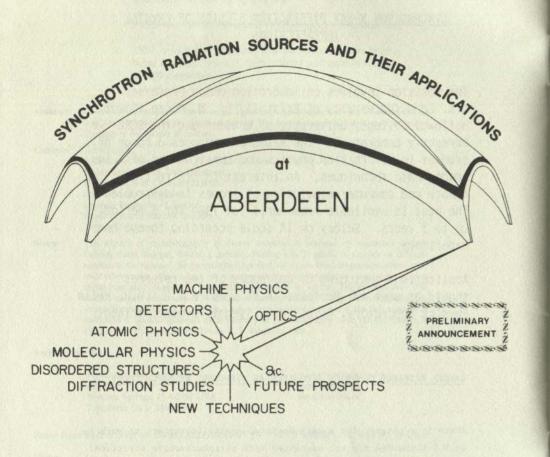
The position involves collaboration among Professor A.R. Lang (University of Bristol), Dr. M. Moore (Royal Holloway College, University of London) and the SERC Daresbury Laboratory. The research embraces a range of studies in diffraction physics and applications of X-ray topographic techniques. An interest in diffraction theory and computer simulation of images is desirable. The post is available from April 1st 1984 for a period up to 3 years. Salary on 1A scale according to age and experience.

Applications including CV and names of two referees should be sent to: Professor A.R. Lang, F.R.S., H.H. Wills Physics Laboratory, Royal Fort, Tyndall Avenue, Bristol, BS8 1TL.

CANCER RESEARCH CAMPAIGN BIOMOLECULAR STRUCTURE RESEARCH GROUP

There is a vacancy for a post-doctoral crystallographer, to work on an M.R.C.-funded project concerned with oligonucleotide structure; there will also be opportunities for protein crystallography. The post, from 1st October, will run until May 1986 in the first instance. Starting salary up to £9426 + £1186 L.A., depending upon age and experience. The laboratory is well-equipped - diffractometer, graphics, VAX. Apply as soon as possible to Dr. S. Neidle, CRC Group, Department of Biophysics, King's College London, 26-29 Drury Lane, London, WC2B 5RL.

Scottish Summer School in Physics 1985



With Practical Work at Daresbury S.R.S.

Application forms available November 1984 from

Dates :

Professor G. V. Marr Department of Natural Philosophy Aberdeen University Aberdeen AB9 2UE Scotland. Aberdeen University 14-28th September

Daresbury S.R.S. 28th September - Ist October

FORTHCOMING MEETINGS AND COURSES

| November 8 | Mineralogical Society General Meeting |
|------------|--|
| | at the Geological Society, Burlington House, |
| | London 31 : details from The Min. Soc., |
| | 41 Gueen's Gate, London SW7 5HR. |

- November 9 E C A Industrial Group Harrogate Dr E Metcalfe, C E R Lab., Kelvin Avenue, Leatherhead, Surrey, GUI 1UX. SEE PREVIOUS ISSUE.
- Novr 12 F C A Biological Structures Group : Position Sensitive Detectors Birkbeck College, London Dr P F Lindley, Dept of Crystallography, Birkbeck College, Malet Street, London WC1E 7HX. SER THIS ISSUE
- Novr 14-15 50 years of the Patterson Function Inst. for Cancer Research, Philadelphia Kathryn Gennett, Office of Public Affairs, The Institute for Cancer Research, The Fox Chase Cancer Centre, Philadelphia, PA 19111, U S 4.
- Novr 28 I O P Physical Crystallography Group + Thin Films and Surfaces Group Imperial College, London Mary Helliwell, British Telecom Research Laboratory, Martlesham Heath, Ipswich IP5 7RE. SEE PREVIOUS ISSUE
- Decr 17-22 Internat. Sympos. on Biomolecular Structure & Interactions Eangalore, India Molecular Biophysics Unit, Indian Institute of Ecience, Bangalore 560012, India.
- Decr 19-21 Annual Solid State Physics Conference University of Southampton Dr J Yeomens, Dept of Theoretical Physics, 1 Keble Road, Oxford. SIZE THIS ISSUE. 1985 Jany 7-11 A S U Centennial Conf. on High Resolution Electron
 - Microscopy Scottsdale, Arizona Dr P K Buseck, Center for Solid State Sciences, Arizona State University, Tempe, AZ 85287 U S A.
- January 10 Mineralogical Society Anniverary Meeting At the Geological Society, Burlington House, London Min. Soc., 41 Queen's Gate, London SW7 5HR.

1985

- Feby 11-14 Characterization & Analysis of Polymers Melbourne, Australia Dr J H O'Donnell, Polymer & Radiation Group, Dept of Chemistry, Univ. of Queensland, Brisbane 4067, Australia.
- March 25-27 B C A Spring Meeting Bristol Dr Judith Howard, Dept of Inorganic Chemistry, Univ. of Bristol, Cantock's Close, Bristol ES8 1TS. SEE THIS ISSUE
- March 25-28 Microscopy of Semiconductors Oxford Hoyal Microscopical Society
- April 1-4 European Union of Geosciences Strasbourg Min. Soc., 41 Queen's Gate, London SW7 5HR.
- April 9-13 VIII International Conf. on Solid Compounds of Transition Elements Vienna Gesellschaft Österreichischer Chemiker VIII S C T E, Eschenbachgasse 9, 1010 Wien, Austria.
- May 24 Static & Dynamic Implications of Precise Structural June 6 Information (Course) Erice, Sicily Dr P Murray-Rust, Glaxo Group Research Ltd., Greenford, Middx. UB6 OHE. SEE PREVIOUS ISSUE.
- July 23-25 Physical Interactions & Energy Exchange at the Gas-Solid Interface Hamilton, Ontario Prof. J A Morrison, Institute for Materials Research, M^CMaster University, Hamilton, Ontario, Canada,L8S 4M1.
- July 28 Sagamore VIII on Cherge, Spin & Momentum Densities August 3 Sanga-Saby, Sweden Prof. Ivar Olovsson, Dept of Chemistry, Univ. of Uppsala, Box 531, S-75121, Uppsala, Sweden.
- Aug.18-23 30th. International Symposium on Macromolecules The Hague Dr J A M Smit, Gorlaeus Labs., Univ. of Leiden, Dept of Chemistry, POBox 9502, NL-2300 RA Leiden, Netherlands.
- Sept.2-6 9th European Crystallographic Meeting (ECM-9) Turin Prof. G Ferraris, Istituto di Mineralogia, Cristallografia e Geochimica, Universita di Torino, Via San Massimo 22, 10123 Torino, Italy. SEE LEAFLET IN PREVIOUS ISSUE

| Sept.19-21 6th. Meeting of the Geological Societies of the British Isles Birmingham Prof P A Garrett, Dept of Geological Sciences, The University, Birmingham, B15 2TT. |
|--|
| November 7 Mineralogical Society General Meeting Burlington House, London W1 Min.Soc., 41 Queen's Sate, London SW7 5HR |
| Decr 18-20 Annual Solid State Physics Conference Reading Dr J A Blackman, Dept of Physics, Univ. of Reading, Whiteknights, Reading, Berks., R36 2AF |
| 1986 June 10-19 Synchrotron Radiation for X-ray Crystallography Erice, Sicily Prof L Riva di Sanseverino, International School of Crystallography, Piazza Porta San Donato 1, 40127 Bologna, Italy |
| 1986 July 13-18 14th General Meeting of the International Mineralogical Association Stanford University, California IMA 1986, P O Box 183, Stony Brook, New York 11790 USA |
| 1986 July 14-18 International Conference on Crystal Growth ICCG-8 : York F W Ainger, Allen Clark Research Centre, Plessey Research (Caswell) Ltd., Towcester, Northants NN12 8E |
| 1986 Sept. 8-11 16th European Bolid State Device Research Conference (ESSDERC 86) : Cembridge The Meetings Officer, The Institute of Physics, 47 Belgrave Square, London SWIX 80X |
| 1986 Dec.17-19 Annual Solid State Physics Conference Imperial College London The Meetings Officer, I o P, 47 Belgrave Square, London SWIX 84X |
| 1987 August 12-20 14th General Assembly & International Congress |

- of Crystallography : Ferth % A Dr E N Maslen, Crystallography Centre, Univ. of Western Australia, Nedlands 6009, Western Australia.
- 1987 Aug 27 Sept 6 Crystal Growth in Science & Technology Erice, Sicily Prof Lodovico Riva di Sanseverino, International School of Crystallography, Piazza Porta San Donato 1, 40127 Bologna, Italy

1988 May 30 - June 7 : Crystallography of Molecular Biology Erice, Sicily Prof L Riva di Sanseverino

1989 September 16-26 : X-ray Crystallography & Drug Action Erice, Sicily Prof L Riva di Sanseverino, International School of Crystallography, Piazza Porte San Donato 1, 40127 Bologna, Italy

1990 : 15th General Assembly & International Congress of Crystallography : Bordeaux

Dr W A WOOSTER

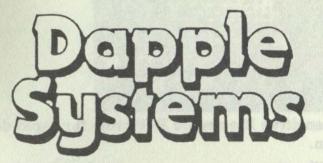
It is reported with regret that Dr Wooster of Cambridge died in April. He will be remembered for his many contributions to science, including books on experimental crystal physics, diffuse X-ray scattering and, with Henry and Lipson, on the interpretation of X-ray diffraction photographs: as well as by the excellent models and apparatus built by Crystal Structures Ltd which are used by crystallographers worldwide.

CRYSTALLOGRAPHY NEWS

Camera-ready copy on A4 paper is welcome at any time. For inclusion in the December issue please send items by NOVEMBER 15 to the Editor : Dr Moreton Moore, Department of Physics, Royal Holloway College, Egham, Surrey TW20 OEX. Telephone Egham 0784- (or from London 87-) 35351 extension 36. Telex 935504. (This September issue is Number 10 : the June issue was erroneously numbered 8.)

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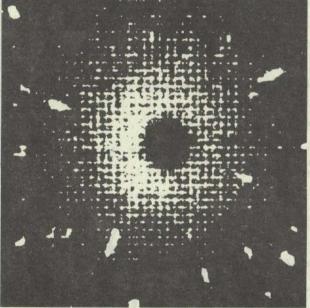
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