Contents: 
Office Bearers 
Crystal 14 Summary 
News from the 1983 ACM 
Treasurer's Report 
New Members 
Personalia 
Forthcoming Meetings 
IUCr 13th Congress and General Assembly 
Previous Meetings of the SCA 
Report on the AXAA'83 Meeting 
Obituary of Prof. D. McLachlan Jr. 
Book Reviews: W.H. Bragg 
Crystallography in North America 
Journal of Molecular Graphics 
Inorganic Crystal Structure Data Bank 
BIDICS 1981 
CSIRO's CDC 205 
The Vanishing Leprechaun 
The Argonne Anti-jet-lag Diet 
Corrigenda 
Booklist
(i) - Organization of the 1987 I.U.Cr Congress and General Assembly.
Dr E.N. Maslen reported that the Australian Government has given written assurances that entry visas will be granted to all bona fide foreign scientists intending to visit Australia for the 1987 Congress. These assurances are in accordance with the I.C.S.U. rules, and now allow the organization of the meeting to proceed at full strength. Dr Maslen stressed that Australians attending the 1984 Congress in Hamburg should make every effort to 'sell' the Perth meeting.

(ii) - The National Committee for Crystallography has invited the SCA to proceed with negotiations relating to the formation of a South East Asian Regional Group. This group will be composed of countries in the region bounded by China, Japan, India, Australia and New Zealand. It may not include the United States. The SCA will now send letters to the National Crystallography Societies in the major countries of the region inviting them to participate in the proposed Group.

(iii) - Since no further nominations for Officers of the Society were received additional to the list presented by the Nominations Committee in the last Newsletter, an election was not required, and the candidates proposed are confirmed in office. The updated list of officebearers appears on the inside of the front cover of this Newsletter.
I am sure that the Secretary speaks for the entire SCA membership in congratulating Bryan Gatehouse, our retiring President, on his outstanding job at the helm during the last 18 months. Much of the business of the Society, of course, takes place quietly behind the scenes, and Bryan has discharged these duties with the efficiency and wisdom of a seasoned campaigner. It was certainly a pleasure to work with him.

(iv) - Amendments to the SCA Constitution which are required in order to receive tax-exempt status as an Incorporated Society were approved during the meeting. However, in accordance with Article VI, Section 1 of the SCA Constitution, an amendment is not ratified until an affirmative vote of at least two thirds is received in a postal vote by the whole membership. The proposed amendments are detailed on an accompanying loose sheet forwarded with this Newsletter. Please indicate your approval, or otherwise, of the amendments in the appropriate space on that sheet and mail it either to the Secretary, or to the Treasurer, along with your 1984 membership dues.

(v) - Venue for Crystal XV.
As usually experienced by Chairman of the AGM, Bryan Gatehouse had the very difficult task of choosing between the large number of volunteers clambering to organize the next Crystal meeting. One offer, however, stood out from the rest, and was received with acclamation when announced. Crystal XV will, therefore, be held in Adelaide in May 1985, and will be coordinated by Dr M.R. Taylor. Thanks a million Max!!

TREASURER'S REPORT

The following statement of the Society's finances were presented to the AGM in Morpeth, and accepted by that meeting.
Statement of Income and Expenditure
for the year ended 30th June, 1983.

INCOME

Membership Subs. 1158.55
Interest on FCN debentures 1.4.82 to 30.6.83 478.15
Interest on IBD (Westpac) 472.50
Sales World Directory 10.00
Savings Bank Interest (Westpac) 28.73
La Trobe Credit Union Interest 12.61 2161.64

LESS EXPENDITURE

Bank Charges 2.40 2.40
Surplus for year transferred to Accumulated Funds 2159.24 2161.64

Balance sheet as at 30th June, 1983.

ACCUMULATED FUNDS

Balance as at 30.6.82 6870.22
Add surplus for this year 2159.24 9029.46

THESE FUNDS ARE REPRESENTED BY CURRENT ASSETS

Finance Corp. of Aust. Ltd debentures (maturing 24.11.83) 3000.00
Westpac Interest Bearing deposit (maturing 5.4.84) 3500.00
La Trobe University Credit Union 1512.81
Westpac Savings Account 766.65
Prepaid expenses for Xstral XIV 250.00 9029.46

LIABILITIES

-$9029.46

Audited by David Goodridge
Manager
Westpac Banking Corp.
La Trobe University

(Signed)  M.F. Mackay
Hon. Treasurer

13.7.83
NEW MEMBERS

A warm welcome from the Executive of the SCA is extended to the following new members of the Society:-

Full:  - Dr J. Drennon (CSIRO Advanced Materials, VIC.)
       Ms S.A. Miller (CSIRO Energy Chemistry, NSW.)
       Dr A. Pring (RSC, ANU)
       Dr P.K. Smith (RSC, ANU)

Student: - Mr A.T. Baker (Chemistry, University of New South Wales)
           Mr W.B. Church (Inorganic Chemistry, University of Sydney)
           Mr C.A. Collyes (Inorganic Chemistry, University of Sydney)
           Mr C. Dean (P. and I. Chemistry, University of Adelaide)
           Miss J. Delaney (Inorganic Chemistry, University of Sydney)
           Mr T.B. Williams (RSC, ANU)

PERSONALIA

Dr A.F. Reid, Chief of the CSIRO Division of Mineral Engineering, has recently been elected to Fellowship of the Royal Australian Chemical Institute.

Dr M.F. MacKay has been appointed Reader in the Dept. of Physical Chemistry at LaTrobe University. After obtaining her double major in Chemistry from the University of Sydney, Maureen worked at New England University College, and then as a research assistant in the Chemical Crystallography Laboratory at Oxford University. It was during her years there, working under the direction of Nobel Prize winner, Prof. Dorothy Crowfoot-Hodgkin, FRS, that she developed her interest in crystallography. Returning to Australia, she completed a Ph.D thesis at the University of Melbourne, supervised by Dr A. McL. Mathieson of the CSIRO Division of Chemical Physics, and joined the faculty at LaTrobe in 1971.

Dr M.A. Spackman has made a welcome return to Australia after spending several years as a postdoctoral research associate with Prof. R.F. Stewart at Carnegie Mellon University in Maryland. Mark has joined Dr E.N Maslen's very active group at the Crystallography Centre at the University of Western Australia.

Dr J.B. Parise has also returned to Australia after several years in the United States working with Profs C.T. Prewitt (Stony Brook) and R.D. Shannon (Du Pont). He is now working with Prof B.G. Hyde at the RSC in Canberra.

FORTHCOMING MEETINGS

• Nov. 25 and 25, 1983: RACI Solid State Division Two-day Symposium, Victorian College of Pharmacy, 381 Royal Parade, Parkville, Victoria. Contact: Mr H. Jaeger, CSIRO Division of Materials Science, University of Melbourne, 3052, Parkville.
• Jan. 22-26, 1984: 12th Conference of the RACI COMO Division, University of Tasmania, Hobart. Contact: Dr P.W. Smith, Chemistry Dept., University of Tasmania, Box 252C, G.P.O., Hobart 7001.
• May 6-20, 1984: International School on Direct Methods of Solving Crystal Structures, Erice, Italy. Contact: Prof. L. Riva di Sanseverino, Instituto di Mineralogia, Piazza di Porta San Donato 1, 40127 Bologna, Italy.
This meeting, sponsored by the Deutsche Forschungsgemeinschaft (DFG) and Freie und Hansestädte Hamburg, will be held 9-18 August 1984 at the Congress Centrum Hamburg, Hamburg, Federal Republic of Germany.

You are cordially invited by the Arbeitsgemeinschaft Kristallographie (AGK) of the Federal Republic of Germany to attend the XIIth Congress and General Assembly of the International Union of Crystallography to be held in Hamburg at the Congress Centrum Hamburg (CCH). Registration will begin on Wednesday, 8 August 1984. The sessions will continue until 18 August.

Programme

The scientific programme will include invited general lectures, invited oral papers and open Commission meetings. Most contributed papers will be presented in poster sessions. Commercial and non-commercial apparatus will be exhibited and crystallographic data file demonstrations are planned.

Subjects

The congress will cover recent advances in all aspects of crystallography. It is anticipated that the following areas will be represented:

1. General Topics
   - Atomic and molecular mechanisms of physical, chemical or biological properties
   - Applied crystallography
   - Computer statistics
   - Crystallography
   - Crystal physics
   - Crystal growth and morphology
   - Diffraction theory
   - Dendrhythmicity
   - Education and data retrieval
   - Electron density studies
   - Electron diffraction and microscopy
   - EXAFS and near-edge spectroscopy
   - Instrumentation and apparatus
   - Lattice dynamics
   - Materials research
   - Methods of structure determination
   - Neutron diffraction
   - Phase transitions
   - Powder diffraction
   - Resonance studies
   - Real and ideal crystals
   - Scanning and scattering
   - Synchrotron radiation and applications
   - Symmetry and related topics
   - Techniques

2. Structural Studies
   - Biological materials (proteins, viruses, membranes, drugs, etc.)
   - Coordination compounds
   - Clathrates and amorphous materials
   - Inorganic and intermetallic compounds
   - Liquid crystals
   - Magnetic structures
   - Minerals
   - Organic compounds
   - Organic-metallic compounds
   - Polymeric materials
   - Surfaces, interfaces and films


Committee

Organizing: Professor H. Saalfrank, Hamburg (Chairman) with the assistance of the Gesellschaft Deutscher Chemiker

Programme: Professor U. Bonse, Dortmund (Chairman)

Accommodation

Reservation will be arranged by a special travel agency. A limited number of student dormitories and camping facilities may be available. Detailed information will be given in the second circular.

Further Information

A second circular with a call for papers, a more detailed programme, and general arrangements and registration forms will be distributed in the autumn of 1983. Those wishing to receive the second circular should write to:

Gesellschaft Deutscher Chemiker
Abteilung Tagungen Postfach 90 04 90
D-6000 Frankfurt/Main 90 F.R.G.

Associated Meetings


PREVIOUS MEETINGS OF THE SOCIETY

During the Morpeth Crystal XIV meeting, and just prior to the AGM, a small group of the 'Elder Statesmen' of the SCA attempted to find out which capital city in Australia had not hosted a Crystal meeting for some time. As it turned out, it was clearly Adelaide's turn, and indeed, Max Taylor from Flinders University is now scheduled to coordinate the arrangements for Crystal XV. However it was also abundantly clear that there is some considerable confusion in regard to the dates and venues of all but the last 4 or 5 Crystal meetings.

The list which was eventually drawn up is reproduced below, and is decidedly tentative beyond Crystal 9. The Secretary would greatly appreciate hearing from members who can correct any mistakes in this list and/or fill in the missing details of the earlier meetings, for the Society's records.

<table>
<thead>
<tr>
<th>Crystal</th>
<th>Year</th>
<th>Dates</th>
<th>Venue</th>
<th>Chairman of Org. Comm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1985</td>
<td>May</td>
<td>Adelaide</td>
<td>Dr M.R. Taylor</td>
</tr>
<tr>
<td>14</td>
<td>1983</td>
<td>Aug. 30-Sept. 2</td>
<td>Morpeth, NSW.</td>
<td>Mr H.R. Tietze</td>
</tr>
<tr>
<td>13</td>
<td>1982</td>
<td>Feb. 2-5</td>
<td>Univ. Queensland</td>
<td>Cr C.H.L. Kennard</td>
</tr>
<tr>
<td>12</td>
<td>1980</td>
<td>Jan. 30-Feb. 2</td>
<td>ANU, Canberra</td>
<td>Dr G.M. McLaughlin</td>
</tr>
<tr>
<td>11</td>
<td>1978</td>
<td>Jan. 29-Feb. 2</td>
<td>Bendigo, Victoria</td>
<td>Drs Gatehouse, Lloyd, Grey and Bursill</td>
</tr>
<tr>
<td>10</td>
<td>1976</td>
<td>Feb.</td>
<td>Hawkesbury, NSW.</td>
<td>Dr M.F. MacKay</td>
</tr>
<tr>
<td>8</td>
<td>1971</td>
<td></td>
<td>Adelaide</td>
<td>Prof. H.C. Bolton</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1967</td>
<td>Aug. 17, 18</td>
<td>Monash Univ. Vic.</td>
<td>Dr B.M. Gatehouse,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prof. H.C. Bolton</td>
</tr>
</tbody>
</table>
REPORT ON THE AXAA '83 MEETING

The Fifth Australasian Schools and Conference on X-ray Analysis and Surface Analysis (AXAA '83) was held at the Victorian College of Pharmacy, Melbourne from 16th to 20th May 1983. This meeting and associated equipment exhibition was arranged by the Victorian Branch of the Australian X-ray Analytical Association and was attended by over 220 delegates, visiting lecturers and exhibitors. The attendees came from every state in Australia, New Zealand, U.S.A., Canada, U.K., Germany, Holland, Switzerland, China, Japan, Singapore, Chile and Papua New Guinea.

The Schools and Conference were opened by Dr W.J. McG. Tegart (Secretary of the Department of Science and Technology) who gave an address on science and technology policies. Plenary lectures, on the main themes of the Schools and Conference, were given by Dr. C.R. Hubbard (N.B.S. Washington, U.S.A.) “Computer Aided Revolution in X-ray Powder Diffraction”, Dr. K. Norrish (C.S.I.R.O., Division of Soils) “X-ray Fluorescence — Past, Present and Future”, and Prof. R.J. MacDonald (University of Newcastle) “Surface Analysis — The State of the Art”.

The Schools programs on each of these topics, ran concurrently over three days, had been arranged by Mr K.G. Hamilton (Gippsland Institute of Advanced Education) and Dr. T.C. Hughes (University of Melbourne). During the X-ray Diffraction School, a workshop on manual methods of phase identification consisting of tutorial and problem solving sessions based on course material provided by JCPDS — International Centre for Diffraction Data, was led by Dr. Hubbard with the assistance of Dr. E. Slansky (Geological Survey of N.S.W.). Among the subjects covered in the XRD school were crystallography, instrument optimization and quantitative XRD. Those who attended the X-ray Fluorescence School were able to hear presentations from four international speakers: Dr. M.A. Short (Occidental Research, U.S.A.), Dr. F. Claisse (Canada), Dr. J. Kikkert (Philips, Holland) and Mr. D.F. Sermin (Bausch & Lomb, Switzerland). The subjects that were covered in this school included instrumentation for wavelength and energy dispersive analysis, sample preparation and correction procedures.

A forum for Computer Search Match Methods in XRD was held and a subcommittee (Messrs. Horne, Bogi and Slansky) was formed to keep the AXAA up-to-date on the current methods.

The most recent feature of AXAA Schools is the coverage of the wide range of Surface Analysis techniques, which were represented this year by lectures on sem-eda, epma, PIXE, SIMS, ESCA, AES. These topics were thoroughly covered by sixteen well-known speakers. On the Wednesday afternoon of AXAA ’83 week, visits were arranged to laboratories in the Melbourne area which allowed delegates to see how the “locals” applied various techniques to a wide range of problems. The XRF school organized practical sessions at this time.

The Conference sessions were lead by review papers on “Preparation of metals and alloys for XRF” (Dr. K. Norrish and Mr. R.A. Davies), Progress in XRD Quantitative Analysis (Dr. C.R. Hubbard), “The Present and Future of Surface Analysis” (Dr. B.F. Phillips, Perkin Elmer, U.S.A.), “X-ray Fluorescence — The State of the Art” (Dr. M.A. Short) and “Safety for X-ray Instrumentation” (Mr. A. Melbourne and Mr. F.P. Robotham). There were a total of fifty papers presented orally in three concurrent sessions and the delegates, were able to view thirteen poster papers during the meeting.

An Energy Dispersive XRF workshop, led by Dr. J.D. Smith (Melbourne University), was held during the Conference sessions.

The manufacturers exhibition was held in the Main Hall which is conveniently close to the lecture theatres at Pharmacy College. Equipment and accessories were displayed by thirteen companies and their representatives included twelve experts from overseas. One manufacturer was able to show one of the latest automated X-ray fluorescence analysis systems working for the first time in Australia.

An automated XRD system was demonstrated and delegates could see how a mini- and micro-computer could be used in Search Match XRD analysis for compounds.

A Student prize of $200, donated by Sietronics, was shared by Mr. P. Kennedy (Auckland University) and Mr. P. Lambrinides (Monash University). The Rocklabs prize was awarded to Mr. V.J. Manners, for his new XRD powder camera design and Mr. R.A. Coyle, for a new automated drive to a microdensitometer.

The Proceedings of the Fifth Australasian Schools and Conference (326 pages) are available from AXAA ’83, P.O. Box Parkville, 3052 at $20.00 per copy. It is planned to hold the sixth Schools and Conference on X-ray Analysis in Sydney in 1986.

P.W. Wright
Conference Secretary

The Australian Physicist, Vol. 20, August 1983 — Page 177
OBITUARY OF PROF. D. McLACHLAN JR.

Dan McLachlan died on 3 December 1982, two days before his 77th birthday. McLachlan was emeritus professor of mineralogy at Ohio State University. He was editing the final proofs of Crystallization in North America for the American Crystallographic Association when he suffered a massive heart attack.

McLachlan was born in Arcola, Saskatchewan, and educated at Kansas State College, receiving his BS in 1930, and at Pennsylvania State College, receiving his MS in 1933 and PhD in 1936. He was a physical chemist at Corning Glass from 1936 to 1941, and a physicist at American Cyanamid to 1947, before serving as professor of metallurgy, mineralogy and physics at the University of Utah until 1953. He then went to the Stanford Research Institute as assistant chairman of the Poulter Laboratory, and later to the University of Denver, where he served as coordinator of the physics department and professor of metallurgy until 1965. After a year as Battelle professor, he remained professor at Ohio State University from 1964.

His interests ranged over large areas of crystallography. In the days before high-speed computers, he invented a series of ingenious analog devices to lighten the tedium involved in such hand calculations as Fourier series summations. He published X-ray Crystal Structure in 1957 and Statistical Mechanical Analogies in 1968. He was active in a number of scientific societies and was a member of the US delegation to the celebrated 1946 meeting in London that led to the organization of the International Union of Crystallography. He was the ninth president of the American Crystallographic Association. His major activity in the last two years was editing Crystallography in North America, a comprehensive account of the development of this science in the US and Canada from its beginnings, before WWI, to the present.

McLachlan was a warm and friendly man with a keen if wry sense of humor. His hilarious tale Your Dog Died, published under the pseudonym Dok McMud expresses his comic perceptions with great fidelity.

S. C. Abrahams
Bell Laboratories

(From: "Physics Today, April 1983, p.72)

BOOK REVIEWS

Reviewed by John Jenkin, Physics Department, La Trobe University.

Ever since William Henry Bragg's two surviving children (Gwenaiden Caroe and William Lawrence Braege) wrote a short memoir of their father for the Royal Society on the centenary of his birth (1962), Mrs. Caroe had urged her brother to write a "Life" of their

father, but she could not persuade him to do it — he was "too busy", "a son could not write about his father". Later Sir Lawrence reluctantly agreed to write something with his sister, but he died (1970) before much progress had been made. In the end she had to do it alone.

This book is now not new, and it has been reviewed elsewhere (see, for example, Historical Records of Australian Science, 52), 1981 pp. 123-4, and references therein). Nevertheless, it deserves to be brought to the attention of the Australian physics community, for it
Every winter he played lacrosse, quickly establishing himself as the colony's leading player and founding two new and successful clubs: one, after his return, in the top level of the local tennis competition. In later years he took up golf avidly, helping establish Adelaide's leading club and became a very competent player with a near-scratch handicap. At the university he led the formation of the Union and the Sports Association and remedied the electrical system when it broke down. At home he learnt to paint and played the flute.

In the wider Adelaide community he took a keen interest in primary and secondary education and appears to have played a leading part in the new Education Movement around the turn of the century. He spoke at school sneeze days; he encouraged and he led. And I wonder if further research will not reveal that he was a leading figure in Adelaide church life too.

Caroe's book has only snippets of all of this, charmingly presented; but a detailed study of the Adelaide period remains to be written.

Some attention has been given by other authors to Bragg's "sudden" rush into research in 1904. In the next few years he established a world-wide reputation on the basis of his elegant work on the range of alpha-particles and the nature of x- and y-rays. In fact, however, he had been preparing himself, both consciously and unconsciously, for nearly twenty years; he had, for example, flexed his muscles with a few not insignificant papers on electromagnetism early in the 1890s. An offer to return to England was now inevitable: it came from Leeds, and Bragg left with his now grown and growing family early in 1909.

"Wife" Lawrence almost immediately went up to Cambridge, having recently completed an honours science degree at Adelaide University. It was he who, walking along the Cambridge backs in 1912, first envisaged the correct explanation for von Laue's "spots" in. = 2d sin. But this was an area the nature of x-rays and their interaction with matter in which his father had been working; it was WLB who first noticed the German report and it was he who first got a spectrometer working well and routinely on the new technique. Bragg's Law was often attributed to the father and, despite their early work together and their continued contact, a coolness and tension developed in their relationship which the joint award of the 1915 Nobel Physics Prize did not erase: it was a cross that WLB carried with him to his grave. Mrs. Caroe gives some attention to this matter, always with affection and sympathy for both men, but there is surely more to be said. One wonders how the relationship developed when WLB was young. Despite his own first-rate mind and talent and a considerable school athletic ability, Lawrence seems always to have lived in his father's shadow. There are other parent-child relationships in our field (J. J. & G. P. Thomson, Manne and Kai Siegbahn, Pierre and Marie and Irene Curie and Niels and Anne Bohr) with which comparison could be made; but only the Braggs worked so closely together in the same field.

Mrs. Caroe follows her father's career though the early difficult days in Leeds, two world wars, time at University College and finally an illustrious period at
the Royal Institution. He was gifted and determined, wise and kind, self-contained and self-sacrificing. He wrote and spoke with exceptional lucidity, a skill he did not immediately possess, it seems, and to which his Adelaide period again contributed substantially. He was widely honoured: "the career that led to these distinctions", Heilbron has suggested, "could not be reproduced in our time".

And yet there are many facets of Bragg's life and work that are timeless. Mrs. Caroe's extensive use of quotations from private family papers and from more public documents is one of the many attractive features of her book: when Bragg talks of research (pp. 130-3), for example, the reader cannot fail to be uplifted by his down-to-earth understanding as well as his insight and vision, in 1982 as in 1924.

When I was growing up in Adelaide as a school boy and an undergraduate student I hardly knew the name Bragg or its intimate connection with my alma mater: I see a small dusty photograph in a dark corridor, but no more. In recent years the Adelaide Physics Department has rectified this omission by naming the Bragg Laboratories, but what other reminders are there in Australian science that William Henry Bragg ever walked these shores or that his equally illustrious son, William Lawrence Bragg, was an Australian, born, bred, raised and educated? Professor Home tells me that there is little in the Bragg papers in England to suggest that Australian science later made any serious attempt to keep in touch with the family, father or son.

This sad situation says something about the Australian psyche. But it is never too late to celebrate in Australia the memory of these two great scientists, who laid the foundations of their careers in a small town on our southern shores, so far away from the European centres of their sciences as it was possible to be, during one of the golden ages of our subject.

In summary, we can thank Mrs. Caroe for reminding us so pleasantly that, to use Perutz's words, "success in science can be combined with devotion to human values, and that occasionally the great can also be good and true".

From: ('The Australian Physicist', Vol.20, August 1983, p.179)

CRYSTALLOGRAPHY IN NORTH AMERICA

The American Crystallographic Association has recently published the book Crystallography in North America (edited by Dan McLachlan, Jr. and Jenny P. Glusker; 414 pp. plus detailed subject and name indexes).

It contains 85 historical articles by well-known crystallographers under the headings: Accounts of Some Crystallographic Laboratories, In Memory of Some Past-Presidents, Organizations of Crystallographers, Apparatus and Methods, Internal Properties of Matter, and Applications to Various Sciences. It also contains a foreword by Linus Pauling, a historical account of crystallography in North America from the late 18th century to about World War II by Clifford Frondel, and 22 pages of historical portraits and snapshots collected by Sidney Abrahams.

The book may be obtained from Polycrystal Book Service, Box 27, Western Springs, Illinois, U.S.A., price U.S.$50.00

JOURNAL OF MOLECULAR GRAPHICS

A new journal of possible interest to members is the Journal of Molecular Graphics published by Butterworth Scientific in the U.K. (quarterly cost £45/US.$83.30). First issue - March 1983. The publication is a forum for the presentation of research in the use of computers for the investigation of molecular structure, function and interaction. It is international in both scope and readership. For further information contact Chris Rawlins, Butterworth Scientific Ltd, P.O. Box 63, Westbury House, Bury Street, Guildford Surry, GU2 5BH, U.K.
INORGANIC CRYSTAL STRUCTURE DATA BANK, ICSD

The SCA has been informed that the ICSD data bank is now available on magnetic tape under a leasing arrangement. For one year's use of the files on about 23000 structures (as of May 1, 1983), the cost is approximately DM220 plus postage. This price includes the programs for handling and retrieval of the data.

For further details contact the Secretary, or write direct to Dr H. Behrens or Dr G. Ebel, Fachinformationszentrum, Energie, Physik, Mathematik GmbH, D-7514 Eggenstein-Leopoldshafen 2, Federal Republic of Germany.

BIDICS 1981

The 1981 Bond Index of the Determination of Inorganic Crystal Structures is now available from Dr I.D. Brown, Institute for Materials Research, McMaster University, Hamilton, Ontario, Canada L8S, 4M1.

With the advent of the ICSD and the Metals Data File, the need for BIDICS as an independent compilation of structure data has declined, and the 1981 issue of BIDICS will therefore be the last volume of the series. Future hard copy indices to inorganic crystal structures will be produced from computer data bases.

CSIRO'S CDC 205

The April meeting of the Queensland Regional Computing Committee was told that the CYBER 7600 replacement, the CDC 205, will be treated as a National Resource. It was stated that it might be possible for University Scientists to get Federal grants to use this specialist facility. CSIRO would not help in translating any software but would help in the purchasing of established packages.

If any member would like to explore the possibility of using the 205 for major crystallographic computing normally carried out at local computing centres, please contact Dr C.H.L. Kennard, Dept. of Chemistry, University of Queensland, St. Lucia, Queensland, 4067.

THE VANISHING LEPRECHAUN

Dr F.H. Moore, leader of the AINSE Neutron Diffraction Group at Lucas Heights was the first reader to submit a solution to the problem of the vanishing leprechaun in the last Newsletter. Congratulations Frank!
The solution lies in the observation that leprechaun A in the bottom figure has gained a foot relative to the top figure, and leprechaun B has gained a little extra on the top of his head. All the others have extrabits and pieces in between and the result is, therefore, one less body.

Readers will perhaps have noted that SCA members from Building 58 at Lucas Heights have won both of the "crystallography" problems that have appeared so far in the Newsletter. Despite appearances to the contrary, there is apparently no truth to the rumour that they have only been this successful because they haven't got anything better to do!

THE ARGONNE ANTI-JET-LAG DIET

For those few lucky people who can still manage to find the money to travel overseas, Dr C.F. Ehret of the Division of Biological and Medical Research at Argonne National Laboratory has developed the following diet, designed to stop you waking up bright-eyed and bushy-tailed in the middle of the night after a long trip.

How to avoid jet lag

1. DETERMINE BREAKFAST TIME at destination on day of arrival.

2. FEAST-FAST-FEAST-FAST - Start four days before breakfast time. On day one, FEAST, eat heartily with high-protein breakfast and lunch and a high-carbohydrate dinner. No caffeine except between 3 and 5 p.m. On day two, FAST on light meals of salads, light soups, fruits and juices. Again, no caffeine except between 3 and 5 p.m. On day three, FEAST again. On day four, FAST. If you drink caffeinated beverages, take them in morning when traveling west, or between 6 and 11 p.m. when traveling east.

3. BREAK THE FINAL FAST at destination breakfast time. No alcohol on the plane. If the flight is long enough, sleep until normal breakfast time at destination, but no later. Wake up and FEAST on a high-protein breakfast. Stay awake and active. Continue the day's meals according to mealtimes at the destination.

FEAST on high protein breakfasts and lunches to stimulate the body's active cycle. Suitable meals include steak, eggs, hamburgers, high-protein cereals, green beans.

FEAST on high-carbohydrate suppers to stimulate sleep. They include spaghetti and other pastas (but no meatballs), crepes (but no meat filling), potatoes, other starchy vegetables, and sweet desserts.

FAST days help deplete the liver's store of carbohydrates and prepare the body's clock for retiming. Suitable foods include fruit, light soups, broths, skinny salads, unbuttered toast, half pieces of bread. Keep calories and carbohydrates to a minimum.

### COUNTDOWN

<table>
<thead>
<tr>
<th>Day</th>
<th>FEAST</th>
<th>FAST</th>
<th>FEAST</th>
<th>FAST</th>
<th>BREAK FINAL FAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>L</td>
<td>S</td>
<td><strong>FEAST</strong></td>
<td>Westbound: if you drink caffeinated beverages, take them in morning before departure. Eastbound: take them between 6 and 11 p.m. If flight is long enough, sleep until destination breakfast time. Wake up and FEAST, beginning with a high-protein breakfast. Lights on. Stay active.</td>
</tr>
<tr>
<td>2</td>
<td><strong>FEAST</strong></td>
<td>S</td>
<td>L</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**THE ARGONNE ANTI-JET-LAG DIET**

The Argonne Anti-Jet-Lag Diet is helping travelers quickly adjust their bodies' internal clocks to new time zones. It is also being used to speed the adjustment of shiftworkers, such as power plant operators, to periodically rotating work hours. The diet was developed by Dr. Charles F. Ehret of Argonne's Division of Biological and Medical Research as an application of his fundamental studies of the daily biological rhythms of animals. Argonne National Laboratory is one of the U.S. Department of Energy's major centers of research in energy and the fundamental sciences. Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439
CORRIGENDA

The last SCA Newsletter contained a list of minerals named after Australian crystallographers/mineralogists. Two minerals, wadsleyite and jeppeite, were included in this list when in fact the original descriptions of these minerals were 'in press' at the time of release of the Newsletter, and had, therefore, not appeared formerly in the open literature. Dr E.N. Nickel, the Australian representative on the International Mineralogical Association's Commission on New Minerals and Mineral Names, has pointed out that this is a very sensitive area in the Mineralogical Community. In order to prevent any misunderstanding, the full references to the papers naming these two minerals for the first time are reproduced below:


Dr Nickel has also pointed out that the mineral bouleyite included in the earlier list has been discredited, and is now no longer a valid mineral name. The species now has the name bityrite.

BOOKLIST

Anyone with an interest in seeing the total range of currently available books on crystallography, and virtually all topics concerned with crystallography, can take advantage of the new, comprehensive booklet recently produced by ICCD. It has been published not as a separate booklet but in the Journal of Applied Crystallography (JAC), where it is in the December issue of the 1982 volume, running from page 540 to page 576. JAC can be found, of course, in any good library.

It is sometimes quite useful to have a document of this kind at hand, or on one's shelf, for reference. Copies of this new booklet can be obtained from the Chester office of the ICCD; however, as photocopying is nowadays so efficient, and so routinely available, the ICCD would prefer crystallographers who have such equipment in their institutions to make their own copies, if that is reasonably convenient. The Chester office will gladly supply copies to those who cannot easily make their own – to crystallographers in the developing, or Third World countries particularly.

This new booklet is the successor to Helen Menzies's list (of about 1965, which was updated about ten years ago by Michael Woolfson). The new list has about 1,200 entries. It differs from previous lists in having the books classified into some 50 or so subject areas (rendering it less tedious to consult), and in the use of various different type-faces, making it rather easy for a comparatively casual user to scan up and down the pages, to pick out what is interesting in his or her own speciality. The period covered is the decade 1970-1981, with a sprinkling of 1982 titles included. Incidentally one book that's not in the list (because it has appeared only during the past month) is the reprint of James's classic, 'Optical Principles of X-ray Diffraction.'

From the May, 1983 Newsletter of the ACA.