are properly recast, if necessary, in all occurrences.

The source code now provided without a plotting routine is accepted by Microsoft compilers as being fully ANSI 77. On special request, source code (subroutines CALPLT, POINT and CURVE) can be provided that was used in earlier mainframe versions to write instructions for a CalComp or compatible plotter to make Becdovd plots. Utilization of the plot code in subroutine CALPLT requires access to a CalComp library. The DBWS-9411 program does routinely output two files that can be used for plotting with separate programs, e.g. the Shareware program DMPLOT in the DBWS distribution package and, probably, a number of others.

Availability: There are now several hundred users-of-record of one or more DBW* versions. There are probably at least as many more users who are not 'of record', because the source code has been distributed from the beginning and widely shared by recipients. It was intended that the source code could be shared and modified by the users. It was not intended that vendors should incorporate the DBW* code in software packages that they then sold, but some of that has happened without our permission, advance knowledge or recompense. Consequently, the source code and manual are now copyrighted. We give permission to bona fide scientists to use the program for their own research work with no formality or cost beyond proper citation, e.g. of this article. We do not give permission for commercial exploitation of the program.

The DBWS-9411 distribution package is available to scientists meeting the above criteria without charge for the DBWS software. We do ask those who can manage it to help defray our out-of-pocket distribution costs with a nominal contribution, currently US $15 plus postage costs, from their institutional, not personal, funds. To obtain a copy of the distribution package, send a written request to Professor R. A. Young at the above address.

One of the authors (COPS) may be contacted by e-mail at copsanto@sifqsc.sc.usp.br.

References


Crystallographers

This section is intended to be a series of short paragraphs dealing with the activities of crystallographers, such as their changes of position, promotions, assumption of significant new duties, honours etc. Items for inclusion, subject to the approval of the Editorial Board, should be sent to The Executive Secretary, 2 Abbey Square, Chester CH1 2HU, England.


Jenny Glusker and Ken Trueblood have been selected to receive the American Crystallographic Association's Fankuchen Award for their contributions to crystallography. This award, memorializing Dr I. Fankuchen, Professor of Physics (1942-1964) at the Polytechnic Institute of Brooklyn, recognizes contributions to crystallography by persons known to be effective teachers of crystallography. Jenny Glusker is currently a Senior Member at The Institute for Cancer Research of The Fox Chase Cancer Center in Philadelphia and Adjunct Professor of Biochemistry and Biophysics at the University of Pennsylvania. She is Editor of Acta Crystallographica Section D. Ken Trueblood is Professor Emeritus at the University of California, Los Angeles.


New Commercial Products

Announcements of new commercial products are published by the Journal of Applied Crystallography free of charge. The descriptions, up to 300 words or the equivalent if a figure is included, should give the price and the manufacturer's full address. Full or partial inclusion is subject to the Editor's approval and to the space available. All correspondence should be sent to the Editor, Dr A. M. Glazer, Editor Journal of Applied Crystallography, Glenarden Laboratory, University of Oxford, Parks Road, Oxford OX1 3PU, England. The International Union of Crystallography can assume no responsibility for the accuracy of the claims made. A copy of the version sent to the printer is sent to the company concerned.


INRAD receives excellence award

In January 1995, Hercules Defense Electronics Systems, Inc. presented INRAD, Inc. with their 'Subcontractor Excellence Award in Recognition of INRAD's Outstanding Performance in Support of the AAR-47 Production Program'.

The AN/AAR-47 Missile Warning System is a passive electro-optic threat warning device used to protect low slow-flying helicopters and fixed-wing aircraft against missile attack from ground-to-air and air-to-air missiles. Protection is provided by detection of the rocket plume and the activation of the appropriate contermesure system.

INRAD manufactures crystals, laser components, optical coatings, laser systems and instruments for scientific, defense, aerospace and industrial markets.

INRAD, 181 Legrand Avenue, Northvale, NJ 07647, USA.


Zoom Electrostatic Image Intensifiers

A new range of zoom demagnifying electrostatic image intensifiers is being developed by Photek as part of a European collaborative development project – PHOBIA. Phobia aims to provide new photon detectors for the biological science community.

The zoom demagnifying image intensifier is analogous to a zoom lens on a camera and the new tube design has a zoom ration of 6:1. It can focus accurately with high resolution and low distortion at magnifications between 0.6 and 0.1. In principle, this allows the user to scan the full field of view at a low resolution (dominated by the TV read-out system) and to then zoom into the central area at high magnification.

It is hoped that this capability will prove valuable in X-ray and auto-radiography systems.

The image intensifiers can be coupled to most CCD sensors – it is envisaged that these will be cooled for static imaging applications. For real-time imaging, a microchannel plate can be built into the image intensifier, to give high photon gain, with the ability to work at very low photon fluxes.

Devices with an image input diameter of 47 mm are now in production. A larger version with 80 mm input and 40 mm output has been designed and will be available towards the end of 1995.

Ian Ferguson, Photek Limited, 26 Castleham Road, St Leonards on Sea, East Sussex TN38 9NS, England.


Inexpensive Corrosion-Free Cold Trap

A new use of titanium in the Vapor Trap cold trap greatly increases the cold trap’s resistance to solvents. The mechanically refrigerated CFC-free Vapor Trap operates at -50°C or -90°C and replaces dry ice or liquid N2 as a cooling source to trap condensibles from the vapor flow.
before they enter the vacuum pump. The Vapor Trap is available with stainless steel or glass lids complete with vacuum hose connections and requires only 120 V electrical power for operation.

Books Received


The following books have been received by the Editor. Brief and generally uncritical notices are given of works of marginal crystallographic interest; occasionally, a book of fundamental interest is included under this heading because of difficulty in finding a suitable reviewer without great delay.

Bioinorganic chemistry: inorganic elements in the chemistry of life. Edited by W. Kaim and B. Swederski. Pp. xii + 401. Chichester: John Wiley & Sons, Ltd, 1994. Price £19.95, US $31.95 (paperback). ISBN 0471-94369-X. This is a textbook designed for use by upper-level undergraduates in a two-semester course. It contains 19 chapters, partially organized by element and partially on the basis of biological function. The authors note 'priority given to function and reactivity as opposed to static structural aspects' of the topic, but also observe that 'a major purpose . . . is the correlation of function, structure and actual reactivity of inorganic elements in organisms'. Literature references are given through 1993.

Chemical kinetics of solids. By Hermann Schmauzried. Pp. xvi + 433. Weinheim: VCH Verlagsgesellschaft mbH, 1995. Price DM 298. ISBN 3-527-29094-X. Dealing mainly with inorganic systems, the author attempts a 'more or less phenomenological approach' to the understanding of kinetics in the solid state. The book is directed at 'graduate students and researchers who want to understand the physical chemistry of solid state processes in fair depth and to be able to apply the basic ideas to new (practical) situations'. The book updates and considerably expands ideas outlined in the author's earlier monograph, Solid State Reactions (Verlag Chemie, 1975).