

Documentation and availability: The CAOS package consists of 38 source files and three data files and needs 2.6 Mbytes of hard disk to store them. The Wordstar™ 6.0 documentation, program source codes and test examples are available free of charge for noncommercial users specifying the media or by e-mail from the authors (struta@irmias.ias.fra.cnr.it).

Keywords: Automatic structure determination, Patterson method, heavy-atom analysis.

References

- Bellucci, G., Bianchini, R., Chiappe, C., Marioni, F. & Spagna, R. (1988). *J. Am. Chem. Soc.* **110**, 546–552.
- Camalli, M., Capitani, D., Cascarano, G., Cerrini, S., Giacobozzo, C. & Spagna, R. (1986). CAOS (Italian Patent No. 35403c/86) *User's Manual*. Istituto di Strutturistica Chimica CNR, Roma, Italy.
- Caruso, F., Camalli, M., Rimml, H. & Venanzi, L. M. (1994). *Inorg. Chem.* Submitted.
- Cascarano, G., Giacobozzo, C., Camalli, M., Spagna, R. & Watkin, D. J. (1991). *Acta Cryst.* **A47**, 373–381.
- Okada, K. (1994). *J. Appl. Cryst.* **27**, 131.
- Pavelčík, F., Sívý, J., Rizzoli, C. & Andreotti, G. D. (1992). *J. Appl. Cryst.* **25**, 328–329.
- Sheldrick, G. M. (1985). *Crystallographic Computing 3*, edited by G. M. Sheldrick, C. Krüger & R. Goddard, pp. 175–189. Oxford Univ. Press.
- Simpson, P. G., Dobrott, D. & Lipscomb, W. N. (1965). *Acta Cryst.* **18**, 169–179.
- Bedzyk** of Argonne National Laboratory and Northwestern University in recognition of his recent advances in the study of surfaces and interfaces through the use of variable-period standing waves.
- The 1994 Martin J. Buerger Award of the American Crystallographic Association has been conferred on Professor **Philip Coppens** of the State University of New York at Buffalo in recognition of his pioneering roles in the development of diffraction methods for the accurate determination of electron density in molecules and transition-metal complexes, in the application of synchrotron radiation to problems in chemical crystallography, in developing methods for the analysis of modulated structures, and for studying the response of crystals to rapidly changing external perturbations.
- Professor **Donald L. D. Caspar** of Brandeis University has been elected a member of the US National Academy of Sciences.
- Professor **Alajos Kálmán** has been awarded the István Count Széchenyi Hungarian State Prize for his work on the X-ray crystallography of organic compounds of pharmaceutical importance.
- Professor **Sung-Hou Kim** of the University of California at Berkeley has been elected a member of the US National Academy of Sciences.
- Professor **Sir David Chilton Phillips**, Laboratory of Molecular Biophysics, University of Oxford, was created a Life Peer in the Queen's Birthday Honours list.

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.

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The 1994 Bertram Eugene Warren Diffraction Physics Award of the American Crystallographic Association has been conferred on Professor **Michael J.**

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