

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (R. F. Bryan, Department of Chemistry, University of Virginia, McCormick Road, Charlottesville, Virginia 22901, USA). As far as practicable, books will be reviewed in a country different from that of publication.

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Electron microscopy 1998. Edited by H. A. CALDERÓN BENAVIDES and M. JOSÉ YACAMÁN. Vol. I. **General interest and instrumentation.** Pp. xxxvii + 879. ISBN 0-7503-0564-9. Vol. II. **Materials science 1.** Pp. xxxvii + 910. ISBN 0-7503-0565-7. Vol. III. **Materials science 2.** Pp. xxxv + 805. ISBN 0-7503-0566-5. Vol. IV. **Biological sciences.** Pp. xli + 952. ISBN 0-7503-0567-3. Bristol & Philadelphia: Institute of Physics Publishing, 1998. Price £450.00, US \$900.00. ISBN (Four-volume set) 0-7503-0568-1.

A remarkably rapid publication of the proceedings of the 14th quadrennial International Congress on Electron Microscopy, held in Cancun, Mexico, from 31 August to 4 September 1998. 'The four volume set documents recent advances in microscope technology and applications in scientific research, from HREM studies of quasicrystal and nanoscale materials to biomembrane research and art history. These volumes contain: 21 papers of general interest, 157 papers on instrumentation, 174 papers on electron microanalysis and diffraction techniques, 124 papers on new microscopes and techniques, 678 papers on materials science and 540 papers on biological sciences.' A companion two compact disc set, available at the Congress (ISBN 0-7503-0569-X) compresses this $24 \times 22 \times 17 \text{ cm}^3$ hard copy into digital format, and produces excellent screen images of both text and micrographs.

Of the CD ROM, Douglas Dorset writes:

A physically imposing four volume set of proceedings for this international congress is conveniently compressed into two CD-ROM discs in a single jewel box that is certainly more conveniently stored! The portable document files (PDF) are read with the included Adobe Acrobat software on Windows, Macintosh or UNIX platforms. As received, the discs were reviewed on a Power Macintosh 8500/120. The software is easily installed from the disc, following clear instructions in the leaflet inserted into the box.

In general, electron microscopists have exacting standards for publishing abstracts containing micrographs. Conference proceedings have traditionally been printed on coated paper so that photographic details could be adequately reproduced. It was therefore of interest to evaluate how faithfully images would be rendered on a computer screen. In the PowerPC used for this examination, there was no expanded grey level scale for displaying image files, such as is found in computers employed for image analysis. The results should, therefore, be typical of those found with other small computers otherwise used for word-processing, except that the 17" monitor on this computer was larger than the typical screen dimension. Especially given the difficulties encountered in publishing micrographs in journals that do not use coated paper (e.g. those of ACS & APS), this CD reproduction is quite successful.

I examined a number of images critically and felt that no compromise was made in the reproduction of information necessary for understanding the abstract. Two-fold magnification of individual pages, conveniently provided by the software, further enhances the examination of these figures. The print version of the proceedings was not available to this reviewer for direct comparison, however.

Another point checked was the accessibility of information in these volumes. Each volume has a table of contents, both as a listing of papers, and as a listing of symposia given in a side table. Clicking on a symposium icon on the side table brings up the list of paper titles and authors in the session for the larger print table of contents. The highlighted page number can be activated by clicking the mouse button to access the individual paper. There are also separate author indices. Word searches of either the titles or the authors in the table of contents or author names in the author index can also access desired papers. This facility for locating information is vastly superior to the rather casual grouping of conference papers found in the CD-ROM version of the Proceedings of the 11th European Congress on Electron Microscopy (1996), for example. The glaring shortcomings of that production have not been repeated here.

There is, however, one small drawback of searching contributions to a symposium. Returning to the table of contents was not very convenient if, after examining one paper, one desired to view a number of papers sequentially. This problem is easily overcome, in principle, by directly accessing the collected PDF documents for a given volume, after first determining the sequence of papers for a given symposium. However, the table of contents lists papers by their page number only while the PDF documents in the separate file are labeled by the abstract number. One has to access one paper of a symposium first *via* the table of contents to find the abstract code number for its PDF before clicking on a sequence of icons in the volume PDF library. The contributed abstracts are grouped sequentially so that the sequence of papers can then be viewed quite conveniently.

In summary, this CD-ROM version of the conference proceedings can be regarded as a highly successful production that is quite convenient and space-saving. While I was very frustrated with the result of the Dublin EUREM proceedings, since the CD-ROM was the only option, I think that this newer product can serve as a model for future conference proceedings and even support arguments to abolish the print versions of abstract books altogether. (This admission is made by a bibliophile who would not ever agree to CD-ROM versions of textbooks and reference books!)

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