

Book Review

M. S. Dresselhaus, G. Dresselhaus, J. E. Fischer, and M. J. Moran (eds), *Intercalated Graphite* (Materials Research Society Symposia Proceedings Vol. 20), North-Holland, New York, 1982, \$70/Dfl.195.

This volume contains summaries of the papers presented at a Symposium on Intercalated Graphite, held in November 1982, in Boston, Massachusetts. The range of topics covered is extensive and will provide readers with updated views on developments in this very interesting and industrially-important field. The work is divided into 10 parts dealing with Structure and phase transitions, Carbon fibres, Spectroscopic studies, Electronic structure, Transport properties, Superconductivity and magnetism, Synthesis, Batteries and intercalation kinetics, Phonons, NMR, and Mössbauer Spectroscopy. Each of these sections is self-contained and consists of several papers dealing broadly with the main topic. All of the accounts are quite readable and will provide information to research workers in the field. The range of coverage is very good and includes not only fundamental studies, but also applications to technology.

One criticism this reviewer has of the titles of the sections is that they are quite brief in many cases and, therefore, uninformative. What, for example, would a reader expect to see in the section labelled Phonons or, for that matter, NMR? Surely the editors could have given a somewhat more explicit title, and must they use abbreviations and not spell out Nuclear Magnetic Resonance Studies, or even Nuclear Magnetic Resonance Spectroscopic Studies?

With a volume of this type, which is made up of papers presented at a symposium, the value is, in this reviewer's opinion, greatly enhanced if the organizers take the trouble to have a plenary lecturer, or rapporteur, who would present a reviewed paper at the beginning of each section summarizing, or giving an overview of, the topics to be discussed. That procedure would, to some extent, avoid the lack of connection not only between some of the sections, but also between the different papers presented within each section.

Despite the above comments, as we have said, the book is nevertheless useful and is to be recommended to research workers interested in fundamental studies or the technology of intercalation compounds. The printing is very good, and though small is nevertheless easily readable. In addition, the diagrams are also satisfactory and, on the whole, clearly illustrate the points which the authors intend to depict. The editors are also to be commended on including an author index, as well as a subject index, though this reviewer would have wished to have had a rather more extensive subject index than the one given. This reviewer would also have wished to have seen an index giving the list of the names of authors of papers that are quoted in the volume. Such a listing is very easy to prepare nowadays with computer retrieval programs. The inclusion of this type of index is invaluable to workers in the field who may wish to look up a particular reference at a later stage.

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