

differences in spectroscopic properties has been demonstrated with exceptional clarity from the technique of fluorescence line narrowing. This chapter is concentrated on laser-excited fluorescence studies, and the author gives a good survey of the present status of the research. A. H. Francis & R. Kopelman discuss briefly excitation dynamics in molecular solids in the same way as those of ionic crystals and glasses. The research on organic and inorganic materials has developed independently and with little mutual awareness of the other's activity. However, the last chapter places emphasis on a unified interpretation of excitation dynamics in both molecular crystals and inorganic solids.

The book covers rather limited areas in the studies of laser spectroscopy of solids. Nevertheless, the subject matter discussed and the way it is presented indicate that this book should be of interest for those involved with material science in general and especially in the areas of optical and electric properties of solids, solid-state quantum electronics and electronic devices. The large list of references supplements well the subject of the book.

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### 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.*

**The analytic theory of point systems.** By J. D. BERNAL. Pp. xiv + 135, 1923. Published in facsimile and available at £2.50 + postage (30p in the UK) from A. L. Mackay, Dept of Crystallography, Birkbeck College, London WC1E 7HX, England. The name of J. D. Bernal requires no introduction to crystallographers. What is not so well known is that Bernal's first scientific paper was never published. It was written when J. D. was a student – and a rather shy one – at Emmanuel College, Cambridge. Considered to be too long for publication, it did earn him a £30 prize and, more important, a post with Sir W. H. Bragg, which set him on his crystallographic career. This paper, once surviving at Birkbeck College only as a single copy, has now been duplicated and is available, as above, through Dr A. L. Mackay. Introductory notes, by Dr Mackay and by Professor R. Schwarzenberger, are included.