

mulae of the kind which Kay and Nedderman recite: its computer-simulation techniques are based on mathematical and physical concepts of a different kind. Never mind! If the authors have omitted much that is useful, everything that they *have* included is worth knowing; having made no attempt to 'keep up with the literature', they have not felt constrained to discuss subjects of merely ephemeral fashionability. At £17.50 or \$29.95 (paper-back), this book can be recommended to students; and teachers can be beneficially reminded by it that fluid mechanics and transfer processes can be presented as essentially simple subjects.

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NAIM H. AFGAN (Editor), **Measurement Techniques in Power Engineering**. Hemisphere, Washington, DC. Distributed outside North America by Springer-Verlag, 1985, 356 pp.

THIS book is a collection of lectures prepared for the Advanced Course organised by the International Centre for Heat and Mass Transfer on measurement in power engineering, held in August 1983 in Dubrovnik. It is intended for engineers interested in the application of modern measurement methods and associated control techniques in power engineering. A rather general introduction to the field is provided in the first paper by the editor (Institute of Nuclear

Sciences, Belgrade), whilst the last paper (De Witt, Los Alamos) provides a general summary of data acquisition systems for heat transfer measurements, with emphasis on interfacing and thermocouple performance. Between these two bookends are papers on applications in combustion (Kunitomo, Kyoto), water reactors (Hsu, Maryland and Hewitt, Harwell), liquid metal cooled fast breeder reactors (Sackett, Argonne), plasma (Soloukhin, Minsk), and a long paper on solar power (Hahne, Stuttgart). The problems are topical and there is minimal repetition of basic material.

Readers can imagine the many different techniques that are applicable under these headings and will, indeed, find most of them here albeit in a few cases abbreviated almost to the extinction point of true understanding, plus some new ones. In the last category for this reviewer were heated thermocouple void meters, the plugging temperature method of measuring impurities in sodium, and the lithium chloride hygrometer. Furthermore, it is clear that some standardisation is necessary of the test conditions for the pervasive flat plate solar collector.

In general the techniques are those of proven reliability and some of the more advanced ones still under development in the research context are, understandably, not featured. Thus thermocouples and conventional spectroscopy are well covered, but there is little on the more advanced laser-based sizing techniques. With this proviso, the book provides a good summary of all relevant, well-established techniques.

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