

Book Review

Progress in Low Temperature Physics, Volume XIII

Edited by D. F. Brewer, University of Sussex, Brighton, UK, Elsevier, North-Holland, Amsterdam, 1991, ISBN 0-444-89109-9, US\$ 159.00/Dfl. 310.00.

This XIII volume of the *Progress in Low Temperature Physics* series consists of about 357 pages divided into five chapters. The first chapter deals with the critical behaviour and scaling of confined ^4He . Chapter 2 is a review entitled "Ultrasonic Spectroscopy of the Order Parameter Collective Modes of Superfluid ^3He ", and Chapter 3 is a review of the thermodynamics and hydrodynamics of ^3He - ^4He mixtures. Chapter 4 is devoted to the quantum circuits of conventional superconductors at low temperatures. The last chapter deals thoroughly with specific heat data of high- T_c superconductors at low temperatures.

All chapters are very well written, and include an introduction to the subject, theoretical calculations, experimental data and their comparison wherever necessary. The addition of

Chapter 5 makes this volume particularly attractive for those engaged in high- T_c superconductivity research because low temperature measurements on high- T_c superconductors are essential for learning more about the fundamental mechanism of superconductivity. In each chapter the data are very well explained and there are adequate graphical illustrations. At the end of each chapter a detailed list of references is given, so that the reader can investigate the subject in more detail. For example, Chapter 1 consists of 85 pages, 44 figures and 212 references, and Chapter 3 is based on 44 pages, 13 figures and 156 references.

In general, this volume provides the reader with an overview of the low temperature properties of systems such as ^3He , ^4He , mixtures of ^3He and ^4He , quantum circuits and high- T_c superconductors.

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