

BOOK REVIEW

NCRP Report No 58 Second Edition

A Handbook of Radioactivity Measurement Procedures

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The first edition of this handbook published in 1978 has become recognized as a standard work in the field of radioactivity measurement. The emphasis is on quantitative measurement methods and the topics covered range from the physics of radiation detectors through the applications of different detectors to the assessment of uncertainties in the measurement. The second edition has been extensively revised to take into account the changes and improvements in technique which have taken place in the last seven years. Two sections have been added. The first of these discusses quality control and traceability. As the book is an NCRP report the USA practice is described but there are other systems for ensuring the quality of measurements (such as that organized by the British Calibration Service) which give the National Laboratory greater control over the use of the term traceability. The second new section deals with the difficult question of how to state the uncertainties of a measurement. The method now recommended by the Bureau International des Poids et Mesures can cause problems in assessing uncertainties and the older method of adding maximum assessable systematic uncertainties to the random uncertainty at a given confidence level may still be preferred. The usefulness of the handbook is enhanced by the Nuclear Decay Data Tables which can be used as a quick reference, and by the 48 pages of references enabling more detailed information to be found.

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