

A DICTIONARY OF
Scientific Units

A DICTIONARY OF **Scientific Units**

**Including dimensionless numbers
and scales**

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Preface to the first edition

The intense specialization that occurs in science today has meant that scientists working in one field are often not familiar with the nomenclature used by their colleagues in other fields. This is particularly so in physics. This dictionary is designed to help overcome this difficulty by giving information about the units, dimensionless numbers and scales which have been used, or are still being used, throughout the world. Some four hundred entries are provided and these are supplemented by about five hundred references. The definition of each entry is given together with relevant historical facts. Where appropriate, some indication of the magnitude of each unit is included. Any scientific unit, which to the authors' knowledge has appeared in print, even if not universally adopted, has been listed. While it is too much to hope that there are no omissions, it is believed that there cannot be many and that this dictionary provides the most complete information of its kind available. The units are listed alphabetically and the references are numbered in sequence for each letter. In appendices are given a table of fundamental physical constants, details of standardization committees and conferences, a table of British and American weights and measures and conversion tables. The symbols and abbreviations used throughout the text are those recommended by the Institute of Physics and the Physical Society and by the British Standards Institution.

It is a pleasure to acknowledge the help given by numerous friends and colleagues and in particular that given by Dr J. R. Clarkson of the Royal South Hants Hospital; Mr C. H. Helmer of the Mechanical Engineering Department, Southampton University, Dr Peter Lane of the Iraq Petroleum Company; Miss D. M. Marshallsay of the Department of Economics, Southampton University; Mr R. E. Peroli of the Belfast Public Textile Testing House; Dr L. G. A. Sims, Professor of Electrical Engineering, Southampton University; Mr R. W. Watridge, the Southampton Borough analyst; Major H. W. H. West of the British Ceramic Research Association

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1963

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Preface to the fifth edition

Since the publication of the fourth edition in 1980 advances in technology have led to more precise values of the fundamental physical constants and a movement towards definitions of the fundamental units of mass, length and time based on atomic parameters. More precise definitions of some other units such as the candela have been approved by the international committees. These changes, together with the definitions of several new units have been included in this edition, the text of which has been revised and which now contains over 850 units and dimensionless numbers.

The authors wish to thank all those who have helped in this latest compilation by suggestion and kindly criticism and Margaret Wainwright who has had the difficult and tedious task of typing, retyping and copying the fragmented parts that arise from a text revision. At the time of going to press we believe this book to provide the most complete and up-to-date information of its kind available.

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1985

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