

SERIES PREFACE

The primary objective of the Controlled-Fusion Atomic Data Center at Oak Ridge National Laboratory is to publish handbooks containing numerical and graphical cross sections and other physical data relevant to fusion energy research. In 1977, a two-volume compilation was published as ORNL reports ORNL-5206 and ORNL-5207. Since that time, a large volume of pertinent data has become available, necessitating an update of the previous compilation. Plans are to include both cross sections and rate coefficients for collisional processes, and to publish the revised series in handbook form. The specific volumes which are in preparation are listed below, with their expected completion dates.

- Vol. 1, "Collisions of H, H₂, He, and Li Atoms and Ions with Atoms and Molecules," C. F. Barnett, ORNL (January 1986).
- Vol. 2, "Collisions of Electrons with Atoms and Molecules," J. W. Gallagher, Joint Institute for Laboratory Astrophysics; and C. F. Barnett, ORNL (October 1985).
- Vol. 3, "Particle Interactions with Surfaces," E. W. Thomas, Georgia Institute of Technology (January 1985).
- Vol. 4, "Spectroscopic Data for Iron," W. L. Wiese, National Bureau of Standards (March 1985).
- Vol. 5, Collisions of Carbon and Oxygen Ions with Electrons, H, H₂, and He," R. A. Phaneuf, ORNL; R. K. Janev, Institute of Physics, Yugoslavia; and M. S. Pindzola, Auburn University (March 1986).

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