

ELEMENTAL ABAREX -- A User's Manual*

by

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ABSTRACT

ELEMENTAL ABAREX is an extended version of the spherical optical-statistical model code ABAREX, designed for the interpretation of neutron interactions with elemental targets consisting of up to ten isotopes. The contributions from each of the isotopes of the element are explicitly dealt with, and combined for comparison with the elemental observables. Calculations and statistical fitting of experimental data are considered. The code is written in FORTRAN-77 and arranged for use on the IBM-compatible personal computer (PC), but it should operate effectively on a number of other systems, particularly VAX/VMS and IBM work stations. Effort is taken to make the code user friendly. With this document a reasonably skilled individual should become fluent with the use of the code in a brief period of time.

This code and this document have been sent to the NEA Data Bank and the Radiation Safety Information Computational Center (ORNL). Interested users should contact one of these centers. Any suggestions, errors and/or corrections should be communicated to A. B. Smith, Technology Development Division, Bldg. 315, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439, USA.

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