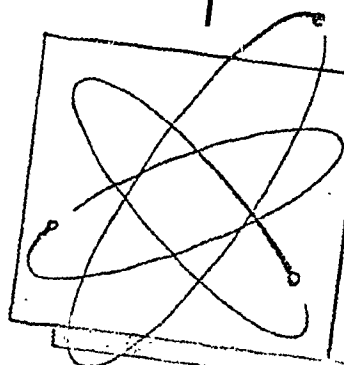


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REPORTS TO THE
AEC NUCLEAR CROSS SECTIONS
ADVISORY COMMITTEE



INTERNATIONAL ATOMIC ENERGY AGENCY
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Los Alamos, New Mexico
April 3-4, 1968



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REPORTS TO THE AEC NUCLEAR CROSS SECTIONS
ADVISORY COMMITTEE

Meeting Held at
LOS ALAMOS, NEW MEXICO

April 3-4, 1968

Compiled by
M. S. Moore, Secretary

NCSAC

PREFACE

The reports which follow were submitted to the AEC Nuclear Cross Sections Advisory Committee at the meeting held in Los Alamos, New Mexico on April 3-4, 1968. The reporting laboratories are those which have a substantial effort devoted to the measurement of neutron and nuclear cross sections and other basic data of interest to the applied nuclear energy program of the United States. The reports which have been submitted contain informal statements of recent developments and preliminary data which reflect these interests. Material which may be considered appropriate includes the following:

1. Microscopic neutron cross sections in energy regions corresponding to reactor development or shielding interests, and inverse reactions.
2. Charged particle cross sections, especially as appropriate in the development and testing of nuclear models.
3. Gamma-ray production by nuclear reactions, or radioactive decay, and related theoretical developments concerning nuclear structure.
4. Proton and alpha-particle cross sections at higher energies (up to approximately 1 GeV), of interest to the space program.

In this sense, these reports are not intended to be complete; a number of laboratories, whose research is less programmatically oriented, do not submit reports; and those reports which have been submitted do not cover all the work in the reporting laboratories relating to nuclear cross-section measurements. For the sake of brevity, certain items of general interest appended to the submitted reports have been listed by title in this compilation.

Persons who might make use of these data for serious computations should contact the experimenter directly to ascertain that the data are considered appropriate for such use. The data which appear in these reports should be quoted only by permission of the contributor and should be referenced as such, i.e., a private communication and not by reference to this document.

This compilation has been made almost completely from master copies prepared by the laboratory representatives listed in the Table of Contents. It is a pleasure to acknowledge their contributions.

M. S. Moore
Secretary, NCSAC
Idaho Nuclear Corporation
Idaho Falls, Idaho 83401

TABLE OF CONTENTS

1.	ARGONNE NATIONAL LABORATORY	1
	H. E. Jackson, Jr.	
2.	BROOKHAVEN NATIONAL LABORATORY	16
	R. E. Chrien	
3.	CASE-WESTERN RESERVE UNIVERSITY	29
	E. F. Shrader	
4.	COLUMBIA UNIVERSITY	30
	W. W. Havens, Jr.	
5.	DUKE UNIVERSITY	38
	H. W. Newson and E. G. Bilpuch	
6.	GENERAL ATOMIC	52
	J. R. Beyster	
7.	IDAHO NUCLEAR CORPORATION	58
	M. S. Moore	
8.	LAWRENCE RADIATION LABORATORY (LIVERMORE)	69
	S. C. Fultz	
9.	LOCKHEED PALO ALTO RESEARCH LABORATORY	88
	L. F. Chase, Jr. and H. A. Grench	
10.	LOS ALAMOS SCIENTIFIC LABORATORY	89
	H. T. Motz	
11.	NATIONAL BUREAU OF STANDARDS	96
	R. S. Caswell	
12.	NAVAL RADIOLOGICAL DEFENSE LABORATORY	100
	J. M. Ferguson	
13.	NUCLEAR DEFENSE LABORATORY, U. S. ARMY	101
	W. R. Van Antwerp	
14.	OAK RIDGE NATIONAL LABORATORY	102
	P. H. Stelson	
15.	RENSSELAER POLYTECHNIC INSTITUTE	113
	R. C. Block	
16.	RICE UNIVERSITY	132
	G. C. Phillips	
17.	TEXAS NUCLEAR CORPORATION	142
	I. L. Morgan	
18.	YALE UNIVERSITY	154
	H. L. Schultz	
	APPENDIX	163