

TABLE OF CONTENTS

Volume 16

Session A-11: Nuclear Data	Page
P/1018 Spinrad, Avery.....	Reactor Physics Constants Center..... 3
P/2483 Hughes.....	Cross Sections of Interest in Reactor Design..... 8
P/14 Rose <i>et al.</i>	Thermal Reactor Problems..... 34
P/11 Pattenden.....	Neutron Cross Sections of Importance to Reactors..... 44
P/203 Eastwood <i>et al.</i>	Determination of Cross Sections of Reactor Interest.... 54
P/1072 Halperin, Stoughton.....	Cross Sections of Heavy Nuclides..... 64
P/202 Westcott <i>et al.</i>	Effective Thermal Reactor Neutron Cross Sections..... 70
P/685 Côté <i>et al.</i>	Slow Neutron Cross Section..... 77
P/205 Craig <i>et al.</i>	Long Irradiation of Natural Uranium..... 83
P/2417 Blomberg.....	Neutron Cross Sections of Some Reactor Materials..... 97
P/1599 Şaplakoğlu.....	New Technique for Absolute Fission Cross Sections.... 103
P/1186 Billaud <i>et al.</i>	Measurement of Fission Cross Sections and Number of Prompt Neutrons..... 106
P/52 Colvin, Sowerby.....	Precise Measurement of $\bar{\nu}$ 121
P/204 Bigham <i>et al.</i>	Some Slow Neutron Fission Cross Sections..... 125
P/2149 Kalinin, Pankratov.....	Some Fast Neutron Fission Cross Sections..... 136
P/2223 Gordeev, Pupko.....	Absorption Cross Section of U ²³⁵ Fission Fragments.... 141
P/673 Harvey <i>et al.</i>	Radioactive Fission-Product Nuclides..... 150
P/1988 Adler <i>et al.</i>	Quantitative Evaluation of Resonance Integrals..... 155
P/150 Brimberg, Dahlström.....	Resonance Integral Temperature Coefficient..... 172
P/2489 Richtmyer <i>et al.</i>	Monte-Carlo Calculation of Resonance Capture..... 180
P/19 Morton.....	Resonance Escape Probability..... 187
P/1847 Spinrad <i>et al.</i>	Resonance Capture in Uranium and Thorium Lumps... 191
RECORD OF SESSION.....	207
Session A-12: Nuclear Data and Reactor Theory	
P/18 Schofield, Hassitt.....	Calculation of Thermal Neutron Spectra..... 217
P/2033 Drozdov <i>et al.</i>	Calculation of Thermal Neutron Spectra..... 223
P/10 Campbell <i>et al.</i>	Measurements of Reactor Spectra..... 233
P/2152 Mostovoi <i>et al.</i>	Measurement of Neutron Spectra..... 254
P/1636 Ramanna <i>et al.</i>	Spectrum of Neutrons from Moderators..... 260

	<i>Page</i>
P/1372 Santandrea <i>et al.</i>	Neutron Temperature Measurements..... 265
P/1839 Nelkin, Cohen.....	Neutron Thermalization..... 270
P/2148 Kazarnovsky <i>et al.</i>	Neutron Thermalization and Diffusion in Heavy Media 279
P/1567 Koppel.....	Moderation in Infinite, Heavy, Monatomic Gas..... 289
P/1540 McReynolds <i>et al.</i>	Neutron Thermalization by Bound Hydrogen and Carbon 297
P/1634 Ramanna.....	Slowing Down Time in BeO..... 314
P/1639 Kothari, Singwi.....	Slowing Down of Neutrons..... 316
P/1635 Gokhale <i>et al.</i>	0.09 ev Neutron Moderation Experiments..... 319
P/1637 Sarma <i>et al.</i>	Transmission of Slow Neutrons through BeO..... 322
P/1638 Singwi, Kothari.....	Thermal Transport Cross Sections in Solid Moderators.. 325
P/1673—Part II	
Neve de Mévergnies <i>et al.</i>	The BR-I Pile, Physics..... 333
RECORD OF SESSION.....	351
 Session A-13: Reactor Theory and Computing Methods	
P/2151 Marchuk <i>et al.</i>	Reactor Calculation Methods..... 359
P/966 Humbach.....	Neutron Slowing Down in Finite Media..... 372
P/2375 Goldstein <i>et al.</i>	Slowing Down of Neutrons in Hydrogenous Media..... 379
P/1711 Mogyorodi.....	Probability Theory in Neutron Motion..... 406
P/624 Stuart.....	Neutron Multiple Scattering Methods..... 409
P/1691 Grosjean.....	Multiple Isotropic Neutron Scattering..... 413
P/1692 Grosjean.....	Theory of Multiple Isotropic Scattering II..... 431
P/1377 Albertoni <i>et al.</i>	Integral Formulation of Age Theory..... 447
P/153 Waller.....	Energy–Time Distribution of Moderated Neutrons..... 450
P/1950 Iyengar, Mani.....	Transient Fast Neutron Moderation in Fissile Media.... 452
P/1194 Lafore <i>et al.</i>	Monte-Carlo Study of Fast Neutrons in Water..... 456
P/1843 Gelbard <i>et al.</i>	Digital Computers in Reactor Design..... 473
P/633 Wachspress <i>et al.</i>	Two-Space Dimension Multigraph Calculations..... 483
P/1378 Albertoni <i>et al.</i>	Computer Code for Spherical Reactor Parametric Study 489
P/959 Grümme, Herre.....	Group-Constant Tolerances in Reactor Calculations.... 492
P/310 Schaefer, Parkyn.....	Monte-Carlo Study of Thermal Utilization and Diffusion Area..... 496
P/639 Bareiss.....	Transport Theory Calculation Techniques..... 503
P/627 Francis <i>et al.</i>	Solutions of the Transport Equation..... 517
P/573 Aspelund.....	A New Solution of the Boltzmann Transport Equation.. 530
P/2386 Carlson, Bell.....	Solution of the Transport Equation by the S_n Method.. 535
P/2102 Trlifaj, Čermák.....	Neutron Transport Theory in Slab Lattices..... 550
P/1103 Tunkelo.....	Neutron Transport and Diffusion Theories Compared... 559
P/1085 Medina.....	Green Functions for a Homogeneous Reactor..... 566

		Page
P/1541	Varga, Martino	Numerical Solution of Multigroup Equations 570
P/1869	Triplett	Generalized Diffusion Theory Methods 578
P/2224	Veinik <i>et al.</i>	Application of Onsager's Theory to Neutron Diffusion 586
P/2272	Jacob	Neutron Diffusion with a Periodic Source 590
P/634	Nohel, Timlake	Solution of Two-Dimensional Neutron Diffusion Equations 595
P/2189	Laletin	Passage of Neutrons in a Heterogeneous Medium 601
P/968	Meetz	Exact Treatment of Heterogeneous Reactors 611
P/272	Barden <i>et al.</i>	Calculation of Parameters of Heterogeneous Systems 627
P/1440	Stippel	Source-Sink Analysis for Heterogeneous Reactors 639
P/1100	Simons	Heterogeneous Fine Structure Calculations 644
P/631	Stewart, Zweifel	Self-shielding Effects in the Absorption of Neutrons 650
P/2034	Belkin <i>et al.</i>	Radial Thermal Neutron Flux in Fuel Elements 663
P/53	Jeffrey	Evaluating Flux Distribution in Small Power Reactors 671
P/1055	Winterberg	The Achievement of Uniform Reactor Power Density 675
P/1710	Pál	Statistical Fluctuations of Neutron Multiplication 687
P/1084	Medina	Stochastic Models for Nuclear Reactors 697
P/2344	Inönü	Definition of the Extrapolated Surface 701
P/325	Dopchie	Boundary Conditions for Reactor Cell Transformation 706
P/475	Ribarić	Boundary Conditions for Curved Reactor Surfaces 711
P/1337	Makishima <i>et al.</i>	Reactor Simulator Based on Optical Analogy 715
P/1804	Ortega Costa	Neutron Conductors 730
P/17	Mossop, McGhee	Analogue Wax Model for Reactor Calculations 736
RECORD OF SESSION		742