

CONTENTS OF VOLUME II

SESSION B.2: BENCHMARKS AND NUCLEAR DATA

NBS ISNF and Cavity Fission U-235 Standard Neutron Fields	597
<i>E. D. McGarry et al.</i>	
Neutron Spectrum Investigation in the Reference Spectrum $\Sigma\Sigma$ -ITN by Means of Recoil Proton Spherical Counters	615
<i>D. Albert et al.</i>	
CFRMF Spectrum Update and Application to Dosimeter Cross-Section Data Testing	623
<i>R. A. Anderl et al.</i>	
Average Neutron Cross Sections in the CF-252 Benchmark Field	637
<i>W. Mannhart</i>	
Intercomparison of the D ₂ O-Moderated ²⁵² Cf Sources at the N.B.S. and at the SEFOR Calibration Center	649
<i>W. E. Brandon et al.</i>	
Multigroup Processing of ENDF/B Dosimetry Covariances	655
<i>D. W. Muir et al.</i>	
The MOL Cavity Fission Spectrum Standard Neutron Field and its Applications	665
<i>A. Fabry et al.</i>	
Supplementary Neutron Flux Calculations for the ORNL Pool Critical Assembly Pressure Vessel Facility	689
<i>P. J. Maudlin and R. E. Maerker</i>	
A Benchmark Experiment for Neutron Transport in Iron, Carbon Steel and Sodium	699
<i>J. Burian et al.</i>	
ASTM Standard Recommended Guide on Application of ENDF/A Cross Section and Uncertainty File: Establishment of the File	705
<i>E. P. Lippincott and W. N. McElroy</i>	
A Benchmark Gamma-Ray Skyshine Experiment	711
<i>R. R. Nason et al.</i>	
Comparison of Measured and Evaluated Spectrum-Averaged Cross-Section Data	725
<i>W. L. Zijp et al.</i>	
Characterization of Reactor Neutron Spectra and Measurement and Evaluation of Resonance Integrals	745
<i>A. Ahmad et al.</i>	
Updated Results for the MOL- $\Sigma\Sigma$ Benchmark and First Results of the Connected U _{nat} Experiment	755
<i>G. De Leeuw-Gierts and S. De Leeuw</i>	

SESSION B.3: FUSION-I

Proposed Neutron Diagnostic Systems for JET	771
<i>O. N. Jarvis et al.</i>	
Neutron Flux and Spectral Measurements to Characterize Irradiation Facilities for Fusion Materials Studies	783
<i>L. R. Greenwood</i>	
Displacement Damage Calculations Using ENDF/B-V Cross Sections Including Thermal Capture and Beta Decay Effects	793
<i>R. K. Smither and L. R. Greenwood</i>	

SESSION C.1: DAMAGE CORRELATION

Review of IAEA Specialists' Meeting on Irradiation Embrittlement and Surveillance of Reactor Pressure Components, Vienna, Austria, 19-21 October 1981	809
<i>L. E. Steel</i>	
Investigation on the Dependence of RPV Steel Embrittlement on Irradiation Temperature and Neutron Exposure	819
<i>J. Ahlf et al.</i>	
Standards for Materials Behavior Under Neutron Irradiation	829
<i>P. D. Hedgecock and J. S. Perrin</i>	
Influence des Neutrons Thermiques sur la Fragilisation de L'Acier de Peau D'Etancheite des Reacteurs a Haute Temperature (H.T.R.)	839
<i>A. Alberman et al.</i>	
Characterisation D'Emplacements D'Irradiation en Spectres Neutroniques et en Dommages	847
<i>P. Mas and R. Perdreau</i>	
Evaluation and Uncertainty Estimates of Charpy Impact Data	855
<i>F. W. Stallmann</i>	
Comparison and Limitation of Uncertainties in Surveillance and Lifetime Prediction of LWR Pressure Vessels	861
<i>W. Schneider</i>	

SESSION C.2: NUCLEAR DATA NEEDS AND PROBLEMS

Highlights from the IAEA Advisory Group Meeting on Nuclear Data for Radiation Damage Assessment and Related Safety Aspects	873
<i>N. P. Kocherov</i>	
Experience in Using the Covariances of Some ENDF/B-V Dosimetry Cross Sections: Proposed Improvements and Addition of Cross-Reaction Covariances	877
<i>C. Y. Fu and D. M. Hetrick</i>	
Spectrum-Integrated Helium Generation Cross Sections for ${}^6\text{Li}$ and ${}^{10}\text{B}$ in the Sigma Sigma and Fission Cavity Standard Neutron Fields	889
<i>B. M. Oliver et al.</i>	

Re-Evaluation of the Dosimetry for Reactor Pressure Vessel Surveillance Capsules	903
<i>R. L. Simons et al.</i>	
The IAEA International Reactor Dosimetry File (IRDF-82)	917
<i>D. E. Cullen et al.</i>	
PSF Interlaboratory Comparison	929
<i>L. S. Kellogg and E. P. Lippincott</i>	

SESSION C.3: FUSSION-II

Tokamak Fusion Test Reactor Fusion-Reactors-Products Diagnostics	949
<i>H. W. Hendel et al.</i>	
Neutron Dosimetry for the TFTR Lithium Blanket Module Program	959
<i>Y. D. Harker et al.</i>	
Fusion-Blanket Dosimetry Program at the Idaho National Engineering Laboratory	975
<i>F. Y. Tsang et al.</i>	
Fast Neutron Dosimetry of Spallation Neutron Sources	987
<i>F. Hegedüs</i>	
A Review of Helium Accumulation Neutron Dosimetry for Fusion Neutron Test Environments	995
<i>D. W. Kneff et al.</i>	

SESSION D.1: LIGHT WATER REACTORS-III

Status of Regulatory Demands in the U.S. on the Application of Pressure Vessel Dosimetry	1011
<i>P. N. Randall</i>	
Neutron Exposure Parameters for the Fourth HSST Series of Metallurgical Irradiation Capsules	1023
<i>F. B. K. Kam et al.</i>	
Characterization of the Neutron Environment Inside the Primary Containment of Caorso Nuclear Power Plant	1035
<i>E. Borioli et al.</i>	
Spectral Analysis of a BWR Vessel	1043
<i>E. B. Norris</i>	
Mesure et Interpretation des Flux de Dommages dans le Simulateur de Cuve P.W.R. d'Oak-Ridge (ORR-PSF)	1051
<i>A. Alberman et al.</i>	
A Brief Account of the Effect of Overcooling Accidents on the Integrity of PWR Pressure Vessels	1061
<i>R. D. Cheverton</i>	
LWR Pressure Vessel Monitoring: Absolute or Relative Dosimetry?	1071
<i>W. Schneider</i>	

Tests on Radiation Damage Exposure and the Role of its Location Dependency in Bulky Materials (Like Pressure Vessel Steels)	1077
<i>W. Schneider</i>	

SESSION D.2: ADJUSTMENT CODES AND UNCERTAINTIES

Status Report on the Real-80 Exercise	1089
<i>W. L. Zijp et al.</i>	
Dosimetry Experiments in JOYO	1111
<i>A. Sekiguchi et al.</i>	
LSL—A Logarithmic Least Squares Adjustment Method	1123
<i>F. W. Stallmann</i>	
FERRET Adjustment Code—Status/Use	1129
<i>F. Schmittroth</i>	
Experiences with Neutron Spectrum Unfolding Codes in Different Neutron Spectra	1141
<i>É. M. Zsolnay and E. J. Szondi</i>	
Uncertainties in the Estimation of Radiation Damage Parameters	1155
<i>F. W. Stallmann</i>	
Neutron Spectra Analysis Using Information—Computing System SAIPS	1165
<i>H. Bondars</i>	
Unfolding of Real-80 Sample Problems by ITER-3 and STAYSL Codes	1171
<i>M. Najžer and B. Glumac</i>	
The YAYOI Blind Intercomparison on Multiple-Foil Reaction Rate Measurements	1179
<i>M. Nakazawa et al.</i>	

SESSION HIGHLIGHTS

A.1: Light Water Reactors-I	1191
<i>R. H. Lewis and W. Schneider</i>	
A.2: Fast Reactors	1193
<i>P. B. Hemmig</i>	
A.3: Data and Techniques	1195
<i>J. Grundl and A. Fudge</i>	
B.1: Light Water Reactors-II	1197
<i>Robert A. Shaw and Jürgen Ahlf</i>	
B.2: Benchmarks and Nuclear Data	1199
<i>W. G. Alberts and G. Hansen</i>	
B.3: Tokamak Related Papers from the Fusion I and Fusion II Sessions	1201
<i>Charles E. Clifford</i>	
C.1: Radiation Damage Correlations and Damage Analysis Techniques	1205
<i>L. E. Steele</i>	
C.2: Nuclear Data Needs and Problems	1209
<i>John Lewellen</i>	

C.3: Fusion II, Intense Neutron Sources for Fusion Radiation Damage Studies	1211
<i>R. Dierckx and L. Greenwood</i>	
D.1: Réacteur à eau Légère III	1213
<i>P. Mas</i>	
D.2: Adjustment Codes and Uncertainties	1215
<i>M. Petilli and F. Schmittroth</i>	

WORKSHOPS

Adjustment Codes and Uncertainties	1219
<i>F. W. Stallmann</i>	
Spectrum Adjustment Procedures	1221
<i>W. L. Zijp and F. W. Stallmann</i>	
Nuclear Data and Benchmarks	1231
<i>A. Fabry et al.</i>	
LWR Surveillance and Dosimetry	1233
<i>Art Lowe and H. Tourwé</i>	
Neutron and Gamma-Ray Transport Methods	1235
<i>R. E. Maerker and M. Austin</i>	
AUTHOR INDEX	1239
ATTENDEES	1243