

資料 (そのII)

International Conference on Neutron Physics and
Nuclear Data for Reactor and other Applied Purposes
(Harwell, 25-29 September 1978) 発表論文

この会議で発表された論文名をご紹介することから、Conference のプログラムをそのまま
以下に掲載しました。Parallel Session のものはすべて contributed paper で、
他は invited paper です。この会議の Proceedings は近く発行される予定とのことで
す。

CONFERENCE PROGRAMME

Monday 25th September 1978

09.15 OPENING SESSION

Chairman - Dr. B. Rose

Address of welcome

DR. L. ROBERTS,
DIRECTOR, ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL.

Opening address

DR. W. HANNUM,
DEPUTY DIRECTOR GENERAL, OECD NUCLEAR ENERGY AGENCY

09.30 NUCLEAR DATA FOR FISSION REACTORS

Chairman - B. Rose

09.30 Nuclear data for reactor design, operation and safety

J.L. ROWLANDS (AEE, Winfrith, England)

10.30 Refreshments

11.00 NUCLEAR DATA FOR FISSION REACTORS

Chairman - J. Blachot

11.00 Nuclear data for reactor shielding

J. BUTLER (AEE, Winfrith, England)

11.30 Cross sections for non-proliferation

M.G. SOWERBY (AERE, Harwell, England)

12.00 Fast neutron fission cross sections of the major transactinium isotopes

B.H. PATRICK (AERE, Harwell, England)

12.30 Measurements in Los Alamos Benchmark Criticals and the central reactivity discrepancy.
W.G. Davey, G.E. Hansen, J.J. Koelling and T.P. McLaughlin
(LASL, Los Alamos, USA)

12.45 Lunch

Monday 25th September 1978

14.00 NEUTRON CROSS SECTIONS
Chairman - S. Cierjacks

14.00 Correlated uncertainties in nuclear data
F.G. PEREY (ORNL, Oak Ridge, USA)

14.30 Correlated uncertainties in integral data
A.K. McCracken (AEE, Winfrith, England)

15.00 Fast neutron inelastic scattering
J. LACHKAR (CEA, CE Bruyères-le-Châtel, France)

15.30 Photon production in neutron induced reactions
I.J. VAN HEERDEN (SUNI, Faure, South Africa)

16.00 Refreshments

16.30 NEUTRON ELASTIC AND INELASTIC SCATTERING
Parallel Session A
Chairman - J.J. Schmidt

16.30 Determination of necessary accuracies for transactinide
neutron cross-sections when calculating their accumulation in
fast reactors
L.N. Usachev (Fiziko-Energeticheskij Institut, Obninsk, USSR)

16.45 Measurements of the differential elastic scattering cross section
of iron between 0.5 and 3 MeV
I Schouky and S. Cierjacks. (KFZ, Karlsruhe, FRG)

17.00 The energy levels of ^{107}Ag and ^{109}Ag from the $(n,n'\gamma)$ reaction
E. Barnard, D.W. Mingay, D. Reitman and J. White (Atomic Energy Board,
Pelindaba, South Africa).

17.15 The interactions of fast neutrons with ^9Be
M. Baba, T. Sakase, T. Nishitani, T. Yamada, T. Momota
(Tohoku University, Sendai, Japan)

17.30 Gamma ray multiplicity of ^{59}Co after excitation by inelastic
scattering of 14.5 MeV neutrons
P. Grabmayr. (Institut für Radiumforschung und Kernphysik, Vienna
Austria).

18.00 RECEPTION AT AERE HARWELL

Monday 25th September 1978

16.30 FISSION PRODUCT AND DECAY DATA

Parallel Session B

Chairman - P. Christmas

- 16.30 The UK chemical nuclear data files: an evaluated set of radioactive decay data for reactor applications
B.S.J. Davies, M.F. James, A.L. Nichols, J.R. Parkinson, A. Tobias and D.G. Vallis (BNL, Berkeley; AEE Winfrith; Windscale Works, Cumbria; AWRE, Aldermaston, England).
- 16.45 Bibliothèque de données nucléaires non neutroniques des isotopes radioactifs produits de fission et noyaux lourds.
J. Blachot et Ch. Fiche (CEA, CEN Grenoble et CEN Cadarache, France)
- 17.00 Direct measurement of nuclide yields in thermal-neutron fission using HIAWATHA
R.B. Strittmatter and B.W. Wehring (University of Illinois at Urbana Champaign, Illinois, USA).
- 17.15 Fission product yields in ^{238}U fission by ^{252}Cf -neutrons
K. Debertin. (Physikalisch - Technische Bundesanstalt, Braunschweig, FRG)
- 17.30 A new determination of the half-life of ^{241}Pu
R. Vaninbrouckx (CBNM, Geel, Belgium)
- 18.00 RECEPTION AT AERE HARWELL

Tuesday 26th September 1978

- 09.15 NEUTRON CROSS SECTIONS
Chairman - A. Michaudon
- 09.15 Cross sections of the major transactinium isotopes in the resonance region
G.A. KEYWORTH (LASL, Los Alamos, USA)
- 09.45 Low energy cross section data for structural material
F.H. FRÖHNER (KFZ, Karlsruhe, FRG)
- 10.15 Neutron radiative capture cross section calculations
V. BENZI (CNEN, Bologna, Italy)
- 10.45 Refreshments
- 11.15 RESONANCE PARAMETERS FOR FISSION REACTOR MATERIALS
Parallel Session A.
Chairman - K.H. Böckhoff
- 11.15 Conversion from Wigner-Eisenbud to Kapur-Peierls resonance parameters without matrix inversion
F.H. Fröhner (KFZ, Karlsruhe, FRG)
- 11.30 Systematics of s- and p-wave radiation widths for transactinium isotopes
M.S. Moore (LASL, Los Alamos, USA)
- 11.45 Resonance parameter analysis results from ^{58}Ni and natural nickel transmission data
D.B. Syme and P.H. Bowen (AERE, Harwell, England)
- 12.00 Investigation of neutron resonance parameters of some Pd and ^{238}Pu isotopes
C. Gu, A.B. Popov, K. Trzeciak (JINR, Dubna, USSR)
- 12.15 A study of the temperature dependence of the neutron transmission of uranium dioxide
T.J. Haste and M.G. Sowerby (AERE, Harwell, England)
Resonance parameters of ^{238}U below a neutron energy of 200 eV
T.J. Haste and M.C. Moxon (AERE, Harwell, England)
- 12.30 Measurement of the Doppler effect of ^{238}U as a metal and as an oxide
R.M. Brugger, F.Y. Tsang (University of Missouri, Missouri, USA)

Tuesday 26th September 1978

11.15 OPTICAL MODEL

Parallel Session B

Chairman - J. Fréhaut

- 11.15 Neutron-nucleus optical potential for the actinide region
D.G. Madland, P.G. Young (LASL, Los Alamos, USA)
- 11.30 Paramètres globaux du potentiel optique dans le domaine de masses A=89 à 242
C. Lagrange and J.P. Delaroche (CEA, CE Bruyères-le-Châtel, France)
- 11.45 Comparison of neutron scattering cross sections with the JLM microscopic optical model
S. Kailas and S.K. Gupta. (Bhabha Atomic Research Centre, Bombay, India)
- 12.00 Potential optique nucleon - ¹⁹⁷Au entre 10 keV et 57 MeV
D.P. Delaroche (CEA, CE Bruyères-le-Châtel, France)
- 12.15 Applications de méthodes matricielles en modèle optique
J.M. Dufour and J. Salvy (CEA, CE Bruyères-le-Châtel, France).
- 12.30 Déformation de l'interaction spin-orbite: relations avec la structure nucléaire et effets possibles sur la section efficace de diffusion inélastique
J. Raynal (CEA, CEN Saclay France)
- 12.45 Lunch

Tuesday 26th September 1978

- 14.00 NUCLEAR MODELS AND THEORETICAL METHODS
Chairman - H. Conde
- 14.00 Nuclear models of level density
A.S. JENSEN (University of Aarhus, Aarhus, Denmark)
- 14.30 Optical Model Calculations
J. SALVY (CEA, CE Bruyères-le-Châtel, France)
- 15.00 The use of self-consistent field theory for the calculation of
nuclear data
D. GOGNY (CEA, CE Bruyères-le-Châtel, France)
- 15.30 *Refreshments*
- 16.00 CAPTURE CROSS SECTIONS
Parallel Session A.
Chairman - F. Poortmans
- 16.00 The (N-Z) dependence of neutron strength functions in the 3p region
A.R. de L. Musgrove (AAEC Research Establishment, Sutherland,
Australia and ORNL, Oak Ridge, USA)

Recent measurements of neutron capture cross sections for
fission products - a review
A.R. de L. Musgrove, B.J. Allen, J.W. Boldeman and R.L. Macklin
(AAEC Research Establishment, Sutherland, Australia and
ORNL, Oak Ridge, USA).
- 16.15 Neutron cross section measurements of ^{54}Fe and ^{56}Fe
A. Brusegan, F. Corvi, G. Pasquariello, G. Rohr, R. Shelley and
T. van der Veen. (CBNM, Geel, Belgium)
- 16.30 Neutron capture cross sections of ^{93}Nb , ^{127}I , ^{133}Cs , ^{165}Ho , ^{181}Ta
and ^{238}U from 3 to 80 keV.
N. Yamamuro, K. Saito and T. Wada
(Research Laboratory for Nuclear Reactors, Tokyo Institute of
Technology, Japan)
Y. Fujita and K. Kobayashi (Research Reactor Institute, Kyoto
University, Japan)
- 16.45 Neutron capture cross section measurements $^{143, 145, 146, 148}\text{Nd}$
Y. Nakajima, A. Asami, Y. Kawarasaki, Y. Furuta (JAERI, Tokai-Mura,
Japan) T. Yamamoto (Tohoku University, Sendai, Japan)
Y. Kanda (Kyusyu University, Fukuoka, Japan).

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- 17.00 Mesure de sections efficaces de capture de Rh, Tm, Ir et Au pour des neutrons d'énergie comprise entre 0.5 et 3 MeV
S. Joly, J. Voignier, G. Grenier, D. Drake, L. Nilsson
(CEA, Bruyeres-le-Chatel, France)
- Mesure de la section efficace de capture radiative du thallium naturel et de ses isotopes pour des neutrons d'énergie comprise entre 0.5 MeV et 2.5 MeV
J. Voignier, S. Joly, G. Grenier
(CEA, Bruyeres-le-Chatel, France)
- 17.15 Resonance neutron capture in ^{23}Na and ^{27}Al from 3 to 600 keV
A.R. de L. Musgrove, B.J. Allen and R.L. Macklin
(AAEC Research Laboratory, Sutherland, Australia and ORNL, Oak Ridge, USA).
- The keV (n, γ) cross sections of ^{138}Ba and ^{140}Ce and prompt neutron corrections to gamma ray detectors
A.R. de L. Musgrove, B.J. Allen and R.L. Macklin (AAEC Research Laboratory, Sutherland, Australia and ORNL, Oak Ridge, USA).
- 17.30 Neutron capture and transmission measurements of krypton samples
R.C. Block, H.T. Maguire and H. Fisher (RPI, Troy, USA).
- 20.00 CONCERT IN THE HOLYWELL MUSIC ROOM OXFORD
The Allegri String Quartet.

Tuesday 26th September 1978

- 16.00 CROSS SECTION THEORY
Parallel Session B.
Chairman - J. Story
- 16.00 A new interpretation of the level density systematics
G. Rohr and R. Shelley (CBMM, Geel, Belgium)
- 16.15 Role of the level density parameter 'a' in calculation of
energy distribution matrices for secondary neutrons and
gamma-rays in shielding material
H. Yamakoshi, Y. Itoh, Y. Kanai and K. Ueki (Ship Research
Institute, Tokyo, Japan)
- 16.30 Applications of approximate isospin conservation in R-matrix
analyses
D.C. Dodder and G.M. Hale (LASL, Los Alamos, USA).
- 16.45 Etude expérimental des effets de l'isospin et de la déformation
dans la diffusion des neutrons par les noyaux de la région
des terres rares
G. Haouat, J.P. Delaroche, J. Lachkar, Ch. Lagrange, Y. Patin,
J. Sigaud, R. Shamu, M.T. Mc Ellistrem. (CEA, CE Bruyères-le-Châtel,
France).
- 17.00 Inelastic neutron scattering calculations including the
pre-equilibrium and direct components using optical model
fit parameters only
H. Jahn (KFZ, Karlsruhe, FRG)
- 17.15 Description de l'interaction des neutrons avec des noyaux de la
région du plomb et des actinides à partir des mesures de sections
efficaces totales, de diffusion élastique et de diffusion inélastique
J. Lachkar, G. Haouat, Ch. Lagrange, Y. Patin, J. Sigaud and M. Cates
(CEA, CE Bruyères-le-Châtel, France)
et
S. Ferguson and R.E. Shamu
(Western Michigan University, Kalamazoo, Michigan, USA)
- 17.30 Calcul de spectres d'émission et de sections efficaces par
le modèle d'excitation de Griffin
O. Bersillon et L. Faugere. (CEA, CE Bruyères-le-Châtel, France)
- 20.00 CONCERT IN THE HOLYWELL MUSIC ROOM, OXFORD
The Allegri String Quartet

Wednesday 27th September 1978

- 09.15 NUCLEAR DATA FOR FUEL MANAGEMENT
Chairman - C.G. Campbell
- 09.15 Nuclear data for fuel handling, reprocessing and waste
H. KÜSTERS (KFZ, Karlsruhe, FRG)
- 10.15 Fission product and actinide data
P. HAMMER (CEA, CEN Cadarache, France)
- 10.45 Fission yield data
H.O. DENSCHLAG (University of Mainz, Mainz, FRG)
- 11.15 *Refreshments*
- 11.45 FUEL MANAGEMENT
Parallel Session A.
Chairman - S. Pearlstein
- 11.45 Magnox fuel inventories: calculation and experiment
S. Nair, J.R. Harvey and J.A. Desoisa
(Berkeley Nuclear Laboratories, Berkeley, England,
A.J. Fudge, K.M. Glover and R.A.P. Wiltshire (AERE, Harwell, England)
- 12.00 Formation et disparition des actinides secondaires dans les
réacteurs. Resultats d'expérience sur combustibles irradiés et
situation des besoins pour la physique des réacteurs, la retraitement
et la fabrication des combustibles
M. Darrouzet, A. Giacometti et M. Robin (CEA, CEN Cadarache, France)
- 12.15 Energy spectra of delayed neutrons from uranium fission
J.G. Owen, J. Walker and D.R. Weaver (University of Birmingham,
Birmingham, England)
- 12.30 Neutron yields from (α, n) reactions in the light elements
D. West and A.C. Sherwood (AERE, Harwell, England)

Neutron production from (α, n) reactions in actinide oxides
E.W. Lees (AERE, Harwell, England)
- 12.45 *Lunch*
- 14.00 EXCURSION TO BLENHEIM PALACE
- 14.00 VISIT TO NUCLEAR PHYSICS LABORATORIES AT HARWELL

Wednesday 27th September 1978

- 11.45 BIOMEDICAL AND OTHER APPLICATIONS
Parallel Session B
Chairman - A.T.G. Ferguson
- 11.45 Nuclear data requirements for the calculation of absorbed dose and simulation of tissue response in neutron therapy
G. Pfister, G. Hehn, M. Mattes, H.P. Friedlein (University of Stuttgart, Stuttgart, FRG)
- 12.00 Données nucléaires de base pour la dosimétrie en radiothérapie et radiobiologie
V.D. Nguyen, A. Ricourt, M. Chentob et N. Parmentier (CEA, Fontenay-aux-Roses, France)
- 12.15 Neutron cross section calculation in the energy range 20-50 MeV for elements of biomedical importance
P.J. Dimbylow (NRPB, Harwell, England)
- 12.30 Nuclear Data in the design of neutron probes for borehole logging
L.G. Sanders. (AERE, Harwell, England)
- 12.45 Lunch
- 14.00 EXCURSION TO BLENHEIM PALACE
- 14.00 VISIT TO NUCLEAR PHYSICS LABORATORIES AT HARWELL

Thursday 28th September 1978

09.15 NEUTRONS AND DATA FOR BIOMEDICINE AND ANALYSIS

Chairman - M.K. Mehta

09.15 Biomedical neutrons

W.G. Cross (Chalk River Nuclear Laboratories, Chalk River, Canada).

09.45 Nuclear data needs in bio-medicine

G. STOCKLIN (KFA, Jülich, FRG)

10.15 Data needs for analysis by neutron interrogation

B.W. HOOTON (AERE, Harwell, England)

10.45 Refreshments

11.15 RESONANCE PARAMETERS

Parallel Session A.

Chairman - F.H. Fröhner

11.15 Neutron cross sections below 7 keV for ^{93}Nb

J. Winter, E. Cornelis, L. Mewissen, F. Poortmans, G. Rohr,
R. Shelley, T. van der Veen and G. Vanpraet (CBNM, Geel;
SCK/CEN Mol; RUCA University of Antwerp, Belgium)

Neutron resonance parameters of ^{105}Pd and ^{108}Pd

P. Stavaloz, E. Cornelis, L. Mewissen, F. Poortmans, G. Rohr
and T. van der Veen (CBNM, Geel; University of Brussels; SCK/CEN Mol;
University of Antwerp, Belgium)

11.30 Neutron resonance parameters of ^{91}Zr

A. Brusegan, F. Corvi and G. Rohr (CBNM, Geel, Belgium)

C. Coceva, P. Giacobbe, M. Magnani (CNEN, Bologna, Italy)

p-wave assignments of ^{232}Th neutron resonances

F. Corvi, G. Pasquariello, T. van der Veen (CBNM, Geel, Belgium)

11.45 The total cross section of Tc99 from 4.5 to 44eV

P. Fischer, G.-G. Priesmeyer, U. Harz, (IKK, Kiel, FRG)

12.00 Neutron scattering lengths and resonance parameters

L. Koester, K. Knopf, W. Waschkowski - (Technische Universität
München, Garching, FRG)

12.15 Practical multilevel cross sections in the envelope of R-matrix
predictions

S.H. Kim, D.R. Harris and R.C. Block (RPI, Troy, USA)

Thursday 28th September 1978

- 12.30 The influence of molecular vibrations on neutron reactions
 C.D. Bowman and R.A. Schrack (NBS, Washington, USA)

 Chemical and temperature effects on thermal uranium fission
 R.A. Schrack (NBS, Washington, USA)
- 11.15 NUCLEAR DATA FOR FUSION REACTORS
 Parallel Session B
 Chairman - H. Liskien
- 11.15 Studies of the ${}^6\text{Li}$ (n, α) reaction
 T. Andersson, C. Nordborg, L. Nilsson (Tandem Accelerator
 Laboratory, Uppsala, Sweden),
 H. Condé, L.G. Strömberg (NDRI, Stockholm, Sweden)
- 11.30 (n, α) reactions on light nuclei
 M. Mörike, T. Rohwer, G. Staudt, (Physikalisches Institut der
 Universität Tübingen, Tübingen, FRG)
- 11.45 Measurement of (n, t) cross-sections at 14 MeV and calculations
 of excitation functions for fast neutron reactions
 S. Sudár and J. Csikai (Kossuth University, Debrecen, Hungary)

 Measurement of cross sections for (n, t) reactions on light nuclei
 F. Cserpák, T. Biró and J. Csikai (Kossuth University, Debrecen,
 Hungary)
- 12.00 Neutron spectra from materials used in fusion-fission hybrid
 reactors
 L.F. Hansen and C. Wong (LLL, Livermore, USA)

 Neutronic studies of ${}^{233}\text{U}$ fission breeder
 L.F. Hansen and J.A. Maniscalco (LLL, Livermore, USA)
- 12.15 Decay data of ${}^{93}\text{Nb}^m$
 W. Bambynek, K.H. Czock, D. Reher and R. Vaninbrouckx
 (CBNM, Geel, Belgium)
- 12.30 Neutron data for hybrid reactor calculations
 G.B. Jankov (USSR)
- 12.45 Lunch

Thursday 28th September 1978

14.00 FACILITIES AND TECHNIQUES

Chairman - T. Fuketa

14.00 Accelerator breeding of fissile materials

R.F. TASCHEK (LASL, Los Alamos, USA)

14.30 Counter techniques for highly radioactive samples

K. KÄPPELER (KFZ, Karlsruhe, FRG)

15.00 The Rutherford spallation neutron source

G. MANNING (Rutherford Laboratory, Chilton, England)

15.30 *Refreshments*

16.00 TECHNIQUES

Parallel Session A.

Chairman - M.S. Coates

16.00 Position, time and energy sensitive detectors for fission fragments

M. Mutterer, J.P. Theobald (Institut für Kernphysik der T.H., Darmstadt, FRG)

16.15 A ³He high pressure gas scintillation detector

R. Fischer, H. Benthe, and B. Zeitnitz

(Ruhr-universität, Bochum, FRG) and R. van Staa (Universität Hamburg, FRG)

16.30 Production d'une spectre continu de neutrons à l'aide de la réaction ⁹Be (d,n) ¹⁰B auprès de l'accélérateur Van de Graaff du Centre d'Etudes de Bruyères-le-Châtel

S. Plattard, M. Dumazert, D. Gimat, L. Sinopoli et J. Uzureau (CEA, CE Bruyères-le-Châtel, France)

16.45 Mesure de sections efficaces de capture radiative de neutrons rapides par la méthode du spectre intégré

S. Joly, J. Voignier, G. Grenier, D.M. Drake et L. Nilsson

(CEA, CE Bruyères-le-Châtel, France)

17.00 Mesures absolues de sections efficaces de fission

M. Cancé and G. Grenier

(CEA, CE Bruyères-le-Châtel, France)

Thursday 28th September 1978

- 17.15 Monte Carlo calculations for intermediate - energy standard neutron field.
O.P. Joneja, K. Subbukutty, S.B.D. Iyengar and M.P. Navalkar (Bhabha Atomic Research Centre, Bombay, India)
- 17.30 A hybrid time-of-flight spectrometer for thermal neutron scattering
S. Răpeanu, V. Tripăduş, C. Blaj, M. Ion, I. Pădureanu, P. Timiș, N. Popa, Gh. Bucur (Institute of Nuclear Power Reactors, Bucharest, Romania).
- 19.30 CONFERENCE DINNER AT ST. CATHERINE'S COLLEGE, OXFORD
- 16.00 FISSION CROSS SECTIONS
Parallel Session B.
Chairman - G. Grenier
- 16.00 Measurements of the ^{235}U fission cross section in the MeV energy region
A.D. Carlson and B.H. Patrick (NBS, Washington, USA)
- 16.15 Fission cross section for ^{242m}Am
J.C. Browne, R.E. Howe, R.J. Dongan, R.J. Dupsyk and J.H. Landrum (LLL, Livermore, USA)
- 16.30 Measurement of the sub-threshold fission cross section of ^{240}Pu and ^{241}Am
K. Wisshak, and F. Käppeler (KFZ, Karlsruhe, FRG), W. Hage and H. Hettinger (CEC, JRC, Ispra, Italy)
- 16.45 Measurements of the ^{241}Am neutron induced fission cross section in the energy range 100 eV to 5.3 MeV
H.-H. Knitter and C. Budtz-Jørgensen (CBNM, Geel, Belgium)
- 17.00 Absolute fast neutron fission cross sections of ^{239}Pu and ^{240}Pu
K. Kari and S. Cierjacks (KFZ, Karlsruhe, FRG)
- 17.15 Relative fission cross section measurements of $^{232}\text{Th}/^{235}\text{U}$ and $^{236}\text{U}/^{235}\text{U}$
C. Nordborg (TAL, Uppsala, Sweden), H. Condé and L.G. Strömberg (National Defence Research Institute, Stockholm, Sweden)
- 17.30 The fission neutron spectrum from the spontaneous fission of ^{252}Cf
D. Culley and J.W. Boldeman (AAEC Research Laboratory, Sutherland, Australia)
- 19.30 CONFERENCE DINNER AT ST. CATHERINE'S COLLEGE, OXFORD.

Friday 29th September 1978

- 09.15 NUCLEAR DATA FOR SAFEGUARDS AND TRANSACTINIUM CROSS-SECTIONS
Chairman - H. Motz
- 09.15 Nuclear data for safeguards
T. FUKETA (JAERI, Tokai-Mura, Japan)
- 09.45 Calculation of transactinium and other cross sections
J.E. LYNN (AERE, Harwell, England)
- 10.15 Measurement of the cross sections of the minor transactinium isotopes
H. WEIGMANN (CBNM, Geel, Belgium)
- 10.45 Refreshments
- 11.15 REACTOR PHYSICS AND INTEGRAL EXPERIMENTS
Parallel Session A.
Chairman - S.L. Whetstone
- 11.15 Conséquences des incertitudes sur les données dans le calcul de protection
J.C. Estiot, J. Moreau, M. Salvatores, J.P. Trapp, V. Rado and A. Decarli (CEA, CEN Cadarache, France)
- 11.30 Benchmark experiments with thorium in a fast reactor environment.
U. Schmocker, K. Gmür, H. Graf, M. Jermann, C. McCombie, R. Richmond and S. Seth (SFIRR, Würenlingen, Switzerland)
- 11.45 An assessment of the cross sections used in thermal reactor lattice studies
H.C. Huria, P. Mohanakrishnan, K.R. Srinivasan and B.P. Rastogi (Bhabha Atomic Research Centre, Bombay, India)
- An Analysis of enriched UO_2 , enriched U-metal, $PuO_2 + UO_2$, (Pu + Al) alloy fuelled light water moderated lattices and $Pu(NO_3)_4$ solution in H_2O experiments from the point of view of an Evaluation of Nuclear Data
B.P. Rastogi, H.C. Huria, P. Mohanakrishnan, K.R. Srinivasan and V. Jagannathan,
(Bhabha Atomic Research Centre, Bombay, India.)
- 12.00 Mesures intégrales de la capture des produits de fission dans les spectres de réacteurs à eau et de réacteurs à neutrons rapides.
L. Martin-Deidier, M. Darrouzet, P. Hammer et E. Fort (CEA, CEN Cadarache, France).

Friday 29th September 1978

- 12.15 Fast neutron dose in high-temperature gas-cooled reactors - comparison of measured and calculated fast fluxes
R.D. Neef, V. Drücke, H. Khamis and W. Litzow (KFA, Jülich, FRG)
- 12.30 Reproduction of the Weale experiment results with modified ENDF/B-IV U-238 data
M. Segev and A. Krumbein (Soreq Nuclear Research Centre, Yavne, Israel)
- 11.15 FAST NEUTRON REACTIONS
Parallel Session B.
Chairman-I. Šlaus
- 11.15 A simple model for (n,2n) and (n,3n) cross sections of heavy elements
M. Segev and M. Caner (Soreq Nuclear Research Centre, Yavne, Israel)
- 11.30 Systématique des sections efficaces de réaction (n,2n) pour des séries d'isotopes séparés
J. Fréhaut et J. Jary (CEA, CE Bruyères-le-Châtel, France)
- 11.45 Pre-equilibrium effects in (n,2n) cross sections at 14.5 MeV
S.K. Gupta and A. Chatterjee. (Bhabha Atomic Research Centre, Bombay, India)

(n,2n) and (n,3n) cross sections on the basis of statistical model for fissionable nuclei
M.L. Jhingan, R.P. Anand, S.K. Gupta and M.K. Mehta (Bhabha Atomic Research Centre, Bombay, India)
- 12.00 Measurements of (n,3n) cross sections for ^{235}U and ^{238}U
L.R. Veaser and E.D. Arthur (LASL, Los Alamos, USA)
- 12.15 Analysis of neutrons emitted from 14 MeV neutron reactions
S. Pearlstein (BNL, Upton, USA)
- 12.30 Evaluation of the cross-sections for the reactions $^{24}\text{Mg}(n,p)^{24}\text{Na}$, $^{64}\text{Zn}(n,p)^{64}\text{Cu}$, $^{63}\text{Cu}(n,2n)^{62}\text{Cu}$ and $^{90}\text{Zr}(n,2n)^{89}\text{Zr}$
S. Tagesen and H. Vonach (Institut für Radium forschung und Kernphysik, Vienna, Austria).
- 12.45 Lunch

Friday 29th September

- 14.00 NUCLEAR DATA FOR FUSION REACTORS
Chairman - J. Walker
- 14.00 Nuclear data for fusion reactors
O.N. JARVIS (AERE, Harwell, England)
- 14.30 Neutron threshold reactions
S.M. QAIM (KFA, Jülich, FRG)
- 15.00 Fast neutron reaction mechanisms
D. SEELIGER (Technical University, Dresden, GDR)
- 15.30 Refreshments
- 16.00 CAPTURE CROSS SECTIONS
Parallel Session A
Chairman - A.B. Smith
- 16.00 Capture cross section measurements on ^{240}Pu , ^{242}Pu and ^{241}Am
between 10 and 250 keV
K. Wisshak, F. Kaeppler (KFZ, Karlsruhe, FRG)
- 16.15 Measurement of neutron capture cross sections of ^{232}Th by
activation method
H.M. Jain, R.P. Anand, M.L. Jhingan, R.N. Jindal, V.C. Deniz
and M.K. Mehta (Bhabha Atomic Research Centre, Bombay, India)
- 16.30 Self-acting complex in line with electronic computer
designed for fission product nuclear characteristics
studies
N.G. Volkov (USSR)
- 16.45 Calculated neutron capture cross sections for the ground state
and isomers of $^{93,94,95}\text{Nb}$
M.A. Gardner and D.G. Gardner (LLL, Livermore, USA)
Neutron capture cross sections for unstable nuclei in the mass
90 region derived from proton capture measurements
D.G. Gardner, F.S. Dietrich, D.W. Heikkien (LLL, Livermore, USA)
- 17.00 IBR-2 Periodically pulsed reactor for neutron research
V.D. Ananiev, D.I. Blokhintsev, I.M. Frank, E.P. Shabalin
(JINR, Dubna, USSR)
- 17.15 The WNR facility - a pulsed spallation neutron source at the Los
Alamos Scientific Laboratory.
J.J. Malanify, G.J. Russell, N.S.P. King, P.W. Lisowski
(LASL, Los Alamos, USA)
- EVENING SHAKESPEARE MEMORIAL THEATRE PLAY
"Love's Labour's Lost" by William Shakespeare

Friday 29th September 1978

16.00 EVALUATION OF NUCLEAR DATA

Parallel Session B.

Chairman - E. Fort

- 16.00 Adjustment of evaluated neutron capture cross section of Nd isotopes to integral STEK and CFRMF data
H. Gruppelaar, J.W.M. Dekker, A.J. Janssen and H.C. Rieffe
(ECN, Petten, The Netherlands)
- 16.15 The linearity assumption in adjustment procedures: is it a real problem?
Y. Yeivin (Racah Institute of Physics, Jerusalem, Israel)
- 16.30 Evaluation of neutron induced cross sections for ^{31}P by means of statistical model and coupled channel optical model calculations
B. Strohmaier and M. Uhl (Institute für Radiumforschung und Kernphysik, Vienna, Austria)
- 16.45 Evaluation of the $^{58}\text{Ni}(n,2n)^{57}\text{Ni}$ reaction cross sections
L. Adamski, M. Herman, A. Marcinkowski
(Institute of Nuclear Research, Warsaw, Poland)
- 17.00 Evaluation des sections efficaces neutroniques de ^{169}Tm et Ir naturel de 10^{-5} eV à 20 MeV
O. Bersillon, G. Simon, E. Arthur and C. Philis
(CEA, CE Bruyères-le-Châtel, France)
- 17.15 Fission product evaluation data file for Super Phoenix project
M. Darrouzet, E. Fort, J. Krebs, G. Langlet, L. Martin-Deidier, P. Ribon, Tran Quoc Thuong.
CEA/CEN Cadarache-Saclay, France
F. Fabbri, A. Montaguti, E. Menapace, M. Motta, G.C. Panini, G. Reffo, M. Vaccari,
CNEN, Bologna, Italy.
- 17.30 Evaluation par modeles nucléaires des sections efficaces neutroniques des plutonium 240 et 242 entre 20 keV et 20 MeV
J. Jary et Ch. Lagrange (CEA, CE Bruyères-le-Châtel, France)
- EVENING SHAKESPEARE MEMORIAL THEATRE PLAY
"Love's Labour's Lost" by William Shakespeare