

APSORC2001 PROGRAM

9:00-9:20

Room S

Chairperson: Prof. N. Momoshima

OPN Opening Ceremony

Symposium Chairman's Remarks: Prof. Y. Maeda, Symposium Chairman
 Opening Remarks: Prof. H. Nakahara, President of JSNRS
 Intern' Advisory Board's Remarks: Prof. Y. Liu, Peking University

9:20-10:05

Chairperson: Prof. Y. Nagame

PL1 Chemical Properties of the Transactinide Elements

J. V. Kratz(Univ. Mainz)

10:05-10:50

Chairperson: Prof. M. Ebihara

PL2 Accuracy and Uncertainty in Radiochemical Measurements: Learning from Errors in Nuclear Analytical Chemistry

R. M. Lindstrom(NIST)

Coffee Time

11:10-12:10

Room A

Chairpersons: Prof. H. Kudo and Prof. Y. L. Zhao

1A1

Measurement of the Half Life of $^{53}\text{Mn}(\text{II})$

Y. Oura (Tokyo Metro. Univ.^a) T. Nagamine^a, S. Yoneda(Nat. Sci. Museum), M. Ebihara^a,
M. Honda^a

1A2

An Attempt to Change the Half-Lives of β -Decay Nuclides

N. Takahashi(Osaka Univ.^a), H. Baba^a, A. Sinohara^a, A. Yokoyama(Kanazawa Univ.),
A. Toyoshima^a, Y. Kasamatsu^a, K. Goto^a, Y. Shoji^a, T. Koike^a, K. Takamiya(Kyoto Univ.)

1A3

Alpha-Decay from the 3.5eV Isomer of ^{229}Th

T. Mitsugashira(Tohoku Univ.^a), M. Hara^a, T. Ohtsuki^a, H. Yuki^a, K. Takamiya(Kyoto Univ.),
Y. Kasamatsu(Osaka Univ.^b), A. Shinohara^b, H. Kikunaga(Kanazawa Univ.^c), T. Nakanishi^c

1A4

Identification of ^{159}Pm , ^{162}Sm , and ^{166}Gd

S. Ichikawa, M. Asai, A. Osa, K. Tsukada, H. Haba, Y. Nagame(JAERI),

S. Goto(Niigata Univ.), M. Shibata(Nagoya Univ.), Y. Kojima(Hiroshima Univ.),
M. Sakama(Univ. Tokushima)

11:10-12:10

Room B

Chairpersons: Dr. J. D. Navratil and Prof. T. Sekine

IB1

Radiation-Induced Luminescence and Hydrogen Radical Formation Associated with Thermal Annealing Treatments on White Minerals

T. Hashimoto, E. Nishiyama, Y. Yanagawa(Niigata Univ.)

IB2

New Aspects of Time Interval Analysis Method for the Determination of Artificial Alpha Nuclides

Y. Uezu(JNC), T. Hashimoto(Niigata Univ.)

IB3(Invited Lecture)

Radioactivity Measurement and Standardization in Thailand

P. Wanabongse(Office of Atomic Energy for Peace)

11:10-12:10

Room C

Chairpersons: Prof. K. Masumoto and Prof. T. C. Chu

IC1

Non-Destructive Determination of Trace Amounts of Iodine in Biological Samples by Epithelial Neutron Activation and Compton Suppression Gamma-ray Spectrometry

C. Yonezawa(JAERI^{a)}), H. Matsue^{a)}), M. Yukawa(Nat. Inst. Radiological Sci.)

IC2

Corrections of Neutron Self-Shielding in Activation Analysis of Samples Containing a Large Amount of Manganese

K. Tomura, H. Tomuro(Rikkyo Univ.)

IC3

New Technique for Determination of Trace-Elements Using Multiparameter Coincidence Spectrometry

Y. Hatsukawa, Y. Toh, M. Oshima, T. Hayakawa, N. Shinohara(JAERI)

IC4

Radioactivity Measurement and Element Analysis within a Wood Disk by Neutron Activation Analysis

Y. Hayashi, N. Ikeue, T. M. Nakanishi(Univ. Tokyo)

Lunch Time

12:10-13:30

Room A

Young Researchers Meeting (若手の会)

13:40-14:10

Room S

Chairperson: Prof. Y. Takashima

Special Lecture:

Japanese Pioneers in the Field of Nuclear and Radiochemistry

N. Saito(Univ. Tokyo)

14:10-15:10

Chairperson: Prof. T. Kishikawa

Hevesy Medal Award Ceremony

Symposium Chairman's Remarks

Prof. Y. Maeda

Hevesy Medal Selection Panel's Remarks

Prof. A. Vértés(deputy)

Hevesy Award Lecture:

Speciation Neutron Activation Analysis

A. Chatt(Dalhousie Univ., Canada)

Coffee Time

15:30-17:00

Room A

Chairpersons: Prof. S. K. Lahiri and Prof. A. Yokoyama

IA5(Invited Lecture)

Some Recent Activities of the International Atomic Energy Agency in the Field of Nuclear Data

D. D. Sood, A. Trkov(IAEA)

IA7

Fragment Mass and Total Kinetic Energy Distributions in Fission of Light Actinides

I. Nishinaka, Y. Nagame(JAERI)

IA8

Primary Fragment Mass-Yield Distributions for Mass-Asymmetric Fission Path of Heavy Nuclei

Y. L. Zhao(Chinese Acad. Sci., JAERI^a), Tokyo Metro. Univ.^b), RIKEN), I. Nishinaka^a,

Y. Nagame^a), K. Tsukada^a), K. Sueki^b), S. Goto^a) (Niigata Univ.), M. Tanikawa(Univ. Tokyo),

H. Nakahara^b)

IA9

Characteristics of Asymmetric Mass Distributions in Proton-Induced Fission of Actinides

S. Goto, D. Kaji(Niigata Univ.),

I. Nishinaka, Y. Nagame, S. Ichikawa, K. Tsukada, M. Asai, H. Haba, S. Mitsuoka, K. Nishio(JAERI),

M. Sakama(Tokyo Metro. Univ. ^a), Y. L. Zhao ^a) (Chinese Acad. Sci.), K. Sueki ^a),

K. Tanikawa(Univ. Tokyo), K. Takamiya(Kyoto Univ.), H. Kudo(Niigata Univ.), H. Nakahara^a)

IA10

Status of Heavy Element Synthesis in RIKEN

D. Kaji(RIKEN^a), Niigata Univ.^b), K. Morita ^a), K. Morimoto ^a), Y. L. Zhao ^a)(Chinese Acad. Sci.),

A. Yoneda ^a), T. Suda ^a), A. Yoshida ^a), H. Kudo^b), K. Katori ^a), I. Tanihata^a)

15:30-16:45

Room B

Chairpersons: Prof. T. Nakanishi and Dr. R. M. Lindstrom

IB5

Basic Characteristics of Hollow Filament Polyimide Membrane in Gas Separation and Its Application to Tritium Monitors

S. Sasaki(KEK^a), E. Tega(Shizuoka Univ.^b), A. Shimada^b), M. Akahori^b), T. Suzuki^a), K. Okuno^b), K. Kondo^a)

IB6

The Improvement of Distillation Unit for Determination of Environmental Tritiated Water

S. F. Fang, J. J. Wang, T. W. Wang, J. H. Chiu(Inst. Nucl. Ener. Res.)

IB7

Radiolytic Formation of Tc(IV) Oxide Colloids

H. Narushima, T. Sekine, Y. Kino, H. Kudo(Tohoku Univ.), M. Lin, Y. Katsumura(Univ. Tokyo)

IB8

Substituent Effect on Redox Potential of Nitrido Technetium Complexes with Schiff Base Ligand: Theoretical Calculations

T. Takayama, T. Sekine, H. Kudo(Tohoku Univ.)

IB9

Technetium(VII) Sulfide Colloid Growing Observed by Laser-Induced Photoacoustic Spectroscopy

Y. Saiki, M. Fukuzaki, T. Sekine, Y. Kino, H. Kudo(Tohoku Univ.)

15:30-17:00

Room C

Chairpersons: Prof. A. Chatt and Prof. T. M. Nakanishi

IC5

Neutron Activation Analysis of Trace Elements at Sediment-Water Interface in Lake Biwa, Japan

S. Kojima(Aichi Med. Univ.), T. Saito(Osaka Univ.), J. Takada(Kyoto Univ.), M. Furukawa(Yokkaichi Univ.), K. Yokota(Lake Biwa Res. Inst.)

IC6

Accuracy of K_{α} -Factors for Multielement Determination by Neutron Induced Prompt Gamma-ray Analysis

H. Matsue, C. Yonezawa(JAERI)

IC7

Determination of All Platinum-Group Elements in Mantle-Derived Xenoliths by Neutron Activation Analysis with NiS Fire Assay Preconcentration

X. L. Li (Tokyo Metro. Univ. ^a), Shanghai Inst. Nucl. Res.), M. Ebihara^a)

IC8

Validation of the Accuracy of the LabSOCS Software for Mathematical Efficiency Calibration of Ge Detectors for Typical Laboratory Samples

F. L. Bronson(Canberra Industries)

IC9

^7Be and ^{10}Be in Rains Collected in Tokyo

H. Nagai(Nihon Univ.)

IC10

High-Precision Measurement of ^{14}C with AMS and Its Application to Environmental Studies

T. Nakamura, E. Niu, H. Oda, T. Ohta, A. Ikeda(Center Chrono. Res.)

In the evening

17:30-19:00

Section meeting(分科会)

Room A

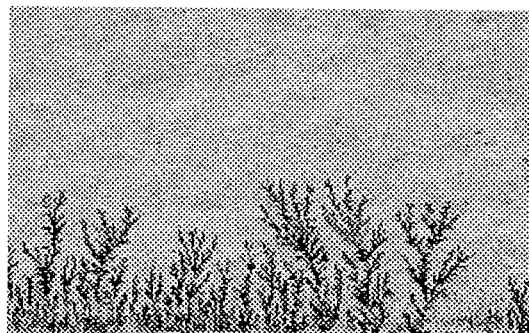
核化学分科会

Room B

原子核プローブ分科会

Room C

放射化分析分科会



8:45-9:30

Room S

Chairperson: Prof. M. Katada

PL3

Atomic and Molecular Motion in Iron Organometallics

R. H. Herber(Hebrew Univ.)

Coffee Time

9:50-11:05

Room A

Chairpersons: Prof. T. Hashimoto and Prof. G. R. Choppin

2A1

Simulation of the Temperature Distributions in the Spiral-II Target for the Production of Radioactive Ion Beam

D. Nayak(Saha Inst. Nucl. Phys.),

M. G. Saint Laurent, F. Pellemoine, V. Dubois(Grand Accelérateur National d'Ions Lourds)

2A2

Production and Separation of ^{183}Os and ^{183}Re from ^7Li Irradiated Tantalum Target

S. Lahiri, K. Banerjee(Saha Inst. Nucl. Phys.),

A. Ramaswami, S. B. Manohar(Bhabha Atomic Research Centre)

2A3

Separation of a Multitracer Prepared at Kyoto University Reactor

T. Ichihara, K. Takamiya, T. Sasaki, S. Shibata(Kyoto Univ.)

2A4

In Vivo Assessment of Dynamics of Various Elements in Living Rat Using Multitracer

K. Matsumoto(Showa Pharm. Univ.^a), I. Ui^a, R. Hirunuma(RIKEN^b), S. Enomoto^b, K. Endo^a

2A5

Water Movement in a Plant Sample by Neutron Beam Analysis as well as Positron Emission Tracer Imaging System

T. M. Nakanishi, Y. Okuni, J. Furukawa, K. Tanoi, H. Yokota, N. Ikeue(Univ. Tokyo),

M. Matsubayashi, N. S. Ishioka, S. Watanabe, A. Osa, T. Sekine, S. Matsuhashi, T. Ito,

T. Kume(JAERI), H. Uchida, A. Tsiji(Hamamatsu Photonics, Co.,)

11:10-12:10

Chairpersons: Prof. J. R. Peterson and Prof. Y. Minai

2A6

Production and Characterization of Actinide Metallofullerenes

K. Akiyama(Tokyo Metro. Univ.^a, JAERI^b), K. Sueki^a, H. Haba^b, K. Tsukada^b, M. Asai^b, T. Yaita^b,

Y. Nagame^b, K. Kikuchi^a, M. Katada^a, H. Nakahara^a

2A7

Systematic Study of Lanthanoid Endohedral Metallofullerenes

K. Sueki(Tokyo Metro. Univ.^a), K. Akiyama^a, Y. Zhao^a, I. Ito^a, Y. Ohkubo(Kyoto Univ.),

K. Kikuchi^{a)}, M. Katada^{a)}, H. Nakahara^{a)}

2A8(Invited Lecture)

Application of Radioactive Tracer Method to Copper Migration in Semiconductor Lithography

T.-C. Chu(Nat. Tsing Hua Univ.^{a)}, F.-H. Ko(Nat. Nano Device Lab.), C.-C. Hsu^{a)}

9:50-11:05

Room B

Chairpersons: Prof. A. Vertes and Prof. T. Suzuki

2B1(Invited Lecture)

Formation and Chemical Reactions of Positronium Studied by AMOC Measurements

H. Stoll, P. Castellaz, A. Siegle, J. Major(Max-Planck-Inst. für Metallforschung)

2B3

A Possibility to Study Substance Properties Using Positronium as the Simplest "Labeled" Atom

V. P. Shantarovich(KEK^{a)}, Russian Academy of Science), T. Suzuki^{a)}, C. He^{a)}

2B4

Positron Annihilation in C₆₀ and K₆C₆₀

Y. Ito(KEK)

2B5

Positive Muons in Condensed Phase Ammonia

M. K. Kubo(Univ. Tokyo), K. Nishiyama(KEK)

11:10-12:25

Chairpersons: Prof. Y. Sakai and Prof. V. P. Shantarovich

2B6

Determination of Antiproton Mass from the Calculation of Energy Levels of Antiprotonic Helium Atoms

Y. Kino(Tohoku Univ.^{a)}, M. Kamimura(Kyushu Univ.), H. Kudo^{a)}

2B7

On-Line TDPAC Studies with the ¹⁹O Beams

W. Sato(RIKEN^{a)}, H. Ueno^{a)}, H. Watanabe^{a)}, H. Ogawa(AIST), H. Miyoshi(Tokyo Inst. Tec. ^{b)}), N. Imai(Univ. Tokyo), A. Yoshimi^{a)}, K. Yoneda^{a)}, D. Kameda^{b)}, Y. Kobayashi^{a)}, K. Asahi^{a),b)}

2B8

Characterization of Perovskite Related Oxides by Nuclear Resonance Inelastic Scattering of Synchrotron Radiation

K. Nomura(Univ. Tokyo^{a)}), T. Mitsui(JAERI), A. Rykov^{a)}, Y. Yoda(Japan Syn. Rad. Res. Inst.), Y. Kobayashi(Kyoto Univ.^{b)}), M. Seto^{b)}

2B9

The Magnetic, Electronic and Vibrational State of Fe in FeCr₂S₄

Z. Klencsár, E. Kuzmann, A. Vertes(Eötvös Lorand Univ.), A. Simopoulos, E. Devlin, G. Kallias(Inst. Materials Science), A. Nath(Drexel Univ.)

2B10

Crystal Structures and ^{155}Gd Mössbauer Spectra of Some Gd(III)- β -Diketonato Complexes

J. Wang, M. Takahashi, T. Kitazawa, M. Takeda(Toho Univ.)

9:50-11:05

Room C

Chairpersons: Prof. K. Komura and Deputy Dir. H. Yang

2C1

Natural Po-Organic Compounds in the Black Shales as a Consequence of Nuclear Recoils Effects

R. V. Bogdanov, S. A. Ozernaya, S. A. Timofeev(Saint-Petersburg State Uni.)

2C2

Determination of Alpha-Emitters in High Purity Semiconductor Materials

T. Mitsugashira(Tohoku Univ.^{a)}), M. Hara^{a)}), P. Kim(Vacuum Metallurgical Co., Ltd),

K. Nakashima, K. Nakayama(ULVAC Mate. Tech. Co.)

2C3(Invited Lecture)

Environmental Radiation Monitoring in Korea

J.-W. Park, Y.-K. Oh(Cheju Nat. Univ.)

2C5

Development for a High Efficiency Radon-222 Collection System Utilizing Silicone Oil as a Cold Trap Agent

N. Hirose, N. Tsuyuzaki, H. Yamamoto(Iwaki Electronics Co.),

T. Mitsugashira, M. Hara(Tohoku Univ.)

11:10-12:25

Chairpersons: Prof. Y. K. Oh and Prof. N. Momoshima

2C6

Application of Low Background γ -ray Spectrometry to Environmental Monitoring Samples ---Water Leaching Treatment for ^{40}K -Removal ---

M. Inoue, H. Kofuji, M. Yamamoto, H. Sasagawa, K. Komura(Kanazawa Univ.)

2C7

Activity Levels of Radioactive Co and Eu Isotopes Induced by Environmental Neutrons, and Their Contribution to A-Bomb Exposed Samples in Hiroshima and Nagasaki

K. Komura(Kanazawa Univ.), A. M. Yousef(South Valley Univ.)

2C8

In-situ Radiochemical Studies at Grimsel and Mont Terri

W. R. Alexander, W. Kickmaier, I. G. McKinly, M. Hugi(Nat. Cooperative for the Disposal of Radioactive Waste)

2C9

Depth Profiles of Long Lived Radionuclides in Chernobyl Soils after 10 Years from the Accident

H. Amano(JAERI), Y. Onuma(Inst. Radiation Measurement)

2C10

Variation of ^{14}C , ^{137}Cs and Stable Carbon Composition in Forest Soil, and Its Implications

J. Guo(JAERI^{a)}), Zhejing Univ.), M. Atarashi-Andoh^{a)}), H. Amano^{a)}

Lunch Time

12:25-13:40

Room C α 放射体・環境放射能研究懇談会

13:45-15:00

Room S

JSNRS Meeting

15:00-16:00

Room S

Chairperson: Prof. K. Sakamoto

The Japan Society of Nuclear and Radiochemical Sciences Kimura Award Lecture:

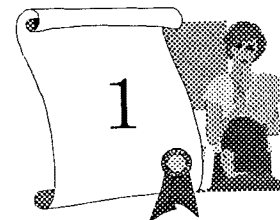
Emission Mössbauer Spectroscopic Studies in Hot-Atom Chemistry

H. Sano(Otsuma Women's Univ.)

16:00-17:45

Lobby

Poster 1 (2P01 - 2P52)



2P01

The Half-Life of ^{147}Sm

N. Kinoshita, T. Nakanishi(Kanazawa Univ.)

2P02

Radiochemical Study of Photon-Induced Spallation at Intermediate Energies

H. Matsumura(Nihon Univ.), M. Yamashita(Kanazawa Univ.^{a)}, H. Kikunaga^{a)}, H. Haba(JAERI^{b)},
K. Washiyama^{a)}, Y. Miyamoto^{b)}, Y. Oura(Tokyo Metro. Univ.), K. Sakamoto^{a)},
S. Shibata(Kyoto Univ.), M. Furukawa(Yokkaichi Univ.), I. Fujiwara(Otemon-Gakuin Univ.)

2P03

Calculation of Nuclear Optical Potentials and Nuclear Fusion Rates in Muonic Molecules

H. Shibata, Y. Kino, H. Kudo(Tohoku Univ.)

2P04

Trace Element Determination in Soft Tissues of Marine Bivalves by Activation Analysis

M. Fukushima(Ishinomaki Senshu Univ.^{a)}, H. Tamate^{a)}, Y. Nakano(Kyoto Univ.)

2P05

Instrumental Neutron Activation Analysis of Extractable Organohalogen(EOX) in Antarctic Marine Organisms

M. Kawano(Ehime Univ.^a), J. Falandysz(Univ. Gdansk), T. Wakimoto^a)

2P06

A Study of Environmental Analysis of Urban River Sediments Using Activation Analysis

Y. Tanaka, A. Kuno, M. Matsuo(Univ. Tokyo)

2P07

Determination of ³⁶Cl in Environmental Samples by AMS

R. Seki, D. Arai, Y. Nagashima, T. Takahashi, T. Matsui(Univ. Tsukuba)

2P08

Relativistic Density Functional Study on the Nitrate Complexes of Tetravalent Rutherfordium and Its Homologues

M. Hirata, H. Haba, Y. Nagame(JAERI)

2P09

Cm³⁺-F⁻ Interaction in a Mixed System of Methanol and Water

I. Satoh(Tohoku Univ.),

T. Watanabe, Y. Ishii, M. Kawasaki, H. Suganuma(Shizuoka Univ.)

2P10

Chemical Separation for Unknown Isotope ²⁵²Bk

T. Maruyama (Niigata Univ.^a), D. Kaji^a), T. Kaneko^a), S. Goto^a, (JAERI^b), K. Tsukada^b), H. Haba^b), M. Asai^b), S. Ichikawa^b), Y. Nagame^b), H. Kudo^a)

2P11

Hot Atom Chemical Behavior of Tritium Produced by ⁶Li(N, α) ³H in Li₄SiO₄

S. Akahori, E. Tega, Y. Morimoto, K. Okuno(Shizuoka Univ.),

M. Nishikawa, K. Munakata(Kyushu Univ.),

H. Moriyama, K. Kawamoto, M. Okada(Kyoto Univ.)

2P12

Installation of Neutron Irradiation Apparatus for Low Temperature Experiments at JRR-3M

Y. Aratono(JAERI)

2P13

Radiochemical Study on Recombination Reactions of H + T → HT and T + T → T₂ in Superfluid and Normalfluid ³He-⁴He Media at 1.4-2.5K

K. Iguchi(Sizuoka Univ.^a), T. Kumada(JAERI^b), K. Okuno^a), Y. Aratono^b)

2P14

New Method for Degradation of Dibutyl Phthalate in Water by Gamma-Ray Irradiation

T. Yoshida, T. Tanabe, Y. Miyashita, H. Yoshida, T. Hattori(Nagoya Univ.)

2P15

Application of Gamma Radiolysis of Water for H₂ Production

T. Sawasaki, T. Tanabe, T. Yoshida, R. Ishida(Nagoya Univ.)

2P16**Multitracer and Neutron Activation Screening: Brain Regional Concentration and Tracer Uptake Behavior in Mice Bred under Controlled Diets**

Y. Yabushita, Y. Kanayama, T. Tarohda, R. Amano(Kanazawa Univ.),
S. Enomoto(RIKEN)

2P17**The Relation between Sb-I Bond Lengths and Charges on Iodine Atoms Determined by ¹²⁷I Mössbauer Spectroscopy**

M. Takeda, M. Takahashi(Toho Univ.)

2P18**Characterization of Ultramafic Rocks from Jinchuan Nickel Deposit in China by ⁵⁷Fe Mössbauer Spectroscopy**

A. Kuno, G. Zheng, M. Matsuo, B. Takano(Univ. Tokyo),
Ji'an Shi, Qi. Wang(Chinese Acad. Sci.)

2P19**A Study on Vertical Distribution of Elements and Their Chemical States in Yatsu Tideland Sediments**

M. Kataoka, A. Kuno, M. Matsuo(Univ. Tokyo)

2P20**Mössbauer Study of Reaction of Laser-Evaporated Iron Atoms with Ozone**

K. Katsumata, Y. Yamada(Sci. Univ. Tokyo)

2P21**Iron(III) LIESST Compounds-A Mössbauer Spectroscopic Study**

G. Juhasz(Kyushu Univ. ^{a)}), S. Hayami^{a)}, O. Sato(KAST), Y. Maeda^{a)}

2P22**Metal-Metal Interaction in Binuclear Ferrocene-Arene Complexes**

S. Nakashima, H. Isobe, N. Akiyama, T. Okuda(Hiroshima Univ.), M. Katada(Tokyo Metro. Univ.)

2P23**Positron Annihilation Study of Free Volume Holes in Polymers and Polymer Blends**

Z. O. Chen(Univ. Tsukuba^{a)}), A. Uedono^{a)}, T. Suzuki(KEK), J. S. He(Chinese Acad. Sci.)

2P24**Clay Wall of Ancient Iron Smelting Furnace Studied by Mössbauer Spectroscopy**

A. Nakanishi(Shiga Univ.^{a)}), T. Kobayashi^{a)}, N. Hagihara(Osaka City Univ.)

2P25**Construction of the Supramolecular Spin-crossover Iron(II) Compounds**

K. Kawamura, S. Hayami, Y. Maeda(Kyushu Univ.)

2P26**Development of the Measuring System for Electronic X-rays Following Atomic Capture of Negative Pions**

K. Goto(Osaka Univ.^{a)}), K. Takamiya(Kyoto Univ.), Y. Kasamatsu ^{a)}, Y. Shoji ^{a)},
A. Yokoyama(Kanazawa Univ.^{b)}), T. Miura(KEK), Y. Hamajima^{b)}, A. Shinohara^{a)}

2P27

Mössbauer Spectroscopic Studies of Perovskite-Type Oxides $\text{Ln}_{1-x}\text{A}_x\text{BO}_3$ (Ln=La, Eu; A=Ca, Sr, Ba; B=Fe, Mn) Synthesized by Sol-Gel Method

T. Yamauchi, M. Katada(Tokyo Metro. Univ.)

2P28

^{161}Dy Mössbauer Spectra for Bridged Cyano Coordination Compounds

K. Suzuki, T. Kitazawa, M. Takahashi, M. Takeda(Toho Univ.)

2P29

^{121}Sb Mössbauer Spectra of Alkali Metal Antimonides M_3Sb ($\text{M}_3=\text{Na}_3, \text{K}_3, \text{Na}_2\text{K}, \text{Rb}_3$)

K. Kitadai, M. Takahashi, M. Takeda(Toho Univ.)

2P30

Structure of a Novel Nitrido Technetium Complex with Peptide Chelate Ligand KYCAR

S. Sato, T. Takayama, T. Sekine, H. Kudo(Tohoku Univ.)

2P31

Basic Studies of Alpha-Recoil Behavior in U and Th Decay Series Using Electrodeposited Sources

T. Morimoto(Jap. Chem. Anal. Center^{a)}), S. Banba^{a)}, T. Hashimoto(Niigata Univ.)

2P32

Radiochemistry Research and Education at Clemson University

J. D. Navratil(Clemson Univ.)

2P33

Characterization of Uranium Series Nuclides in the Geological Materials by Selective Leaching Method

Y. Kanai(AIST)

2P34

Release of Po from Water Supported by Microorganism

N. Momoshima(Kumamoto Univ.), L.-X. Song, S. Osaki, Y. Maeda(Kyushu Univ.)

2P35

^{226}Ra , ^{210}Pb and ^{210}Pb in Different Food Materials and Dose Received by Gudalur People in(South India)

R. Sivakumar(Bharathiar Univ.^{a)}), S. Selvasekarapandian^{a)}, V. Kannan(Envir. Survey Lab.)

2P36

The Study of Uranium Isotope Dilution Method Used to Estimate the Volume Mixing of River Waters

J.-J. Wang (Inst. Nucl. Ener. Res.), T.-Chi Chu(Nat. Tsing Hua Univ.)

2P37

Removal of Impurities from Environmental Water Samples for Tritium Measurement by Means of LS Counter

Y. Sakuma, Y. Ogata, N. Tsuji, H. Yamanishi, T. Iida(Nat. Inst. Fusion Sci.)

2P38**Determination of Trace Rhenium Contents in River Water Samples by Q-ICP-MS and HR-ICP-MS**

S. Uchida(Nat. Inst. Radiological Sci.^a), K. Tagami^a, M. Saito(Kyoto Univ.)

2P39**Atmospheric Deposition of Be-7, K-40, Cs-137, and Pb-210 during 1993-2001 at Tokai-Mura, Japan**

T. Ueno, S. Nagao, H. Yamazawa(JAERI)

2P40**Investigation of Adsorbed Compound on Pine Needle Surfaces for Environmental Monitoring of Uranium**

Y. Saito, Y. Miyamoto, M. Magara, S. Sakurai, S. Usuda(JAERI)

2P41**Distribution and Circulation of Radionuclides Originating from Fallout in a Forest**

S. Ko(Kyoto Univ.^a), T. Aoki^a, H. Ohnishi^a, Y. Katayama(Univ. Human Environments)

2P42**Atmospheric Concentrations of ²¹⁰Pb and ⁷Be at Sarufutsu, Hokkaido, Japan**

S. Sato(Takushin Jun. High School), Y. Koike(Meiji Univ.^a), T. Saito^a, J. Sato^a

2P43**Influence of OH and Metallic Impurities on Radiation-Induced Luminescence Phenomena from Natural Quartz**

Y. Yanagawa, T. Yamaguchi, T. Hashimoto(Niigata Univ.)

2P44**Optical Stimulated Luminescence(OSL) and Thermoluminescence(TL) Properties of Red TL(RTL) Quartz Using a New Automated OSL/TL Measuring System**

T. Nakagawa, H. Usuda, T. Hashimoto(Niigata Univ.)

2P45**Determination of Detection Efficiency with a Ge Detector Using Many Encapsulated Small Radioactive Sources**

N. Nogawa, Y. Makide(Univ. Tokyo)

2P46**Re-Evaluation of Deformation of Photopeak Shapes in Gamma-ray Spectrometry**

T. Kishikawa, T. Isagawa(Kumamoto Univ.)

2P47**Determination of ⁵⁴Mn by Radiochemical γ -ray Spectrometry in Soils Collected from the JCO Campus**

Y. Murata(Kanazawa Univ.^a), T. Muroyama^a, T. Imanaka(Kyoto Univ.), M. Yamamoto^a, K. Komura^a

2P48**Luminescence Dosimetry of Archaeological and Ceramic Samples Using a Single-Aliquot Regenerative-Dose Method**

M. Takano, T. Yawata, T. Hashimoto(Niigata Univ.)

2P49

Anomalously High $^{234}\text{U}/^{238}\text{U}$ Ratios of Tatsunokuchi Hot Spring Waters, Ishikawa Prefecture, Japan

M. Yamamoto(Kanazawa Univ.^{a)}, T. Sato^{a)}, K. Sasaki(Kanazawa Gakuin Univ.), K. Komura^{a)}

2P50

A New Periodic Table for Radiochemistry

M. Aratani(Inst. Envir. Sci.)

2P51

AMS Radiocarbon Dating Ancient Japanese Documents of Known Age

H. Oda(Nagoya Univ.^{a)}, T. Masuda(Aichi Bunkyo Univ.), E. Niu^{a)}, T. Nakamura^{a)}

2P52

Radiocarbon Concentration of Aerosols Collected at Fukuoka, Japan

H. Kawamura(Kyushu Envir. Eval. Assoc.^{a)}, N. Matsuoka^{a)} (Kyushu Univ.^{b)},
N. Momoshima(Kumamoto Univ.), T. Nakamura(Nagoya Univ.), Y. Maeda^{b)}

In the evening

18:15-20:40

Room S

Reception



8:45-9:15

Room A

Chairperson: Prof. T. Mitsugashira

3A1 (Invited Lecture)**Summer Schools in Nuclear and Radiochemistry**

J. R. Peterson (Univ. Tennessee)

9:15-10:30

Room A

Chairpersons: Prof. S. Shibata and Prof. J. V. Kratz

3A3 (The JSNRS Young Scientist Award Lecture)**Radiochemical Studies of Photonuclear Reactions at Intermediate Energies-Recoil Studies of Photospallation and Photofission**

H. Haba(JAERI)

3A5**Isothermal Gas Chromatography of Chlorides of Zr and Hf as Rf Homologs**T. Kaneko (Niigata Univ.^a), S. Ono^a, S. Goto^a, (JAERI^b), H. Haba^b, M. Asai^b, K. Tsukada^b, Y. Nagame^b, H. Kudo^a**3A6****Adsorption of Zr, Hf, and Th from HCl and HNO₃ Solutions by Anion and Cation Exchanges: Model Experiments for the Chemical Characterization of Rutherfordium(Element 104)**

H. Haba, K. Tsukada, M. Asai, A. Toyoshima, K. Akiyama, S. Goto, I. Nishinaka, M. Hirata, S. Ichikawa, Y. Nagame(JAERI),

J. V. Kratz(Universität Mainz), M. Schädell(Gesellschaft für Schwerionenforschung)

3A7**Anion-Exchange Behavior of Rutherfordium(Element 104) in Nitric and Hydrochloric Acid Media**K. Tsukada, H. Haba, M. Asai, I. Nishinaka, S. Ichikawa, Y. Nagame, M. Hirata, T. Yaita(JAERI^a), S. Goto^a, T. Kaneko, T. Maruyama, H. Kudo(Niigata Univ.),A. Shinohara, Y. Shoji, M. Shigekawa, A. Toyoshima^a, A. Yokoyama(Osaka Univ.),K. Akiyama^a, H. Nakahara^a, Y. Oura, K. Sueki(Tokyo Metro. Univ.),

M. Sakama(Univ. Tokushima), M. Schädell(Gesellschaft für Schwerionenforschung),

J. V. Kratz(Univ. Mainz)

9:15-10:30

Room B

Chairpersons: Prof. R. H. Herber and Prof. Y. Yamada

3B3 (Invited Lecture)**Mössbauer Spectroscopy in China**

Y. Hsia, H. Huang, A. M. Ali(Nanjing Univ.)

3B5

Valence States of ^{57}Fe Decayed from ^{57}Mn Implanted into KMnO_4

Y. Kobayashi(RIKEN^{a)}), M. K. Kubo(Univ. Tokyo), T. Saito(Sci. Univ. Tokyo^{b)}), H. Ueno^{a)},
H. Miyoshi^{a)}, K. Yoneda^{a)}, W. Sato^{a)}, Y. Yamada^{b)}

3B6

Synthesis and Mössbauer Spectroscopic Studies of Oxo-Centered Mixed Valence Trinuclear Iron-Fumarate and Iron Malonate Complexes

D. Afroj, T. Yamauchi, M. Katada(Tokyo Metro. Univ.)

3B7

Mechanism of Isochemical Transformations of Iron(III) Oxide Nanoparticles-Mössbauer Study

R. Zboril, M. Mashlan, K. Barcova, M. Vujtek(Palacky Univ.)

8:45-9:15

Room C

Chairperson: Prof. S. Osaki

3C1(Invited Lecture)

Organic Coffee Discrimination with INAA and Data Mining Techniques:New Perspectives for Coffee Trade

E. A. DE. N. Fernandes(Universidade de Sao Paulo^{a)}), F. S. Tagliaferro^{a)},
P. Bode(Delft Univ. of Technology), A. A. Filho^{a)}

9:15-10:30

Chairpersons: Prof. Y. Muramatsu and Dr. S. P. Mishra

3C3

Transfer of ^7Be , ^{210}Pb , and ^{210}Po in a Forest Canopy of Japanese Cedar

S. Osaki, Y. Tagawa, S. Sugihara, Y. Maeda, Y. Inokura(Kyushu Univ.)

3C4

The Role of Microorganisms in the Migration of Radionuclide in Surface Soil

H. Kakiuchi(Inst. Envir. Sci.), H. Amano(JAERI), M. Ichimasa(Ibaraki Univ.)

3C5(Invited Lecture)

Recent Development of Environment Radiochemistry in China

H. Yang, L. Guo(China Inst. for Rad. Protection)

3C7

Transfer of ^{137}Cs and Stable Cs in Soil-Grass-Milk Pathway in Aomori, Japan

H. Tsukada, S. Hisamatsu, J. Inaba(Inst. Envir. Sci.)

Coffee Time

10:50-12:20

Room A

Chairpersons: Dr. D. D. Sood and Prof. Y. Miyamoto

3A8

Speciation Study on Eu(III) in Anion Exchange Separation System with $\text{LiCl-H}_2\text{O/Alcohol}$

Mixed Media by Time-Resolved Laser-Induced Fluorescence SpectroscopyM. Arisaka(Shizuoka Univ.^a), JAERI^b), T. Kimura^b), H. Suganuma^a), Z. Yoshida^b)**3A9****Extraction and Structural Studies of Sr and Ba Complexes with N,N'-Dimethyl-N,N'-diphenyl-diglycolamide and -3,6-Dioxaoctanedioic Diamide**

H. Narita, T. Yaita, S. Tachimori, H. Shiwaku, Y. Okamoto(JAERI)

3A10**Pulse Radiolysis Study on Coordination of Europium(III) Polyelectrolytes in Aqueous Solutions**

R. Nagaishi, T. Kimura(JAERI),

Y. Yoshida, T. Kozawa, S. Tagawa(Osaka Univ.)

3A11**Fundamental Research for Designing Nuclear Fuel Recycling Plants-Evaluation of Evaporation Behavior of Pd, Mo, Te, and Sb in Simulated Low Level Liquid Waste**K. Ito(Tohoku Univ.), M. Watanabe (JNC^a), M. Kamiya^a)**3A12****Chemical Separation of Yttrium from Rare Earth Elements in Xenotima(Pitinga, Brazil)**

A. C. M. Ferreira(Nat. Nucl. Ener. Comm.-CNEN), J. A. Medeiros(Federal Univ.-UFRJ)

3A13**Separation of Radionuclides from Chemical and Electrochemical Decontamination Waste**

K. Rosikova, J. John, F. Sebesta(Czech Tech. Univ.)

10:50-12:20**Room B**

Chairpersons: Prof. S. Nakashima and Prof. Y. Hsia

3B8**Mössbauer and Infrared Investigation of the Reactions of Laser-Evaporated Iron Atoms with Ethylene**

Y. Yamada, K. Katsumata, Y. Ono, K. Yamaguchi(Sci. Univ. Tokyo)

3B9**Microstructure and CO₂ Absorption in Sr_{0.95}Ca_{0.05}Fe_{0.5}Co_{0.5}O_{3.8} and Sr_{0.5}Ca_{0.5}Fe_{0.5}Co_{0.5}O_{3.8} as Studied by Emission Mössbauer Spectroscopy**Z. Homonnay(Eötvös Lorand Univ.^a), K. Nomura(Univ. Tokyo), G. Juhasz^a),T. Hayakawa(Nat. Insti. Mate. & Chem. Res.), E. Kuzmann^a), A. Vertes^a)**3B10****An Application of Coincidence Doppler Spectroscopy to Polymer**T. Suzuki(KEK^a), C. He^a), V. Schantarovich^a)(Russian Acad. Sci.), K. Kondo^a),

E. Hamada(Inst. Env. Sci.), Y. Ito(Univ. Tokyo)

3B11**Characterization of Polymer Sub-Surface Using Slow Positron Beam**C. He(KEK^a), E. Hamada(Inst. Env. Sci.), T. Suzuki^a), H. Kobayashi^a), K. Kondo^a),V. P. Schantarovich^a)(Russian Acad. Sci.), Y. Ito(Univ. Tokyo, JAERI)

3B12

Free Volume Study of Ethylene-Vinyl Alcohol Copolymer by Positronium Lifetime Measurement

K. Ito (Univ. Tokyo^{a)}), H.-L. Li^{a)}, Y. Saito(Nippon Gohsei Co. Ltd.^{b)}), T. Yamamoto^{b)}, Y. Ujihira^{a)}, K. Nomura^{a)}

3B13

Thermal and Optical Switching of Iron(II) and Iron(III) Compounds

S. Hayami(Kyushu Univ.^{a)}), Z.-Z. Gu(KAST^{b)}), Y. Einaga(Keio Univ.), O. Sato^{b)}, Y. Maeda^{a)}

10:50-12:20

Room C

Chairpersons: Prof. E. A. D. N. Fernandes and Prof. H. Amano

3C8

Association of Am with Humic Substances Isolated from River Waters with Different Water Quality

S. Nagao (JAERI^{a)}), N. Fujitake(Kobe Univ.), H. Kodama(Kyoto Pref. Univ.), T. Matsunaga^{a)}, H. Yamazawa^{a)}

3C9

Evaluation of Radioactivity Induced in the Accelerator Building and Its Application to Decontamination Work

K. Masumoto(KEK^{a)}), A. Toyoda^{a)}, K. Eda^{a)}, Y. Izumi(Japan Envir. Res. Co.), T. Shibata^{a)}

3C10

Solvation Structure of Lanthanum Determined by ¹³⁹La NMR, EXAFS, and Neutron Diffraction Method

T. Yaita, Y. Okamoto, H. Narita, S. Tachimori, H. Shiwaku(JAERI)

3C11

Complexation of Actinides with Polyoxometalates

G. R. Choppin, D. E. Wall(Florida State Univ.)

3C12

Comparative Study of RNAA and ICP-MS for the Determination of Ultra-Trace Th and U in Geological and Cosmochemical Samples

J. Chai, Y. Oura, M. Ebihara(Tokyo Metro. Univ.)

3C13

Determination of Pu Concentration and Its Isotope Ratio in Japanese Soils by HR-ICP-MS

Y. Muramatsu(Nat. Inst. Radiological Sci.^{a)}), S. Yoshida^{a)}, A. Tanaka(Kaken Co.)

Lunch Time

13:30-14:15

Room S

Chairperson: Prof. R. Amano.

PL4

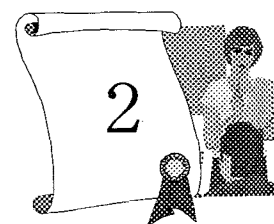
Applications of ^{14}C -AMS in Biomedical Science

Y. Liu, H. Wang and H. Sun(Peking Univ.)

14:15-16:00

Lobby

Poster 2 (3P01 - 3P51)

**3P01****Production Cross-Sections of Carbon-14 in Al by Nuclear Spallation Reactions**

M. Numajiri, K. Masumoto, T. Miura, Y. Oki, T. Suzuki, K. Kondo(KEK)

3P02**Excitation Functions for $^{248}\text{Cm}(^{18}\text{O}, 5n)^{261}\text{Rf}$ and $^{248}\text{Cm}(^{19}\text{F}, 5n)^{262}\text{Db}$ Reactions**

Y. Nagame(JAERI^a), M. Asai^a, H. Haba^a, S. Goto^a (Niigata Univ.), K. Tsukada^a, I. Nishinaka^a,
 K. Nishio^a, S. Ichikawa^a, M. Sakama(Univ. Tokushima), A. Toyoshima^a (Osaka Univ.),
 K. Akiyama^a (Tokyo Metro. Univ.), H. Nakahara^a (Tokyo Metro. Univ.),
 M. Schädel(Gesellschaft für Schwerionenforschung), J. V. Kratz(Univ. Mainz),
 H. W. Gäggeler(Univ. Bern), A. Türler(Paul Scherrer Inst.)

3P03**Measurement of Excitation Function of $^{63}\text{Cu}(n, p)^{63}\text{Ni}$ Reaction for $E_n < 6.5$ MeV**

Y. Ota, K. Takamiya, S. Shibata(Kyoto Univ.),

T. Shibata, Y. Ito(KEK),

M. Imamura(Nat. Musium of Jap. History), Y. Uwamino(RIKEN), N. Nogawa(Univ. Tokyo),

M. Baba, S. Iwasaki, S. Matsuyama(Tohoku Univ.)

3P04**An Attempt to Detect the Ultraviolet and Visible Photon Emitted from the First Excited State in ^{229}Th**

Y. Kasamatsu(Osaka Univ.^a), K. Takamiya(Kyoto Univ.^b), H. Yamana^b, Y. Ohkubo^b, H. Kimura^a,
 T. Mitsugashira.(Tohoku. Univ.) S. Shibata^b, Y. Kawase^b, A. Toyoshima^a, A. Shinohara^a

3P05**The k_0 Standardization NAA on the Low Power Operation at JRR-4**

H. Sawahata, M. Kawate, H. Ozaki, Y. Ito(Univ. Tokyo)

3P06**SPECanal Suite 2001**

Y. Hamajima(Kanazawa Univ.)

3P07

Studies on Zinc Deficiency and Recovery: Changes in Trace Elements in Organs and Tissues of Zinc-Deficient Mice

H. Maetsu, T. Oida, Y. Ohashi, T. Yoshida, T. Ohyama, M. Noguchi, H. Suganuma, T. Omori, M. Yanaga(Shizuoka Univ.)

3P08

Development of Rapid Chemical Separation for Heavy Elements

Y. Shoji, T. Koike, M. Shigekawa, M. Iwasaki, A. Toyoshima, N. Takahashi, A. Shinohara(Osaka Univ.)
A. Yokoyama(Kanazawa Univ.), K. Takamiya(Kyoto Univ.^{a)}), S. Shibata^{a)}

3P09

Anion Exchange Behavior of Nobelium

A. Toyoshima(Osaka Univ.^{a)}, JAERI^{b)}), K. Tsukada^{b)}, H. Haba^{b)}, M. Asai^{b)}, S. Goto^{b)} (Niigata Univ.), K. Akiyama^{b)} (Tokyo Metro. Univ.), I. Nishinaka^{b)}, S. Ichikawa^{b)}, Y. Nagame^{b)}, A. Shinohara^{a)}

3P10

Study on the Solvation Structure of Trivalent Lanthanoid in a Mixed System of Methanol and Water

T. Watanabe, M. Kawasaki, Y. Ishii, M. Yanaga, H. Suganuma(Shizuoka Univ.), T. Yaita, H. Narita, K. Takai, S. Suzuki, S. Tachimori(JAERI)

3P11

Behavior of ²³⁴Th(²³⁴U), ²³⁰Th and ²²⁸Th Recoil Atoms in Ferriferrous Inclusions into the Natural Silicates

R. V. Bogdanov, Yu. F. Batrakov, E. V. Puchkova, A. S. Sergeev (Saint-Petersburg State Univ.)

3P12

In-Beam Mössbauer Spectroscopic Studies of Chemical Effects Associated with the ⁵⁶Fe(n, γ)⁵⁷Fe Reaction

Y. Kobayashi(RIKEN), M. K. Kubo(Univ. Tokyo), Y. Sakai(Daido Inst. Tech.), Y. Yamada(Sci. Univ. Tokyo), T. Saito(Sci. Univ. Tokyo), H. Shoji(Tokyo Metro. Univ.), C. Yonezawa(JAERI), H. Matue(JAERI)

3P13

Affinity of Various Bio-Trace Elements to Lipid Membrane: In Vitro Study Using Multitracer

K. Matsumoto(Showa Pharm. Univ.^{a)}), H. Nagashima^{a)}, R. Hirunuma(RIKEN^{b)}), S. Enomoto^{b)}, K. Endo^{a)}

3P14

Production of Endohedral ¹³³Xe-Fullerene by Ion Implantation

S. Watanabe, N. S. Ishioka, T. Sekine, A. Osa, M. Koizumi(JAERI), H. Muramatsu, H. Shiomura, K. Yoshikawa(Shinshu Univ.)

3P15

The Abnormal Metabolism of Trace Elements in Mouse Induced by Zn Deficiency during the Growing Period

T. Ohyama^{a)}, M. Yanaga, H. Maetsu, M. Noguchi, H. Suganuma, K. Ishikawa(Shizuoka Univ.), M. Kidera, T. Nakagawa, R. Hirunuma, S. Enomoto(RIKEN), T. Omori(Shizuoka Univ.)

3P16**⁵⁷Fe Mössbauer Spectra of (η^6 -Arene)Ruthenium(III) Complexes Having 1,1'-bis(Diphenylphosphinomethyl)Ferrocene**

H. Endo, J. Sakuma, M. Takahashi, M. Takeda(Toho Univ.)

3P17**¹²⁷I Mössbauer Spectra for Phenyliodonium Ylides**

T. Nishimura, H. Iwasaki, M. Takahashi, M. Takeda(Toho Univ.)

3P18**X-ray Diffraction and Mössbauer Studies of First-Row Transition Metal Complexes with Hydroxyquinone Derivatives**

H. Sakai, T. Takao, S. Fujii(Konan Univ.)

3P19**Mössbauer and EPR Spectroscopic Investigations of the [Ethylenediaminetetraacetato] Iron-Hydrogen Peroxide Complex**

S. Fujii, C. Tsueda, H. Sakai(Konan Univ.)

3P20**X-ray Crystallographic and Mössbauer Studies of Teteraalkylammonium Hexacyanoferrates(III)**

S. Iijima, F. Mizutani(Nat. Ins. Adv. Ind. Sci. & Tech.),

M. Watanabe, M. Sato(Saitama Univ.)

3P21**¹²¹Sb and ⁵⁷Fe Mössbauer Spectra of Iron Carbonyls Having Sb-Fe Bonds**

M. Takahashi, A. Ishiguro, M. Takeda(Toho Univ.)

3P22**Erbium-166 Mössbauer Spectra of Er(III)-EDTA Complexes**

J. Wang, Y. Nomoto, Y. Nemoto, M. Takahashi, M. Takeda(Toho Univ.)

3P23**⁵⁷Fe Mössbauer Spectroscopic Study for Spin Crossover Compound Fe(pyridine)₂Ni(CN)₄**

T. Kitazawa, K. Hosoya, M. Takahashi, M. Takeda(Toho Univ.),

I. Marchuk, S. Filipek(Inst. Phys. Chem. Polish Acad. Sci.)

3P24**Microstructure Analysis of (Ba, Ca)(Fe, Mg)O_{3.8} for CO₂ Rapid Absorption by Mössbauer Spectroscopy**

K. Nomura, S. Kobayashi, K. Hashimoto, Ts. Sawada(Univ. Tokyo),

H. Zoltan, A. Vertes(Eötvös Lorand Univ.)

3P25**Development and Application of Parallel-Plate Avalanche Counter for In-Beam Mössbauer Spectroscopy**T. Saito(Sci. Univ. Tokyo^{a)}), Y. Kobayashi(RIKEN), M. K. Kubo(Univ. Tokyo), Y. Yamada^{a)}

3P26

Syntheses and Magnetic Properties of Iron(III) Complexes with Imidazole Groups

Y. Maeda, S. Okamura(Kyushu Univ.)

3P27

Mechanism of Fe²⁺ Oxidation in Olivine Structure-Mössbauer Study

K. Barcova(Palacky Univ.^{a)}, M. Mashlan^{a)}, P. Martinec(Acad. Sci. Czech Rep.), R. Zboril^{a)}

3P28

A New Analytical Method for ²²⁶Ra and ²²⁸Ra in Environmental Waters

-Application to the Field Works-

T. Saito, T. Ohta, Y. Koike, J. Sato(Meiji Univ.)

3P29

Variation of ⁷Be Concentration in Surface Air at Kagoshima

H. Imamura, M. Otsu, M. Nishihara, N. Izumo(Kagoshima Pref. Inst. Envir. Res. Pub. Health)

3P30

Tritium Separation from Heavy Water by Electrolysis with Solid Polymer Electrode

Y. Ogata(Nagoya Univ.), Y. Sakuma(Nat. Inst. Fusion Sci.),

N. Ohtani(Wakasawan Ener. Res. Center^{a)}), M. Kotaka^{a)}

3P31

Enrichment of Atmospheric Hydrogen by Cryopump for Tritium Analysis

Y. Taniyama, N. Momoshima(Kumamoto Univ.)

3P32

Rare Earth Elements Vertical Profiles in ²¹⁰Pb Age-Dated Sediment Cores from Southwestern Gulf of California

S. Kalmykov(Moscow State Univ.^{a)}), E. Shumilin^{a)}, E. Nava-Sanchez^{a)},

D. Sapozhnikov(Inst. Geochem. Anal. Chem.), A. P. Rodriguez Castaneda^{a)},

D. Gorsline(Univ. South California), Yu. A. Sapozhnikov^{a)}

3P33

Migration of Radionuclides Induced in Soil below the 12 GeV Proton Accelerator Facility at KEK

T. Miura, K. Bessho (KEK),

S. Ishihama, N. Ohtsuka (Tokyo Nuclear Services Company)

3P34

The Distribution of ^{239,240}Pu and ²⁴¹Am in the Water Columns of the Japan and Bonin Trenches

A. Nishizawa, T. Nakanishi(Kanazawa Univ.)

3P35

Pretreatment of Plant Samples for the Determination of Rhenium by ICP-MS

K. Tagami, S. Uchida(Nat. Inst. Radiological Sci.)

3P36

Determination on Elemental Composition of Airborne Dust from View Point of Environmental Monitoring

Y. Miyamoto, Y. Saito, M. Magara, S. Usuda(JAERI)

3P37**Analytical Procedure for ^{99}Tc in Soil and Water Samples by ICP-MS**

M. Kondo, R. Seki(Univ. Tsukuba)

3P38**Recent Level of Atmospheric HTO, HT and CH_3T Concentrations in Japan**

T. Okai(Kyushu Univ.), N. Momoshima(Kumamoto Univ.), Y. Sakuma(Nat. Inst. Fusion Sci.)

3P39**Distributions of ^7Be and ^{10}Be in the Atmosphere and Surface Water: An investigation in the Western North Pacific**

W. Tada, H. Nagai, H. Matsumura(Nihon Univ.)

3P40**Fate and Transport of Radionuclides from Uranium Mill Tailings and Related Waste Materials**

E. R. Landa(U. S. Geol. Survey)

3P41**Determination of Technetium-99 in Soil Samples by 3M EmporeTM Technetium Rad Disk**

S. F. Fang, J. J. Wang, T. W. Wang, J. H. Chiu(Inst. Nucl. Ener. Res.)

3P42**Cumulative Dose Measurements Using Radiophotoluminescence Glass Dosimeter in Cold Area**K. Yamazaki(Niigata Pref. Inst. Pub. Health. Envir. Sci.^{a)}, S. Tonouchi^{a)},

T. Hashimoto(Niigata Univ.)

3P43**Thermochromatographic Behavior of Fission Products Combined with Dipivaloylmethane**

S. Ono, T. Kaneko, S. Goto, H. Kudo(Niigata Univ.)

3P44 **α -Source Preparation Method for On-Line Aqueous Chemistry**

T. Hirai, T. Kaneko, H. Kudo(Niigata Univ.)

3P45**Production of No-Carrier-Added ^{177}Lu via the $^{176}\text{Yb}(n, \gamma)^{177}\text{Yb} \rightarrow ^{177}\text{Lu}$ Process**K. Hashimoto(JAERI^{a)}, H. Matsuoka^{a)}, S. Uchida(Tokyo Nuclear Service, Co.)**3P46****Preparation and Properties of ^{213}Bi -Labeled Biotin Derivatives for Pretargeting Radiotherapeutic Study**

K. Washiyama, E. Kubo, R. Amano, S. Kinuya(Kanazawa Univ.),

Y. Shiokawa(Tohoku Univ.)

3P47**Study on the Ion Recognition Mechanism for Alkali and Alkaline-Earth Metals by Calixcrown Ethers**A. Shimada(Shizuoka Univ.^{a)}, JAERI^{b)}, T. Yaita^{b)}, H. Narita^{b)}, H. Shiwaku^{b)}, K. Okuno^{a)},S. Tachimori^{b)}**3P48****Group Separation of Trivalent Actinides and Lanthanides by Tertiary Pyridine-Type Anion-Exchange Resin Embedded in Silica**

T. Suzuki, M. Aida, Y. Ban, Y. Fujii(Tokyo Inst. Tech.),
M. Hara, T. Mitsugashira(Tohoku Univ.)

3P49

Efficient Removal of Cs-134 from Aqueous Solutions by Zirconium Phosphate

S. P. Mishra, D. Tiwari(Banaras Hindu Univ.)

3P50

Evaluation of Self-Absorption of β - ray in Gel-Suspension Samples by Monte Carlo Simulation

G. Wakabayashi, K. Nagao, T. Okai, M. Matoba(Kyushu Univ.)

3P51

Seasonal Variations of the Atmospheric Depositional Fluxes of ^7Be and ^{210}Pb at Fukuoka

S. Sugihara, S. Kameda, S. Osaki, Y. Maeda(Kyushu Univ.)

16:00-16:45

Room S

Chairperson: Prof. K. Okuno

PL5

The Nature of Bonding of Hyperlithiated Molecules beyond the Octet Rule

H. Kudo(Tohoku Univ.)

16:45-17:00

Chairperson: Prof. S. Osaki

CLS Closing Ceremony

Closing Summary:

Prof. K. Kondo, Secretary of JSNRS

Intern'l Advisory's Remarks:

Prof. G. R. Choppin, Florida State University

Closing Remarks:

Prof. Y. Momoshima, Depy. Symposium Chairman

Friday, 2 November 2001

One day excursion

(Applicants only, 8:00 at Miyako Hotel)

