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日本放射化学会

Vol. 2, Supplement
October, 2001

**2001 Asia-Pacific Symposium on Radiochemistry
and the Annual Meeting of the Japan Society of Nuclear
and Radiochemical Sciences
(APSORC 2001 and 45th SORC)**



**Tuesday, 30th October –Thursday, 1st November, 2001
Hakata Miyako Hotel, Fukuoka, JAPAN**

Organized by

The Japan Society of Nuclear and Radiochemical Sciences (JNRS) and
APSORC Organizing Committee, and

Co-organized by

The Chemical Society of Japan (CSJ),
The Japan Society for Analytical Chemistry (JSAC),
Atomic Energy Society of Japan (AESJ) and
The Pharmaceutical Society of Japan (PSJ)

—共催—

日本化学会
日本分析化学会
日本原子力学会
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-co-organizers-

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Atomic Energy Society of Japan(AESJ)
The Pharmaceutical Society of Japan (PSJ)

—後援—

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-secretariat-

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Department of Chemistry,
Faculty of Science, Kyushu University,
Hakozaki 6-10-1, Higashi-ku,
Fukuoka 812-8581 Japan

Joint Symposium:
APSORC 2001 & 45th SORC

講演予稿集

2001 アジア-太平洋
放射化学シンポジウム

- 合同開催 -

2001 日本放射化学学会年会・
第45回放射化学討論会

Abstracts

2001 Asia-Pacific Symposium on
Radiochemistry and 2001

Annual Meeting of the Japan Society of
Nuclear and Radiochemical Sciences・

The 45th Symposium on Radiochemistry



平成13年10月30日 - 11月1日
博多都ホテル

30th October - 1st November, 2001
Hakata Miyako Hotel, Fukuoka, JAPAN

- 主催 -

日本放射化学会
APSORC2001 組織委員会

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The Japan Society of Nuclear and
Radiochemical Sciences (JNRS) and
APSORC Organizing Committee

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日本化学会
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CONTENTS

ORGANIZATION.....	(5)
SYMPOSIUM SCOPE.....	(6)
PLENARY AND INVITED LECTURES.....	(7)
THE HEVESY MEDAL AWARD.....	(9)
SYMPOSIUM TIME TABLE	(11)
APSORC2001 PROGRAM	(13)
ABSTRACT	
PLENARY LECTURER'S ABSTRACTS.....	1
INVITED LECTURER'S ABSTRACTS.....	7
SPECIAL LECTURER'S ABSTRACT.....	17
CONTRIBUTOR'S ABSTRACTS	
1 st day.....	23
2 nd day.....	49
3 rd day.....	125
AUTHOR INDEX.....	203

ORGANIZATION

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SYMPOSIUM SCOPE

In the first year of the 21st century we are pleased to inform The Japan Society of Nuclear and Radiochemical Sciences (JNRS) and APSORC Organizing Committee organize the 2001 Asia-Pacific Symposium on Radiochemistry (APSORC 2001) in Fukuoka, Japan. This is the second symposium following the APSORC'97 started in 1997. The purpose of the meeting is to bring together scientists and engineers from worldwide countries who share a common interest in the fields of nuclear and radiochemistry, and their applications including nuclear energy and life sciences.

The APSORC 2001 is to be held jointly with a Japanese domestic symposium of the same field: Symposium on Radiochemistry (SORC), which will be the 45th meeting (45-SORC). To renew friendship and to facilitate discussions on radiochemistry and related areas, we cordially invite you to attend the APSORC 2001.

SESSION TOPICS

The symposium will include invited lectures and contributed papers on the following code/topics:

- 1 Nuclear reactions and decays/nuclear structures.
- 2 Radioactive isotope beams.
- 3 Nuclear analytical techniques/activation analysis.
- 4 Chemistry of transuranium elements.
- 5 Hot atom chemistry/nuclear recoils.
- 6 Application of radioisotopes/multitracer technique.
- 7 Nuclear probes in chemistry/Mössbauer/ PAC/Positron annihilation.
- 8 Chemistry of artificial and natural radioactive elements/Tc.
- 9 Environmental radioactivity/migration.
- 10 Radiation detection methods.
- 11 Radiation dosimetry.
- 12 Radiochemistry for nuclear medicine.
- 13 Isotopes in life, archaeological and geo-sciences/AMS.
- 14 Radiochemical separation methods.

ABSTRACT & PROCEEDINGS

Abstracts for the joint symposium APSORC 2001 & 45-SORC are published by the organizing committee and are available at the meeting. Symposium proceedings of the plenary lectures will be published in the *Journal of Nuclear and Radiochemical Sciences*, and those of the invited, oral lectures and posters presented in the *Journal of Radioanalytical and Nuclear Chemistry* after referee evaluation.

PLENARY AND INVITED LECTURES

Plenary lectures:

■ Prof. Jens V. Kratz(Univ. Mainz) "Chemical Properties of the Transactinide Elements"	PL1
■ Dr. Richard M. Lindstrom(NIST) "Accuracy and Uncertainty in Radiochemical Measurements: Learning from Errors in Nuclear Analytical Chemistry"	PL2
■ Prof. Rolf H. Herber(Hebrew University) "Atomic and Molecular Motion in Iron Organometallics"	PL3
■ Prof. Yuanfang Liu(Peking University) "Applications of ¹⁴ C-AMS in Biomedical Science"	PL4
■ Prof. Hiroshi Kudo(Tohoku University) "The Nature of Bonding of Hyperlithiated Molecules Beyond the Octet Rule"....	PL5

Invited lectures:

■ Prof. Yuanfu Hsia(Nanjing University) "Mössbauer Spectroscopy in China"	3B3
■ Deputy Dir. Huating Yang (CIRP) "Recent Development on Environmental Radiochemistry in China"	3C5
■ Mr. Paitoon Wanabongse(OAEP) "Radioactivity Measurement and Standardization in Thailand"	1B3
■ Dr. Hermann Stoll(MPI für Metallforschung) "Formation and Chemical Reactions of Positronium Studied by AMOC Measurements"	2B1
■ Prof. Jae-Woo Park(Cheju National University) and Prof. Youn-Keun Oh(Cheju National University) "Environmental Radiation Monitoring in Korea"	2C3
■ Prof. Tieh-Chi Chu(National Tsing Hua University) "Application of Radioactive Tracer Method to Copper Migration in Semiconductor Lithography"	2A8
■ Prof. Emeritus Joseph R. Peterson(University of Tennessee) "Summer Schools in Nuclear and Radiochemistry"	3A1
■ Dr. Din D. Sood(IAEA) "Some Recent Activities of the International Atomic Energy Agency in the Field of Nuclear Data"	1A5
■ Dr. Elisabete A. De Nadai Fernandes(Universidade de Sao Paulo) "Organic Coffee Discrimination with INAA and Data Mining Techniques: New Perspectives for Coffee Trade"	3C1

Special lectures:

■ Special Lecture:

Prof. Nobufusa Saito(Univ. Tokyo)

“Japanese Pioneers in the Field of Nuclear and Radiochemistry” SL

■ The Hevesy Award Lecture:

Prof. Amares Chatt(Dalhousie Univ.)

“Speciation Neutron Activation Analysis” HAWL

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

Prof. Hirotoishi Sano(Otsuma Women's Univ.)

“Emission Mössbauer Spectroscopic Studies in Hot-Atom Chemistry” JAWL

■ The Japan Society of Nuclear and Radiochemical Sciences Young Scientist

Award Lecture:

Dr. Hiromitsu Haba (JAERI)

“Radiochemical Studies of Photonuclear Reactions at Intermediate Energies-Recoil
Studies of Photospallation and Photofission” 3A3

THE HEVESY MEDAL AWARD

The Hevesy Medal Award is the premier international award of excellence to honour outstanding achievements in radioanalytical and nuclear chemistry. It is named after George de Hevesy (1885-1966) who received the Nobel Prize for Chemistry in 1943 for his work on the use of isotopes as tracers in the study of chemical processes. The Hevesy Medal Award is sponsored by the Journal of Radioanalytical and Nuclear Chemistry (<http://www.akkrt.hu>) and adjudicated by the International Committee on Activation Analysis/Modern Trends in Activation Analysis (ICAA/MTAA). The Hevesy Medal has previously been awarded 20 times (see list below). In 2001, two awards of equal value are due to be made.

Hevesy Medals 2001

This year's medalists are listed below in chronological order of the date of presentation of their award.

JUNE 2001, on the occasion of the 3rd International Symposium on Nuclear Analytical Chemistry (NAC-III) in Halifax, Canada

Conference website: <http://www.dal.ca/~nac3/>

Medalist: Prof. Eiliv STEINNES, Department of Chemistry, Norwegian University of Science & Technology, Trondheim, Norway. Prof. Steinnes is honoured for his outstanding and innovative contributions in the field of radioanalytical and nuclear chemistry, in particular for his work on the development of new neutron activation analysis procedures and their application in many different fields including the geosciences, environmental research and monitoring, and human medicine and biology.

OCTOBER/NOVEMBER 2001, on the occasion of the Asia-Pacific Symposium on Radio-Chemistry (APSORC 2001) in Fukuoka, Japan

Conference website: <http://133.5.167.72/labo/rad8/apsorc.html>

Medalist: Prof. Amares CHATT, SLOWPOKE-2 Facility, Trace Analysis Research Centre, Department of Chemistry, Dalhousie University, Halifax, Canada. Prof. Chatt is honoured for his outstanding and innovative contributions in the field of radioanalytical and nuclear chemistry, in particular for his work on various forms of instrumental, preconcentration and radiochemical activation analysis, and their application in a wide variety of different medical, environmental and biological research studies.

List of Hevesy Medalists 1968-2001

- 1968: W. Weine MEINKE
1969: Albert A. SMALES
1970: Ivan Pavlovich ALIMARIN
1972: Philippe ALBERT and Julian HOSTE
1975: Tibor BRAUN and Juraj TOELGYESSY
1976: Francesco GIRARDI
1977: Saadia AMIEL and Richard E. WEINERDI
1978: Robert E. JERVIS
1979: Vincent P. GUINN
1981: William S. LYON and Max PEISACH
1983: Edward V. SAYRE and Garman HARBOTTLE
1984: Georges AMSEL
1985: Nobuo SUZUKI
1986: Emile A. SCHWEIKERT
2000: Frans DE CORTE
2001: Amares CHATT and Eiliv STEINNES

Further information on these awards is posted at the following websites:

<http://www.dal.ca/~nac3/>

<http://www.namls.at.tf/>

This announcement was issued in May 2001 by Robert Parr, Chair, Hevesy Medal Selection Panel, Vienna, Austria.

SYMPOSIUM TIME TABLE

Tue 30 Oct

Wed 31 Oct

Thu 1 Nov

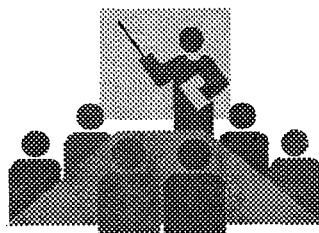
Rm. A Rm. B Rm. C

Rm. A Rm. B Rm. C

Rm. A Rm. B Rm. C

8:20 Registration

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">9:00</td><td colspan="3" style="text-align: center;">Opening (Rm. S)</td></tr> <tr><td style="text-align: center;">9:20</td><td colspan="3" style="text-align: center;">PL1 (Rm. S)</td></tr> <tr><td style="text-align: center;">10:05</td><td colspan="3" style="text-align: center;">PL2 (Rm. S)</td></tr> <tr><td style="text-align: center;">10:50</td><td colspan="3" style="text-align: center;">Coffee Time</td></tr> <tr><td style="text-align: center;">11:10</td><td style="text-align: center;">1A1</td><td style="text-align: center;">1B1</td><td style="text-align: center;">1C1</td></tr> <tr><td></td><td style="text-align: center;">1A2</td><td style="text-align: center;">1B2</td><td style="text-align: center;">1C2</td></tr> <tr><td></td><td style="text-align: center;">1A3</td><td style="text-align: center;">1B3</td><td style="text-align: center;">1C3</td></tr> <tr><td></td><td style="text-align: center;">1A4</td><td></td><td style="text-align: center;">1C4</td></tr> <tr><td style="text-align: center;">12:10</td><td style="text-align: center;">若手の会 Lunch</td><td colspan="2" style="text-align: center;">Lunch Time</td></tr> <tr><td style="text-align: center;">13:40</td><td colspan="3" style="text-align: center;">Special Lec. 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S)</td></tr> <tr><td style="text-align: center;">9:30</td><td colspan="3" style="text-align: center;">Coffee Time</td></tr> <tr><td style="text-align: center;">9:50</td><td style="text-align: center;">2A1</td><td style="text-align: center;">2B1</td><td style="text-align: center;">2C1</td></tr> <tr><td></td><td style="text-align: center;">2A2</td><td></td><td style="text-align: center;">2C2</td></tr> <tr><td></td><td style="text-align: center;">2A3</td><td style="text-align: center;">2B3</td><td style="text-align: center;">2C3</td></tr> <tr><td></td><td style="text-align: center;">2A4</td><td style="text-align: center;">2B4</td><td></td></tr> <tr><td></td><td style="text-align: center;">2A5</td><td style="text-align: center;">2B5</td><td style="text-align: center;">2C5</td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td style="text-align: center;">11:10</td><td style="text-align: center;">2A6</td><td style="text-align: center;">2B6</td><td style="text-align: center;">2C6</td></tr> <tr><td></td><td style="text-align: center;">2A7</td><td style="text-align: center;">2B7</td><td style="text-align: center;">2C7</td></tr> <tr><td></td><td style="text-align: center;">2A8</td><td style="text-align: center;">2B8</td><td style="text-align: center;">2C8</td></tr> <tr><td></td><td></td><td style="text-align: center;">2B9</td><td style="text-align: center;">2C9</td></tr> <tr><td></td><td></td><td style="text-align: center;">2B10</td><td style="text-align: center;">2C10</td></tr> <tr><td style="text-align: center;">12:25</td><td style="text-align: center;">Lunch Time</td><td colspan="2" style="text-align: center;">α放射体 環境放射能 分科会</td></tr> <tr><td style="text-align: center;">13:45</td><td colspan="3" style="text-align: center;">日本放射化学会総会 JSNRS meeting (Rm. 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The welcome party will be held on Mon. 29th Oct.(at 18:00 in MIYAKO HOTEL)

The excursion will be held on Fri. 2nd Nov.

Plenary Lecture : 40+5 min.

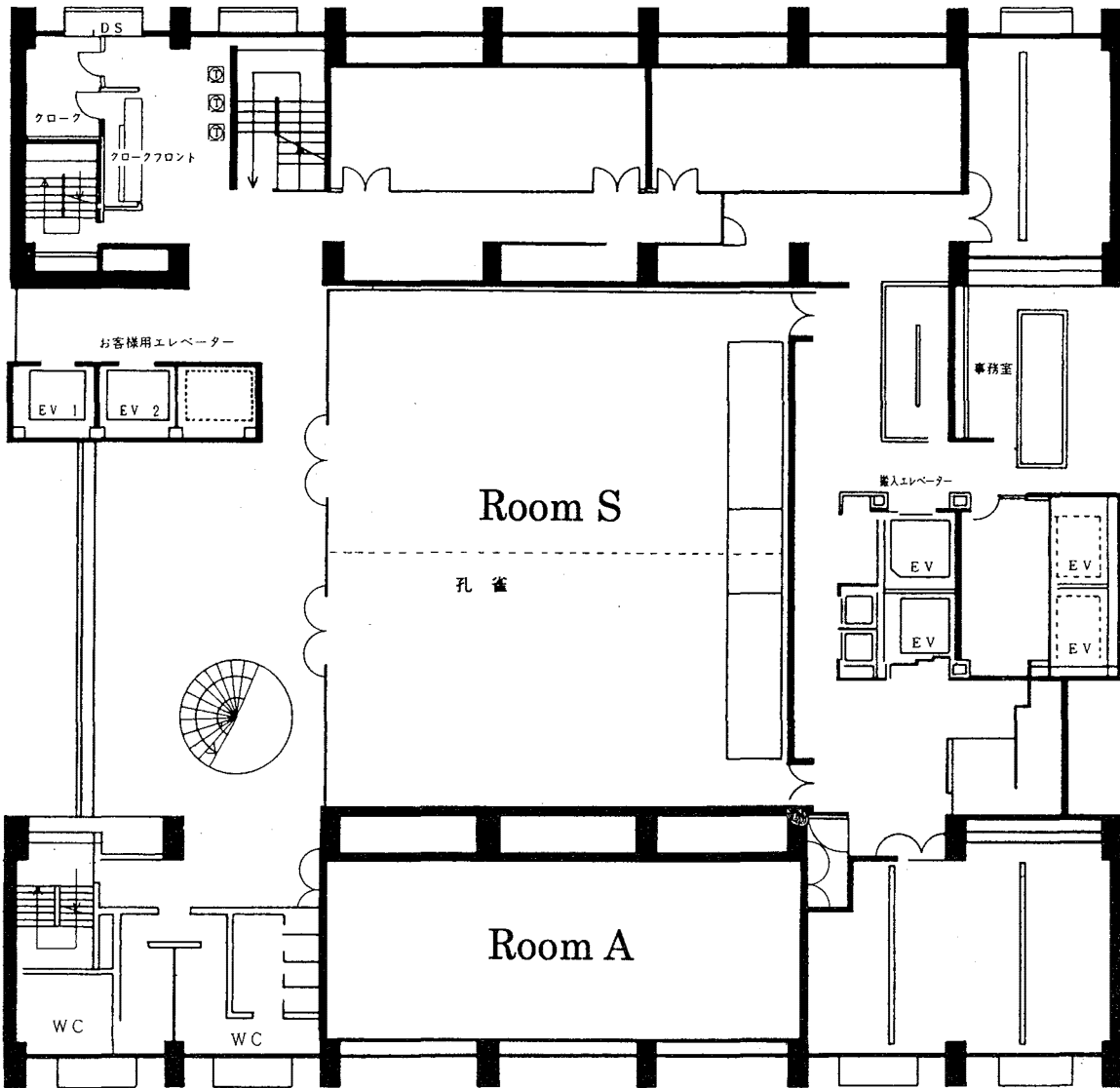
Invited Lecture: 25+5min.

Contributed Paper: 12+3min.

Poster board: 90(W)x150(H)cm.

Sketch of the Symposium Site

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