

Journal of Nuclear and Radiochemical Sciences

Vol.1, No.1, March 31, 2000

ISSN: 1345-4749

The International Journal Published
by the Japan Society of Nuclear and
Radiochemical Sciences

©2000 The Japan Society of Nuclear and Radio-
chemical Sciences

Editorial Board

E-mail radio@gssm.musashi.ac.jp

Editor-in-Chief

Hiroshi Kudo *Department of Chemistry, Graduate
School of Science, Tohoku University, Sendai 980-
8578, Japan*
E-mail kudoh@mail.cc.tohoku.ac.jp
Fax +81-22-217-6597

Acting Editor

Yoshitaka Minai *Center for Arts and Sciences,
Musashi University and Nezu Institute of
Chemistry, 1-26-1 Toyotama-kami, Nerima-ku,
Tokyo 176-8534, Japan*
E-mail minai@cc.musashi.ac.jp
Fax +81-3-3991-1198

Associate Editors

Takaumi Kimura *Japan Atomic Energy Research
Institute, JAERI*

Takafumi Kitazawa *Toho University*

Yoshio Kobayashi *Institute of Physical and
Chemical Research, RIKEN*

Hisaaki Kudo *Niigata University*

Takashi Nakanishi *Kanazawa University*

Yuichi Oki *High Energy Accelerator Research
Organization, KEK*

Tadashi Saito *Osaka University*

Yuko Saito *Aoyama Gakuin University*

Yasuhiro Yamada *Science University of Tokyo*

Secretary of the Japan Society of Nuclear and Radiochemical Sciences

Kenjiro Kondo *High Energy Accelerator Research
Organization, KEK, Oho, Tsukuba, Ibaraki 305-
0801, Japan*

E-mail radchem43@ml.post.kek.jp

Fax +81-298-64-4051

Visit the homepage at:

<http://wwwsoc.nacsis.ac.jp/jnrs/>

CONTENTS

Editorial	
Hiroshi Kudo	i
President Address	
Hiromichi Nakahara	ii
Comments on Finishing the 43rd Symposium on Radiochemistry	
Kenjiro Kondo	iv
Reviews	
Superheavy Elements with the Berkeley Gas-Filled Separator*	
K. E. Gregorich and V. Ninov	1
Radioactive Disequilibrium of Uranium and Thorium Nuclide Series in Hot Spring and River Water from Peitou Hot Spring Basin in Taipei*	
Tieh-Chi Chu and Jeng-Jong Wang	5
Positronium as a Probe of Small Free Volumes*	
Tomasz Goworek	11
Radiopharmaceutical Chemistry in Peking University (PKU)*	
Wang Xiangyun, Wu Yonghui, Wang Yi, and Liu Yuanfang	15
Modern Nuclear Analytical Techniques and Their Applications in China*	
Chai Zhifang	19
Century of Radiochemistry: History and Future*	
B. F. Myasoedov	23
Radiochemistry in India: An Overview*	
S. B. Manohar, B. S. Tomar, and V. K. Manchanda	27
Formation Process of Pionic Atoms and Their Behavior in Material*	
Atsushi Shinohara	33
Nuclear Chemistry in Japan*	
Hisaaki Kudo	39
Present Research on the Environmental Radioactivity and Its Perspective in Japan*	
Noriyuki Momoshima	43
Articles	
Correlation of Aluminum Hole Centers with Hydrogen Radicals from γ-Irradiated Quartz of Different Origins	
Tetsuo Hashimoto, Hiroto Hase, Duk-Guen Hong, Hiroki Fujita, and Hajime Katayama	47
Notes	
Estimation of Total Fission Events in the JCO Criticality Accident by Passive γ-Ray Measurement of ^{140}La in Radioequilibrium with Precursor ^{140}Ba	
Toshiaki Mitsugashira, Takashi Nakanishi, Riki Seki, and Sadao Kojima	51

*Based on the plenary or invited lectures presented in the 43rd Symposium on Radiochemistry at Tsukuba on October 13-15, 1999.