

ISSN 0023-6071

**BULLETIN OF THE INSTITUTE
FOR CHEMICAL RESEARCH**

KYOTO UNIVERSITY

Vol. 59, No. 1

Nuclear Chemistry and Radiation Effects

Published bi-monthly by

**THE INSTITUTE FOR CHEMICAL RESEARCH
KYOTO UNIVERSITY
KYOTO, JAPAN**

January, 1981

(Bull. Inst. Chem. Res., Kyoto Univ.)

INSTITUTE FOR CHEMICAL RESEARCH
KYOTO UNIVERSITY

Director

Toshio TAKADA

Members of Council

Yoshichika BANDO	Eiichi FUJITA	Hiroshi INAGAKI
Yuzo INOUE	Ken-ichi KATAYAMA	Ryozo KITAMARU
Naokazu KOIZUMI	Michio KURATA	Shinzaburo OKA
Masaya OKANO	Tatsuo OOI	Toshio TAKADA
Mitsuru TAKANAMI	Hidekuni TAKEKOSHI	Tohru TAKENAKA
Yoshimasa TAKEZAKI	Megumi TASHIRO	Natsu UYEDA
Takuji YANABU		

Publication Committee

Eiichi FUJITA	Ken-ichi KATAYAMA	Tadashi KOKUBO
Seishi MATSUKI	Tatsuo OOI	Nobuyuki SUGITA

Business Staff

Tetsuo FUJIMOTO	Seiji IJIRI	Shoichi MATSUMURA
-----------------	-------------	-------------------

History of Publications

Term	Vol.	Title	Published
Jan., 1929– Dec., 1947	1–16	化学研究所講演集 (The Reports of the Institute for Chemical Research)	Indeterminately
April, 1933	—	10 Jahre Institut für chemische Forschung (化学研究所創立十周年記念号)	—
March, 1949– Dec., 1949	17–19	化研講演集 (The Reports of the Institute for Chemical Research)	Indeterminately
March, 1950– Sept., 1952	20–30	化学研究所報告 (Bulletin of the Institute for Chemical Research)	Quarterly
Dec., 1951	—	The Commemoration Volume for the Silver Jubilee (化学研究所創立二十五周年記念号)	—
Jan., 1953 onwards	31 No. 1–	Bulletin of the Institute for Chemical Research (化学研究所報告)	Bi-monthly
Nov., 1966	44 No. 6	Special Issue on the Commemoration of the Fortieth Anniversary (化学研究所創立四十周年記念号)	—
Nov., 1976	54 No. 6	Special Issue on the Commemoration of the Fiftieth Anniversary (化学研究所創立五十周年記念号)	—

CONTENTS

Hidekuni Takekoshi, Seishi Matsuki, Katsuo Mashiko, and Naomoto Shikazono: Rf Structure of Superconducting Cyclotron for Therapy Application.....	1
Shigeru Kakigi, Kiyoji Fukunaga, Takao Ohsawa, Seiji Tanaka, Akira Okihana, Hitoshi Nakamura-Yokota, Tuguhisa Sekioka, and Noboru Fujiwara: Excited States of ${}^4\text{He}$ Investigated via the ${}^4\text{He}(\alpha, \alpha p){}^3\text{H}$ Reaction at 119 MeV	9
Takeshi Mukoyama: A Computer Code to Calculate the Parameters Used for Radiation Shielding against γ Rays	15
Toshiro Takabatake, Hiromasa Mazaki, and Teruya Shinjo: High Field Möss- bauer Study of Dilute Ir-(Fe) Alloys	20
Shunji Kakiuchi and Takeshi Mukoyama: Effect of Chemical State on the Decay Rate of ${}^{51}\text{Cr}$	27
Shunji Kakiuchi and Hiromasa Mazaki: Estimation of Superconducting Effect on the Decay Rate of ${}^{99m}\text{Tc}$	36
Seishi Matsuki, Hidekuni Takekoshi, Yoshinaga Nakayama, and Yukinobu Saito: A 31 cm Model Superconducting Cyclotron Magnet, I.....	40

京都大学化学研究所報告 第59卷 第1号

昭和56年2月24日 印刷

【非売品】

昭和56年2月28日 発行

京都府宇治市五ヶ庄

京都大学化学研究所

編集兼発行人 高 田 利 夫

〒553 大阪市福島区吉野1丁目2-7

印刷所 日本印刷出版株式会社

電話(06)(441)6594番(代表)

大阪市福島区吉野1丁目2-7

印刷者 小 林 積 造