

BULLETIN OF THE INSTITUTE FOR CHEMICAL RESEARCH

KYOTO UNIVERSITY

Vol. 38, No. 1

*Commemoration Issue Dedicated to
Professor Sankichi Takei
On the Occasion of his Retirement*

Published bi-monthly by

THE INSTITUTE FOR CHEMICAL RESEARCH
KYOTO UNIVERSITY
KYOTO, JAPAN

January, 1960

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

INSTITUTE FOR CHEMICAL RESEARCH KYOTO UNIVERSITY

Director

Risaburo NAKAI

Members of Council

Rempei GOTO	Osamu HAYAISHI	Hideo KATAGIRI
Kiichi KIMURA	Sango KUNICHIKA	Risaburo NAKAI
Ryohei ODA	Minoru OHNO	Ichiro SAKURADA
Tsunenobu SHIGEMATSU	Sakae SHIMIZU	Keiichi SHISHIDO
Eiji SUITO	Tomoji SUZUKI	Isamu TACHI
Hideo TAKAKI	Yoshimasa TAKEZAKI	Tetsuro TANAKA
Megumi TASHIRO	Waichiro TSUJI	Hideki YUKAWA

Editors

Katsuhiko ICHIKAWA	Risaburo NAKAI	Michiyasu SUGII
Gisaburo TABUCHI	Megumi TASHIRO	Natsu UYEDA

Treasurer

Takeo GYOBU

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



武居三吉博士
Professor Dr. S. Takei

EMERITUS PROFESSOR SANKICHI TAKEI

October 26, 1896-

Having completed 34 years of service at Kyoto University, Professor Sankichi Takei retired on his sixty-third birthday, October 26, in 1959. On the next day an emeritus professor was conferred upon him by the university. For three years until his retirement he served as the 8th director of the Institute for Chemical Research, Kyoto University.

Dr. Takei was born October 26, 1896 in Okaya City, Nagano Prefecture, where he finished the primary and middle school courses. Through Daini High School, Sendai City, he entered Tokyo Imperial University, and in 1920, he graduated with a diploma on agricultural chemistry.

After his military service Dr. Takei joined the Institute of Physical and Chemical Research in Tokyo, in 1922, and as a research fellow collaborated with Professor Umetaro Suzuki and started to work on the chemical study of rotenone, the chemical structure of which was determined later by him. In 1925, he was appointed an assistant professor of the Department of Agricultural Chemistry, Faculty of Agriculture, Kyoto Imperial University. The next year, in 1926, he was dispatched to Germany to engage in a study on organic chemistry by an official order, and made his study as a research fellow to Professor Karl Freudenberg at the Chemical Institute of Heidelberg University. In December, 1956, he was appointed director of the Institute for Chemical Research, Kyoto University.

Besides giving lectures on organic chemistry, chemurgy, and chemistry of agricultural chemicals at the Faculty of Agriculture, he has pursued extensive researches at the Department of Agricultural Chemistry and also at the Institute for Chemical Research for thirty years. His research covered rotenone, essential oil of tea, leaf alcohol, grayanotoxin, phytohormone, BHC, alicyclic compounds, pyrethrin and natural rubber. Throughout the long period of his office, he also contributed greatly to the educational administration as chairman in the Department of Agricultural Chemistry, as well as a member of the University Council and various committees. Dr. Takei was a councilor of Japan Science Council from 1951 to 1953, and president of the Agricultural Chemical Society of Japan from 1957 to 1958. From 1937 Dr. Takei has been an editor of the "Botyu-Kagaku (Scientific Insect Control)", an organ of the Institute of Insect Control.

Many other honours came to Dr. Takei, including a doctorate of agriculture given by Tokyo Imperial University in 1933 on his study on the chemical structure of rotenone, and a Japan Academy Prize, in 1934, for the same study. For his distinguished achievements, Dr. Takei was also honoured with the nomination to a foreign member of "Kaiserliche Deutsche Akademie der Naturforscher, Leopoldina" in 1958, and to a foreign member of "Heidelberger

Akademie der Wissenschaft" in 1959. In 1953, he attended the First International Congress of Plant Protection in Naples and Rome as a representative of Japan Academy Council, and after the congress, made visits to many countries in Europe. In 1959, he was invited to the annual meeting of "Kaiserliche Deutsche Akademie der Naturforscher, Leopoldina" in Halle. After the meeting, he paid visits to many of the institutes and laboratories in Europe.

Lastly mention must be made that Dr. Takei is endowed with such quality as faithfulness, enthusiasm and fortitude. His warm personality earned for him many intimate and cordial friends in and out of our country. This collection of papers by his colleagues, former and present associates, and students, is dedicated to Dr. Takei as an expression of esteem and appreciation in commemoration of his retirement.

February 1960

Risaburo Nakai
Director
Institute for Chemical Research

CONTENTS

Saburo TAKEI and Sankichi TAKEI : Studies on the Syntheses of the Pyrethrin Analogues and their Biological Activities. (I). Allethronyl Esters of Cyclopropanecarboxylic Acids.....	1
Minoru OHNO, Yuzo INOUE and Toshio SUGITA : Novel Synthesis of Chrysanthemumdicarboxylic Acids.....	8
Minoru OHNO, Masayuki HAMADA and Hirokazu TAKAHARA : Synthesis of 3,4-Methylenedioxyphenyl Ethers and their Synergistic Activities	34
Hisateru MITSUDA and Takehiko SHIKANAI : Studies on the Utilization of Chlorella for Food. Studies on the Nutritive Values of Cell Free Algal Proteins.....	40
Shizuo UEDA, Fukuju TSUJI and Akira WATANABE : Study on Surface Electricity. (XXII). On the Differential Capacity of the Adsorbed Layer of Nonionic Surface Active Agents. (I).....	59
Takeshi HASHIZUME, Kenji FUJIMOTO, Hideo UNUMA, Kouichi TAKINAMI and Kei-ichi MORIMOTO : Organophosphorus Compounds. (II). A Novel Synthesis of Glucose-6-phosphate	70
Toshio FUJITA, Koichi KOSHIMIZU, Kazuyoshi KAWAZU, Sadao IMAI and Tetsuo MITSUI : The Plant Growth Activity of 1-Naphthoic Acid Derivatives and their Related Compounds	76
Hideo KATAGIRI and Tatsurokuro TOCHIKURA : Studies on the Microbiological Production of Ketonic and Amino Acids.....	94
Minoru NAKAJIMA, Ichiro TOMIDA and Norio KURIHARA : Benzeneglycols. as a Starting Material for the Syntheses of Cyclitols.....	124

BULLETIN OF THE INSTITUTE FOR CHEMICAL RESEARCH

KYOTO UNIVERSITY

Vol. 37, 1960

Published bi-monthly by

THE INSTITUTE FOR CHEMICAL RESEARCH
KYOTO UNIVERSITY
KYOTO, JAPAN

1959

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

Author Index to Volume 37, 1959

CHACHIN, Kazuo	425	OGATA, Kuniyasu	425
FUENO, Takayuki	260	OKAMOTO, Masasuke	417
FUJINAGA, Taitiro	267, 272	OKAMOTO, Sunao	299
FUKUDA, Kuniya	321	OKAMOTO, Tosio	374
FURUKAWA, Junji	260	OKUDA, Akizo	321
GANNO, Shigetake	374	OSHIO, Toshiki	349
HARA, Tadashi	112, 120, 126, 132, 139, 145, 153, 159, 167, 172, 179, 185	OZAWA, Kunio	327
HATANO, Hiroyuki	374	SAKKA, Sumio	335, 341
HAYAMIZU, Tonosuke	8	SAKRADA, Ichro	353, 361, 368
HAYASIDA, Toshiaki	281	SASAI, Tokio	15, 207, 213, 294
HIGASHI, Shinnosuke	200	SATO, Masanori	267, 272
IMAI, Yasuo	392	SETO, Tsuneo	281
INOUE, Yasushi	1, 38	SETSUDA, Takeshi	468
ISE, Masao	277	SHIBATA, Hiromu	408
ISHIBASHI, Masayoshi	1, 26, 31, 38 145, 153, 159, 167, 172, 179, 185, 191, 267, 272	SHIGEMATSU, Tsunenobu	191, 349
ISHIDA, Masahiro Rué	405	SHIMIZU, Sakae	299
ISOGAWA, Kazuo	15	SHINAGAWA, Yoshya	392
IWASAKI, Tamiko	400	SHINOHARA, Hideyuki	15, 207, 213
IWATA, Takashi	425	SOGA, Naohiro	335, 341
KADOTA, Hajime	408	SOGAMI, Nasaru	392
KAKEI, Mamoru	15, 207, 213, 394	SYAKUDO, Katsumi	437
KAWABATA, Akira	319	TABUSHI, Masayuki	226, 232, 237, 245, 252
KAWAI, Fumio	8	TAKAHASHI, Kunihiro	299
KIMURA, Fujiko	353, 361, 368	TAMURA, Yoshihiro	392
KUBO, Katsuhiko	15, 207, 213	TANAKA, Kenzo	281
KURACHI, Mamoru	48, 59, 73, 85, 101	TANAKA, Shin	299
MARUYAMA, Takeo	417	TANAKA, Shozo	374
MATSUOKA, Saburo	405	TANAKA, Tetsuro	319
MITSUMA, Hisateru	8	TASHIRO, Megumi	335, 341
MIYAKE, Tadashi	468	TOYODA, Koichi	319
MIYOSHI, Hideo	408	TSUJI, Waichiro	353, 361, 368
MURANAKA, Hideo	468	UEDA, Shunzo	26, 31
NAKAYAMA, Yasuyuki	277, 299, 306	UJIHARA, Akio	437
NISHIKAWA, Yasuhara	191	WATANABE, Akira	281
NISHIYAMA, Ichizo	417	YAMAGISHI, Morihisa	440, 453, 461
		YAMAGUCHI, Nobuo	294
		YAMAMOTO, Toshio	145, 153, 159
		YAMAMOTO, Toshikazu	26, 31
		YAMAMOTO, Yuroku	1, 38
		YASUMOTO, Kyoden	8

化学研究所報告第38巻第1号

昭和35年3月25日 印刷

【非売品】

昭和35年3月31日 発行

大阪府高槻市古曽部

京都大学化学研究所

編集兼発行人

中井利三郎

京都市上京区寺之内通小川西入

印刷所

山代印刷株式会社

京都市上京区寺之内通小川西入

印刷者

山代多三郎