

BULLETIN OF THE INSTITUTE  
FOR CHEMICAL RESEARCH  
KYOTO UNIVERSITY

Vol. 35, Nos. 5-6

*Published bi-monthly by*

THE INSTITUTE FOR CHEMICAL RESEARCH  
KYOTO UNIVERSITY  
KYOTO, JAPAN

November, 1957

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

INSTITUTE FOR CHEMICAL RESEARCH  
KYOTO UNIVERSITY

**Director**

Sankichi TAKEI

**Members of Council**

Rempei GOTO	Yoshiyuki INOUE	Masayoshi ISHIBASHI
Hideo KATAGIRI	Kiichi KIMURA	Sango KUNICHIIKA
Risaburo NAKAI	Ryohei ODA	Kikuo OGII
Minoru OHNO	Ichiro SAKURADA	Nobuji SASAKI
Ikutaro SAWAI	Hiroshi SAWAMURA	Tunenobu SHIGEMATSU
Sakae SHIMIZU	Keiichi SHISHIDO	Eiji SUITO
Isamu TACHI	Hideo TAKAKI	Tetsuro TANAKA
Sankichi TAKEI	Yoshimasa TAKEZAKI	Waichiro TSUJI
Hideki YUKAWA		

**Editors**

Junzo EBIHARA	Risaburo NAKAI	Masaya OKANO
Tsunenobu SHIGEMATSU	Gisaburo TABUCHI	Megumi TASHIRO

**Treasurer**

Kisaji TAKADA

**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

## C O N T E N T S

Natsu UYEDA : The Crystal Structure Analysis by the Subsidiary Maxima of the Electron Diffraction Pattern .....	105
Kenzo TANAKA, Tsuneo SETO and Toshiaki HAYASHIDA : Phase Transformation of <i>n</i> -Higher Alcohols. (I) .....	123
<hr/>	
Hisateru MITUDA : Studis on Enriched Food.....	140

### Abstracts

Ken-ichi FUKUI, Teijiro YONEZAWA and Chikayoshi NAGATA : Interrelations of Quantum-Mechanical Quantities Concerning Chemical Reactivity of Conjugated Molecules .....	149
Eiji SUITO and Masafumi ARAKAWA : Electron Microscopic Studies on Fillers for Rubber. (IV). State of Rubber-Filler System at the Elongation .....	149
Eiji SUITO, Natsu UYEDA and Kazuyoshi TAKIYAMA : A Specimen Preparation Technique for the Crystal Habit Analysis of Fibrous Crystals .....	150
Eiji SUITO and Masafumi ARAMAKI : Comparison of the Particle Sizes of Powders Measured by Various Methods .....	152
Eiji SUITO and Eiichi SEKIDO : The Dimorphism and the Crystal Habits of Copper-Oxinate Precipitates .....	153
Kiyokado NISHIHARA, Mitsuo KURACHI and Noboru HIROTA : On the Leaching of Domestic Chromite Ore in Sulfuric Acid .....	154
Hisao KITANO and Kenichi FUKUI : Reaction of <i>n</i> -Hexyl Bromide with Potassium Fluoride in Several Glycols .....	155
Michiyasu SUGII and Risaburo NAKAI : Nitration of Desoxybenzoin .....	155
Masuyuki HAMADA : Studies on Condensation Products of Chlorinated Phenols with Chloral. (I). The Structure of Condensation Products of 2,4-Dichlorophenol or 2,4-Dichloroanisole with Chloral .....	156
Yuzo INOUYE, Toshio SUGITA and Minoru OHNO : Studies on Synthetic Pyrethroid. (XL). Another Evidence for the <i>trans</i> -Configuration of $\alpha$ , $\delta$ -Dimethylsorbic Acid .....	158
Yuzo INOUYE and Minoru OHNO : Resolution of ( $\pm$ ) - <i>trans</i> -3-( <i>trans</i> -2'- Carboxypropanyl)-2,2-dimethyldlopropane-1-daboxylic Acid .....	158
Sango KUNICHIKA and Yasumasa SAKAKIBARA : Preparation of 1,4- Butanediol Monovinyl Ether and its Polymerization .....	159
Hiroshi SUDA, Susumu INOUE and Ryohei ODA : Synthesis of an	

Anion-Exchange Resin from Methylvinylketone .....	160
Noboru MORI and Takeshi TANAKA : On the Demixing of the Solution of Mixture of Polyvinyl Alcohol and its Derivatives .....	161
Waichiro TSUJI, Masazo IMAI and Shinjiro TAMURA : Relation between the Crease Recovery of the Resin Finished Fabric and the Elastic Recovery of Yarn .....	161
Yasuo SONE and Ichiro SAKURADA : Studies on the Swelling of Polyvinyl Alcohol. (V). Influence of the Removal of Soluble Parts on the Effect of the Heat Treatment of Polyvinyl Alcohol Films .....	161
Yasuo SONE and Ichiro SAKURADA : Studies on the Swelling of Polyvinyl Alcohol. (VI). Swelling of Films Prepared from Water-Soluble and Insoluble Parts of Polyvinyl Alcohol Films .....	162
Yasuo SONE and Ichiro SAKURADA : Studies on the Swelling of Polyvinyl Alcohol. (VII). Influence of the Residual Acetyl Groups on the Swelling of Polyvinyl Alcohol Films .....	162
Yasuo SONE and Ichiro SAKURADA : Studies on the Swelling of Polyvinyl Alcohol. (VIII). Swelling of Perfectly Deesterified Polyvinyl Alcohol Films with Various Degrees of Polymerization .....	163
Yasuo SONE and Ichiro SAKURADA : Studies on the Swelling of Polyvinyl Alcohol. (IX). Swelling of Films Prepared from Mixture of Two Kinds of Polyvinyl Alcohols with Different Degree of Polymerization .....	163
Sumio NAGASAWA : Problems on the Breeding of Insects for Biological Assay of Insecticides. (XVI). On the Increment of Size of Faecal Pellets following the Growth in Larva of the Gypsy Moth, <i>Lymantria dispar L.</i> .....	164
Sumio NAGASAWA : Problems on the Breeding of Insect for Biological Assay of Insecticides. (XVII). On the Number of Larval Moults in the “Takatsuki” Race of the Gypsy Moth, <i>Lymantria dispar L.</i> ; Problems on the Breeding of Insect for Biological Assay of Insecticides. (XVIII). On the Number of Larval Moults in the “Noheji” Race of the Gypsy Moth <i>Lymantria dispar L.</i> .....	164

化学研究所報告第35卷第5~6号

昭和33年3月25日 印刷  
昭和33年3月30日 発行 【非売品】

大阪府高槻市古曾部  
京都大学化学研究所  
編集兼発行人 武居三吉

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