

Titles of Papers

Read at the 53rd Semi-annual Meeting of the Institute on
June 11th and 12th, 1954

1. Mamoru KURACHI : Studies on the metabolic products of *Pseudomonas aeruginosa* sp. (III).
On the quantitative determination of pyocyanine. (2).
2. Hideo KATAGIRI and Yoshio ICHIKAWA : Studies on the *Propioni-bacterium*. (IV).
Anaerobic decomposition of succinate by intact cells, lyophilized cells and cell-free extract
of *P. arabinosum*.
3. Hideo KATAGIRI, Masayuki IKEMIYA and Harugoro YOMO : Studies on barley malt. Some
investigations upon zymogen amylase.
4. Kinsuke KONDO, Shigeki MORI and Morikazu KAJIMA : On the components of soybean
protein. Change of protein at the stage of germination.
5. Kinsuke KONDO, Shigeki MORI and Morikazu KAJIMA : On the components of soybean
protein. Separation and purification of soybean β -amylase.
6. Hisateru MITSUDA, Katsuharu YASUMATSU and Atsushi NAKAZAWA : Studies on catalase
in chloroplasts.
7. Hajime FUJIMURA, Takaji UESHIMA, Toshikazu FUJISAWA, Michiyasu SUGII and Toru
YAZE : Studies on syntheses and pharmacological action of tetraline derivatives. (I).
8. Hajime TOMONO, Yutaka YAMAKAWA, Tatsuo AZUMA and Hajime FUJIMURA : Studies
on the alkylamino derivatives. (IV).
9. Yutaka YAMAKAWA, Hajime TOMONO, Tatsuo AZUMA and Hajime FUJIMURA : Studies
on alkylamino derivatives. (V).
10. Kikuo OGIU, Hajime FUJIMURA, Takaji UESHIMA, Toshikazu FUJISAWA and Takashi
OYAIKU : The analgesic action of aminocyclohexane derivatives. (I).
11. Senji UTZINO and Ryokuero SUZUE : Separation of phosphatases of Takadiastase by
chromatography on filter paper.
12. Ren KIMURA and Akio OYAMA : Antibacterial action of nitrofurans derivatives. (III).
13. Tokio SASAI, Teinosuke SAKAMOTO and Masao OKA : On the correlation between the
amount of α -globulin and mucoprotein in pathologic serum.
14. Hiroshi SUDA and Ryohei ODA : Syntheses of the ion-exchange resin.
15. Hiroyoshi AKASHI and Ryohei ODA : Reaction between cetene and hydrogen sulfide.
16. Hiroyoshi AKASHI and Ryohei ODA : Reaction between benzaldehyde and Fremy salt
(Potassium nitroso disulfonate).
17. Ryuzaburo NOZU and Toshizo ISOSHIMA : Reaction of ketene with ethyl acetoacetate in
the presence of pyridine.
18. Ryuzaburo NOZU and Toshizo ISOSHIMA : Reaction of ketene with phenol, resorcinol,
phloroglucinol and dimedone.
19. Keiiti SISIDO and Motoo MATO : Cyclization of chlorobenzene with 1, 4-dichloro-2-
butyne.
20. Keiiti SISIDO and Osamu KURIHARA : Condensation of benzophenone and dialkyl homo-
phthalate in the presence of diethylamino-magnesium bromide.
21. Keiiti SISIDO and Kenzi KUMAZAWA : Stereochemistry in the aldol type condensation of
ketones and esters.
22. Keiiti SISIDO, Hitosi NOZAKI and Sigeo TUZI : Acetylation with acetic anhydride in the
presence of halogens or hydrogen halides.
23. Keiiti SISIDO and Takaaki FUKUSIMA : Synthesis of diglycidyl ether and its reaction
with phenol.

24. Risaburo NAKAI and Miyako MATSUMOTO: On the condensation products of α, β -unsaturated ketones and cyano acetamide.
25. Masayuki HAMADA and Toshio FUJITA: Cyclopropane derivatives. (IV). Structures of diphenylcyclopropanes.
26. Masayuki HAMADA: Cyclopropane derivatives. (V). The structure and insecticidal activity of diphenylcyclopropanes.
27. Tatsuo KARIYONE and Mitsuo TAKAHASHI: Infrared spectra of sugars and glucosides
28. Takeo SUGANO and Rempei GOTO: Solubilization of dyestuffs in aqueous solution of nonionic surfactants.
29. Takeo SUGANO and Rempei GOTO: Studies on hydrotropy.
30. Nishio HIRAI and Rempei GOTO: Spinnability of liquids. (I).
31. Yasuhiko NUKUSHINA and Ichiro SAKURADA: Change of the crystallinity of polyvinyl alcohol films by swelling.
32. Noboru MORI, Koji FUKUMI and Takeshi TANAKA: Mechanical properties of polyvinyl chloride fibers of various degrees of polymerization.
33. Kiyoshi HIRABAYASHI: Some aspects of submicroscopic structure in P. V. A. fibers.
34. Yasuo SONE and Ichiro SAKURADA: Influence of the degree of crystallization and the degree of polymerization upon the solubility of polyvinylalcohol.
35. Waichiro TSUJI and Koichi SUGITA: Polymeric plasticizers. A series of polyester. (II). Mixed polyester with azelaic acid and phthalic anhydride.
36. Noboru YAMAZAKI, Michihiro TAKAHAMA and Masao HORIO: A study on a semi commercial basis of rayon grade pulp (Kraft process), made from cryptomeria, oak, pasania, tabunoki and beech tree.
37. V. P. GOHEL and Michihiro TAKAHAMA: A study on a semi-commercial basis of rayon grade pulp (Kraft process), made from Indian bamboo.
38. Toshio INOUE and Michihiro TAKAHAMA: The variation in viscosity of the cellulose acetate dope used in dry spinning. (V).
39. Shinjiro KODAMA, Isoji TANIGUCHI, Sachio YUASA, Tadahisa OTA and Yutaka TERADA: Pilot plant test for the continuous preparation of polyethylene.
40. Makoto KUMADA, Akira TAKEDA and Kimio TARAMA: On the decomposition rate of Si-Si bond in disilane by NaOC_2H_5 .
41. Ikutaro SAWAI, Kaoru UMEYA and Tomozo NISHIKAWA: Influence of absorbed cations on the casting properties of clay suspensions.
42. Ikutaro SAWAI, Kaoru UMEYA and Tomozo NISHIKAWA: Notes on vacuum dry pressing under high pressure.
43. Ikutaro SAWAI, Sumio SAKKA and Ryoza HAYAMI: Diffusion in molten glasses.
44. Hiroshi SAWAMURA, Masatoshi TSUDA, Sanzo NAKAGAWA and Akitsu TOMITA: Studies on cast iron having fine graphite produced by melting cast iron with slag containing TiO_2 . (V). Influence of chemical composition (nickel and chrome) of cast iron upon the structure of product.
45. Hiroshi SAWAMURA, Masatoshi TSUDA, Sanzo NAKAGAWA and Akitsu TOMITA: Studies on cast iron having fine graphite produced by melting cast iron with slag containing TiO_2 . (VI). Influence of ferro-titanium upon cast iron melt.
46. Isao KUSHIMA and Tsuyoshi AMANURA: On the constitution of zinc-ferrite. (II).
47. Shiro MORITA, Ryohei OZAKI, Yutaka KAWANO and Osamu KAWANO: A fundamental study on nodular graphite cast iron. (IV). The influence of Ti on the formation of spheroidal graphite in cast iron.
48. Shiro MORITA, Ryohei OZAKI and Hisao SHOBAYASHI: A fundamental study on nodular graphite cast iron. (V). The influence of soda ash treating on the formation of spheroidal graphite in cast iron.
49. Shiro MORITA, Ryohei OZAKI and Ikuo YAMAGIWA: A fundamental study on nodular graphite cast iron. (VI). The influence of scale treating on the formation of spheroidal graphite in cast iron.

50. Shiro MORITA, Ryohei OZAKI and Yutaka KAWANO: Influence of the melting and casting conditions on the graphitization of white cast irons.
51. Shiro MORITA and Ryohei OZAKI : Relations between ultrasonic attenuation in cast iron and steel and their structures.
52. Kiyokado NISHIHARA, Yoshio KONDO and Kiyoshi EZAKI : On the recovery of copper from leached solution of pyrite cinder.
53. Shigeru MATSUO and Hajime NARUMI : On the theory of interaction between nuclei and electrons.
54. Hajime NARUMI and Apollo SAIKA : On the theory of nuclear spin interaction in molecules.
55. Toshio AZUMA and Kunihiko TSUMORI : Beta-spectra of Ag¹¹⁰ and Sb¹²⁴.
56. Toshio AZUMA and Kunihiko TSUMORI : Efficiency of Geiger-Müller counter.
57. Kenji MITANI : On the build-up mechanism of the microwave gas breakdown.
58. Sakae SHIMIZU, Fumio HIRAYAMA, Sunao OKAMOTO and Hiroaki AKAGI : Studies on scintillation counter. (I).
59. Kiichi KIMURA, Masateru SONODA, Takuji YANABU, Ryutaro ISHIWARI, Isao KUMABE, Sukeaki YAMASHITA, Kozo MIYAKE and Jiro WUTO : On the electro-magnet for Kyoto cyclotron. (I). Design.
60. Kiichi KIMURA, Masateru SONODA, Takuji YANABU, Ryutaro ISHIWARI, Isao KUMABE, Sukeaki YAMASHITA, Kozo MIYAKE, Hisashi YAMAGUCHI and Kyoji HARADA : On the electro-magnet for Kyoto cyclotron. (II). Test
61. Yoshiaki UEMURA, Jun KOKAME and Hidetsugu IKEGAMI : Measurements of the gas amount liberated from the surfaces of several metals.
62. Hidetsugu IKEGAMI, Jun KOKAME and Yoshiaki UEMURA. : Theoretical consideration for the mechanism of the probe gas for high vacuum leak-detection.
63. Sakae SHIMIZU, Akira KATASE, Hidekuni TAKEKOSHI and Kenji TAKUMI : The preliminary experiments on Kyoto cyclotron oscillator.
64. Sakae SHIMIZU, Akira KATASE, Hidekuni TAKEKOSHI, Kenji TAKUMI and Hideko TAKEKOSHI : On the shorting condensor for Kyoto cyclotron.
65. Isao TAKAHASHI, Tsuneo HASHI, Osamu RYUZAN and Keiichi TAKIYAMA : Pure quadrupole spectra of several bromine compounds (I).
66. Isao TAKAHASHI, Mikio TAKEYAMA and Tanehiro NAKAU : Magnetic resonance absorption of asbestos with 3 cm wave. (II).
67. Isao TAKAHASHI, Mikio TAKEYAMA and Hideo SENO : New approximate methods of dielectric measurement in the centimeter wave region. (II)
68. Hideo TAKAKI, Masashige KOYAMA and Hidekiyo FUJIHARA : Imperfections in tin single crystals.
69. Nobuji SASAKI and Ryuzo UEDA : The electronmicroscopic and micro-diffraction study on the progress of the formation of iron particles from fused Fe₃O₄ by reduction in hydrogen
70. Eiji SUITO and Natsu UYEDA : Electron micro-diffraction study of lamellar crystals of lead iodide.
71. Eiji SUITO and Natsu UYEDA : Electron micro diffraction study of copper phthalocyanine.
72. Eiji SUITO and Eiichi SEKIDO : Electron microscopic study of Cu-oxinate precipitates.
73. Eiji SUITO, Masafumi ARAKAYA and Yasuo BANBA : The viscosity of suspension of powders.
74. Kiyoshi ABE, Tetsuro TANAKA, Michiharu KANBARA and Junzo YAMAMOTO : Study on spinel-type semiconductor. (IV).
75. Kiyoshi ABE, Tetsuro TANAKA, Toshio INOBUCHI and Akira KAWABATA : Bending vibration of combined disc-type BaTiO₃ ceramic vibrator.
76. Kiyoshi ABE, Tetsuro TANAKA, Toshio INOBUCHI and Akira KAWABATA : BaTiO₃ ceramic vibrator having spherical surfaces.
77. Kiyoshi ABE, Tetsuro TANAKA and Tsuguo KAWAI : BaTiO₃ microphone for underwater uses.
78. Kiyoshi ABE, Minoru TOYODA and Ichiro TANIGUCHI : Dipole moments of organosilicon

- compounds.
79. Kiyoshi ABE; Minoru TOYODA and Yushiro SHIRAISHI : Studies on fluorine resins. (I).
On the dielectric properties.
 80. Naokazu KOIZUMI and Tetsuya HANAI : Dielectric properties of lower-membered polyethylene glycols at low frequencies.
 81. Naokazu KOIZUMI : Complex dielectric constants of lower-membered polyethylene glycols.