

## Titles of Papers

Read at the 56th Semi-annual Meeting of the Institute  
on November 18th and 19th, 1955

1. Hajime FUJIMURA, Takaji UESHIMA and Toyoji MAEDA : Studies on the Analgesic Action of Dialkylaminoacylamino Derivatives. (III).
2. Hajime FUJIMURA, Takaji UESHIMA and Toyoji MAEDA : On the Analgesic Action of the Diphenylmethane Derivatives. (I).
3. Hajime FUJIMURA, Keiji SUGA, Masashi ISHIKAWA and Michiyasu SUGI : Studies on Pharmacological Action of Tetralin Derivatives. (III).
4. Hajime FUJIMURA, Kazuo ASAI and Kiyohisa KAWAI : Analgesic Action of Dialkylaminoacylamino Derivatives. (IV). Pharmacological Studies of Camphor Derivatives.
5. Hajime FUJIMURA, Kazuo ASAI, Susumu OYASU, Kiyohisa KAWAI, Hajime TOMONO and Yutaka YAMAKAWA : Analgesic Action of  $\alpha, \alpha$ -Diphenyl,  $\alpha$ -Alkoxy Acetic Esters.
6. Toyo HIRAZAWA and Masashichi YOSHIOKA : On the Action of Papain Enzyme. (IX).
7. Shunji FUKUDA, Masanobu SAWAI, Misao NAKAMA and Senji UTZINO : Re-examination of the Synthesis of 17 $\alpha$ -Methyl-3-keto-5, 17-dioxyandrostane.
8. Senji UTZINO and Ryokuero SUZUE : Studies on the Enzymatic Synthesis Cocarboxylase.
9. Seizo OKAMURA and Takuhiko MOTOYAMA : Emulsion Polymerisation of Vinyl Acetate in the the Presence of Polyvinyl Alcohol.
10. Yasuo SONE : Swelling and Crystallization of the Fractionated Polyvinyl Alcohol.
11. Waichiro TSUJI and Toshio OKADA : Studies on the Tribo-Electricity of Textile Fibers. (III). The Effects of the Treatments with Various Oiling Agents.
12. Waichiro TSUJI, Yasuyoshi SAKAGUCHI and Ryozo KITAMARU : Chemical Treatments of Cotton. (III). Partial Acetylation by Various Processes.
13. Waichiro TSUJI and Ryozo KITAMARU : Chemical Treatment of Cotton. (IV). Elastic Properties of the Partial Acetylated Cotton of High Temperature.
14. Rempei GOTO, Takeo SUGANO and Naomi HAYAMA : Effect of Impurities on the Dispersion State of Non-Ionic Surfactants.
15. Rempei GOTO, Takeo SUGANO and Naomi HAYAMA : Penetrating Power Tests of Surfactants.
16. Chugo KUJIRAI : Reaction Mechanism of Photodegradation of Cellulose by 2537A Irradiation. Especially on the Decomposition Mechanism of Cellulose Peroxide.
17. Keinosuke KOSAYASHI, Nobuo UTSUMI and Akira NAKAMURA : On the Crystalline State of High Polymer. (VI). Changes in Micell Length by Oxydative Degradation of Cellulose.
18. Eiji SUITO and Kazuyoshi TAKIYAMA : Electron Microscopic Observation of Viscous Colloids.
19. Hiroshi INAGAKI : On the 2nd Virial Coefficient of Osmotic Pressure of Polyelectrolyte Solution with Extraneous Salt.
20. Hiroshi INAGAKI and Sunao OKAMOTO : A New Revolution Counter for Ultracentrifuge.
21. Hideo KATAGIRI and Yoshio ICHIKAWA : Studies on *Propionibacterium*.
22. Mamoru KURACHI : Studies on the Mechanism of Pyocyanine Formation. (II). On the Decomposition of Pyocyanine by Fungi. On the Biosynthesis of Pyocyanine from Decomposed Product of Pyocyanine.
23. Hideo KATAGIRI, Chuji TATSUMI and Shohei NAKAGAWA : Studies on the Carotenogenesis by *Rhodoturula muciraginos*. (VI).
24. Hideo KATAGIRI, Masayuki IKEMIYA and Harugoro YOMO : Studies on Barley Malt. (VII). Some Investigations upon Zymogen Amylase.
25. Hideo KATAGIRI, Masayuki IKEMIYA and Hideo AN-YOJI : Studies on Barley Malt. (VIII).

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- Effect of Synthetic Detergents on Malt Amylase.
26. Hisateru MITSUDA, Katsuharu YASUMATSU and Morikazu KAJIMA : Crystallization of Yeast Catalase and its Properties.
  27. Shigeki MORI : On the Nucleic Acid of Soybean.
  28. Yoshiyuki INOUE and Shozaburo KITAOKA : Preparation of Galactosamine and Synthesis of Some Derivatives.
  29. Yoshiyuki INOUE and Toshio ONISHI : Studies on the Browning Reaction of Food-Stuffs.
  30. Yoshiyuki INOUE and Nobumitsu YANO : N-Glucoside of Aminoalkylbenzene.
  31. Masayuki HAMADA and Sumio NAGASAWA : Studies on Chemical Constitution and Insecticidal Activity. (XI). Comparative Toxicity of Condensation Products of Dichlorophenol and Chloral.
  32. Masayuki HAMADA and Sumio NAGASAWA : Studies on Chemical Constitution and Insecticidal Activity. (XII). Comparative Toxicity of Three DDT Isomers and *p, p'*-DDT.
  33. Kyugo SASAGAWA and Mikio KATO : Studies on the Mechanism of Inducing Mutations by Ultrasonic Vibration. (II).
  34. Kyugo SASAGAWA, Masaru SOGAMI, Yasuo INOUE and Koei MOMOTANI : Turbidimetric Titration of Serum-Proteins.
  35. Eiji SUITO, Masafumi ARAKAWA and Makoto TAKAHASHI : New Apparatus for Specific Surface Area Measurement by Air Permeability Method.
  36. Eiji SUITO, Natsu UYEDA and Masako KATSUMI : Particle Size Determination of Gold Sol. Comparison between the Two Methods, Electron Microscope and Ultra Centrifuge.
  37. Eiji SUITO and Natsn UYEDA : Transformation of Cu-Phthalocyanine. (I). Dimorphic Transition and Crystal Structure.
  38. Eiji SUITO and Natsu UYEDA : Transformation of Cu-Phthalocyanine. (II). Velocity of Transformation and Crystal Growth.
  39. Masayoshi ISHIBASHI, Eiji SUITO and Kiichi SEKIDO : Precipitation of Cu-Oxinate. (II).
  40. Masayoshi ISHIBASHI, Taitiro FUJINAGA and Huziko SINOZUKA : The Use of Metal Oxide Electrode of High Positive Potential and its Application to the Determination of Chromate and Vanadate with Ferrous Iron.
  41. Hiroshi SAWAMURA, Masatoshi TSUDA, Sanzo NAKAGAWA and Akitsu TOMITA : Study on the Mass Effect of S-H Cast Iron.
  42. Kiyokado NISHIHARA, Yoshio KONDO and Yukitada HIRATA : Studies on the Electrolytic Refining of Lead.
  43. Kiyokado NISHIHARA, Yoshio KONDO and Yasukazu ISHIDA : On the Treatment of Copper and Cobalt Bearing Pyrite. (III).
  44. Shiro MORITA, Ryohei OZAKI and Naoya INOYAMA : Fundamental Study on Nodular Graphite Cast Iron. (X). On Carbon Determination of Nodular Graphite Cast Iron.
  45. Shiro MORITA and Ryohei OZAKI : Fundamental Study on Nodular Graphite Cast Iron. (XI). Change of Chemical Composition in Molten Cast Iron Treated by Mg.
  46. Hideo TAKAKI and Masashige KOYAMA : Studies on Line Structures in Tin Single Crystals. (V).
  47. Hideo TAKAKI, Masashige KOYAMA and Hidekiyo FUJIHIRA : Studies on Line Structures in Tin Single Crystals. (VI).
  48. Isao TAKAHASHI, Toru OGAWA, Masaru YAMANO and Akira HIRAI : Automatic Control in Stark Modulation Atomic Clock.
  49. Bunzaburo SAHEKI and Shinjiro YASUMI : Diffusion Cloud Chamber with Circulating Cooling System.
  50. Toshio AZUMA and Kunihiko TSUMORI :  $\beta$ -Ray Spectrum of  $So^{46}$ .
  51. Toshio AZUMA and Kunihiko TSUMORI : Synchrotron of Small Size. (I).
  52. Jun KOKAME : A Note on the Intrinsic Speed of the Diffusion Pump.
  53. Jun KOKAME : Absorbed Gases and Effect of Back-Diffusion of the Diffusion Pump.
  54. Jun KOKAME : Evacuation Rate and Outgasing of Vacuum System.
  55. Kiichi KIMURA *et al.* : On the Design and Test of the Vacuum System for Kyoto Cyclotron.
  56. Yoshiaki UEMURA and Hirokazu FUJITA : Measurements of the Substitution Sensitivity

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- Factors of the Probe Gases for High-Vacuum Leak-Detection.
57. Sakae SHIMIZU, Fumio HIRAYAMA and Sunao OKAMOTO : Plastic Scintillator : Relation between Pulse-Height and Polymerization Degree.
  58. Kiichi KIMURA, Isao KUMABE and Kyoichi MIYASHITA : External Cathode  $\text{BF}_3$  Proportional Counter.
  59. Kiichi KIMURA, Isao KUMABE, Kozo MIYAKE, Hiroshi OGATA and Kyoichi MIYASHITA : On the Reaction of  $\text{O}^{16}$  by Fast Neutrons. (II).
  60. Hajime NARUMI, Tadashi WATANABE, Apollo SAIKA, Osamu RYUZAN, Hajime NAKAHARA and Hisao KATSURAGI : On the Interaction between Atomic Nuclei and Electrons. (Continued Reports of III and IV). Nuclear Electric Quadrupole Interaction in the HD Molecule.
  61. Hajime NARUMI and Shigeru MATSUO : On the Interaction between Atomic Nuclei and Electrons. (V). Validity of Adiabatic Approximation.
  62. Hajime NARUMI and Tadashi WATANABE : On the Interaction between Atomic Nuclei and Electrons. (VI). Nuclear Magnetic Octapole and Electric Hexadecapole Spectrum.
  63. Tetsuro TANAKA and Akira KAWABATA : Study on the Ferroelectric Ceramics in the System  $(\text{Pb-Ba})\text{ZrO}_3$ .
  64. Tetsuro TANAKA, Akira KAWABATA and Yoichi SHIMABARA : The "Parametron" using Ferroelectric Materials.
  65. Tetsuro TANAKA and Toshio INOBUCHI : On the Shear Vibration of  $\text{BaTiO}_3$  Ceramic.
  66. Tetsuro TANAKA, Toshio INOBUCHI and Toshiya HAYASHI : Mechanical Filter.
  67. Tetsuro TANAKA and Junzo YAMAMOTO : On the Properties of Nickel Ferrite as Magnetostrictive Material.
  68. Takeshi KIYONO, Minoru TOYODA and Minoru TABANA : Dielectric Properties of the Silicone Resin. (V).
  69. Takeshi KIYONO, Minoru TOYODA and Minoru TABANA : Dipole Moment of Trifluorochloroethylene.
  70. Naokazu KOIZUMI and Rempei GOTO : A Coaxial Line Method for Measurement of Complex Dielectric Constants of Liquids at the Frequency Range of 1.4 to 4 Kmc.
  71. Naokazu KOIZUMI and Tetsuya HANAI : Dielectric Constants of Glycols at Low Frequencies.
  72. Hideo SENO, Mikio TAKEYAMA and Mikio SUMIZAWA : The Dielectric Properties of the n-Long Chain Alcohols in the Microwave Region.
  73. Rempei GOTO and Toru TAKENAKA : Hydrophilic Properties of Alcohols and Their Infrared Absorption.
  74. Isao TAKAHASHI and Tanehiko NAKAU : Ferromagnetic Resonance Absorption in Mixed Ferrites.
  75. Akira WATANABE, Fukuju TSUJI, Tokuro YASUDA and Shizuo UEDA : Study on Surface Electric. (XXII). On Capacity Measurement of Dropping Mercury Electrodes by Resonance Method. (4).
  76. Rempei GOTO, Hiroshi AIDA and Soichi HAYASHI : Viscoelastic Behavior and Brittle Velocity of Asphalts.
  77. Ikutaro SAWAI, Kaoru UMEYA, Tomozo NISHIKAWA and Susumu KAWAMOTO : On the Dynamic Properties of Clay Slips in the Casting Process.
  78. Ikutaro SAWAI, Kaoru UMEYA, Tomozo NISHIKAWA and Susumu KAWAMOTO : Some Observations on the Thixotropic Properties and Casting Characteristics of the Clay Slips.
  79. Ikutaro SAWAI and Toshio MAKI : On the  $\text{BaO-Al}_2\text{O}_3\text{-SiO}_2$  System.