Published in Other Journals by the Staff of the Institute and their Co-workers during the Year 1954

(Papers marked with (*) are written in foreign languages, otherwise they are written in Japanese)

- Kinsuke Kondo, Shigeki Mori and Morikazu Kajima: Studies on proteins. (LXI). On the components of soybean protein. (2). Formation of the component-protein of soybean during the ripening duration. Kyoto Daigaku Shokuryo Kagaku Kenkyusho Hokoku (Bulletin of the Research Institute for Food Science, Kyoto University), 15, 37.
- Kinsuke Kondo, Shigeki Mori and Morikazu Kajima: Studies on proteins. (LXII). On the components of soybean protein. (3). Germinating of soybean and variation of component-protein. *Ibid.*, **15**, 49.
- Ryuzaburo Nodzu, Sango Kunichika, Shinzaburo Oka and Kimio Kusunose: Acetylene and its derivatives. (XI). Vapor phase condensation of acetaldehyde by means of various metallic oxides or hydroxides. Kogyo Kagaku Zasshi (Journal of the Chemical Society of Japan, Industrial Chemistry Section), 57, 914.
- Toshizo Isoshima: Acetylene and its derivatives. (IX). Quantitative analysis of the mixture of acetic acid, acetaldehyde and acetone. *Ibid.*, 57, 743.
- Toshio Isoshima: Quantitative analysis of the mixture of acetie acid, acetaldehyde, acetone, ethyl acetate and ethyl alcohol. *Ibid.*, **57**, 745.
- Ryuzaburo Nodzu, Hiroshi Watanabe: Studies on chemotherapy of tuberculosis. (IV). Synthesis of *m* and *p*-aminophenol alkyl ethers and their bacteriostatic actions on *Mycobacterium tuberculosis*. Yakugaku Zasshi (Journal of the Pharmaceutical Society of Japan), 74, 872.
- Ryuzaburo Nodzu, Hiroshi Watanabe, Shinzaburo Oka et al.: Studies on chemotherapy of tuberculosis. (V). Synthesis of resorcinol monoalkyl ethers and hydroquinone monoalkyl ethers, and their bacteriostatic action on *Mycobacterium tuberculosis*. *Ibid.*, 74, 875.
- Ryuzaburo Nodzu, Hiroshi Watanabe et al.: Studies on chemotherapy of tuberculosis. (VI). Synthesis of o- and p-alkoxybenzaldehyde thiosemicarbazones and their bacteriostatic actions on Mycobacterium tuberculosis. Ibid., 74, 1248.
- Ryuzaburo Nodzu, Hiroshi Watanabe et al.: Studies on chemotherapy of tuberculosis. (VII). Synthesis of o-alkoxyanilino compounds and their bacteriostatic

- actions on Mycobacterium tuberculosis. Ibid., 74, 1250.
- Yuzo Inouye, Terumi Shinohara and Minoru Ohno: An approach to the synthesis of pyrethric acid. Botyu-Kagaku (Scientific Insect Control), 19, 35.
- Toshihiko OIWA: Polarographic determination of pyrethroids. Polarography no Kenkyu (Stndy of Polarography), 2, 84.
- Masayuki Hamada and Tsutomu Suzuki: Studies on chemical constitution and insecticidal activity. (VII). Syntheses of 1,2-diphenylcyclopropane and 1,2-bis-(p-chlorophenyl)-cyclopropane. Botyu-Kagaku (Scientific Insect Control), 19, 76.
- Toshio Fujita and Masayuki Hamada: On the dipole moments of DDT's related compounds. (II). *Ibid.*, 19, 80.
- Masayuki Hamada: Studies on chemical constitution and insecticidal activity. (VIII). Infrared absorption spectra of diphenylcyclopropanes. *Ibid.*, 19, 135.
- Sumio Nagasawa: On the scientific name of the common housefly in Japan. Problems on the breeding of insects for biological assay of insecticides. (V). *Ibid.*, 19, 32.
- Sumio Nagasawa: On a standard substance used in the biological assay of pyrethrin type compounds. Studies on the biological assay of insecticides. (XXXI). *Ibid.*, 19, 74.
- Sumio Nagasawa: "Studies on the biological assay of insecticides. With special reference to the studies of factors affecting the experimental results of the settling dust apparatus methodt," Kyoto.
- Sumio Nagasawa: On the lethal effect of silicon carbide powder in various moisture contents to adults of the azuki bean weevil, *Callosobruchus chinensis* L. Studies on the lethal effects of the so-called 'inert' pulverized dust to insect. (V). *Botyu-Kagaku* (*Scientific Insect Control*), 19, 100.
- Sumio Nagasawa: Screening test in the science of insecticides. Kagaku no Ryoiki, (Journal of Japanese Chemistry), 8, 352.
- Sumio Nagasawa: On the external morphology of the larvae of Hyponomeuta euonymella Hübner (Lep., Hyponomeutidae). New Entomologist, 3 (4), 9.
- Sumio Nagasawa: On the relation between the mixing method of insecticidal dust and its effectiveness. Noyaku (Agricultural Medicine), 1 (11), 32.
- Sumio Nagasawa: On the lethal effect of some inert pulverized dusts to adults of the azuki bean weevil *Callosobruchus chinensis* L., under different relative humidities. Studies on the lethal effect of the so-called 'inert' pulverized dust to insects. (VI). *Botyu-Kagaku* (*Scientific Insect Control*), 19, 127.

- Sumio NAGASAWA: On the local variation of elytral dimension in the flea beetle, *Phyllotreta striolata* Fabricius. *Oyo Kontyu (Applied Entomology)*, 10, 150.
- Yuzo Inouxe and Terumi Shinohara: Studies on the synthetic pyrethroids. (IV). Synthesis of β -methylcrotonaldehyde. Botyu-Kagaku (Scientific Insect Control), 19, 102.
- Hajime Fujimura: Studies on the interaction of autonomic and analgesic drugs on the human volunteers. Nihon Yakurigaku Zasshi (Folia pharmacologia japonica), 50, 32 §.
- Hajime Fujimura: Studies on the interaction of autonomic and analgesic drugs on the human volunteers. (Continued). *Ibid.*, **50**, 224 §.
- Tomio Segawa: The influences of some drugs on the output of adrenaline and noradrenaline in the suprarenal gland. *Ibid.*, **50**, 536.
- Hajime Fujimura, Michiyasu Sugii et al.: Studies on syntheses and pharmacological action of tetralin derivatives. (I). Yakugaku Zasshi (Journal of the Pharmaceutical Society of Japan), 74, 954.
- Kikuo Ogiu, Hajime Fujimura et al.: Pharmacological studies of aminocyclohexane derivatives. (I). *Ibid.*, 74, 1026.
- *Ren Kimura: An electron microscopy of viruses in host cells. Acta Scholae Medicinalis Universitatis in Kioto, 32, 28.
- *Ren Kimura: Virusforschung. Scientia, 48, 1.
- Senji Utzino, Yuko Oka and Takashi Murachi: Enzymic degradation of D-glucosamine by Escherichia Coli. Seikagaku (Jonrnal of Japanese Biological Society), 25, 456.
- Senji Utzino and Shigeru Tsuno: Studies on the excretion of TPD. Vitamins, 7, 473.
- Senji Utzino and Minoru Onoyana: Influences TAD and TPD. on the cathepsin actions. *Ibid.*, 7, 1094.
- *Senji Utzino, Minoru Onoyama and Tadatami Nakao: Influence of γ -aceto- γ -mercapto-propanol, cleavage product of thiamine, on the toad catheptase, papain and ficin. Acta Scholae Medicinalis Universitatis in Kyoto, 31, 167.
- Senji Utzino and Ryokuero Suzue: Studies on the Taka-phosphatases. Shokuryo to Eiyo (Journal of the Japanese Society of Food and Nutrition), 7, 24.
- Hiroshi Sawamura and Masatoshi Tsuda: Investigation on cast iron having fine graphite produced by melting cast iron with slag containing TiO₂. (III). Influence of chemical composition of cast iron upon the structure of product, Tetsu to

- Hagane (Iron and Steel), 40, 622.
- Hiroshi Sawamura and Masatoshi Tsuda: Investigation on cast iron having fine graphite produced by melting cast iron with slag containing TiO₂. (IV). Some melting conditions for the manufacture of S-H cast iron. *Ibid.*, 40, 986.
- Takuhiko Motoyama and Seizo Okamura: Increasing effect on the viscosity of polyvinylalcohol solution. *Kobunshi Kagagu (Chemistry of High Polymers)*, 11, 23.
- Ichiro Sakurada and Yasuhiko Nukushima: Thermodynamics of swelling of crystalline high polymers. *Ibid.*, 11, 472.
- Noboru Mori and Takeshi Tanaka: Tensile recovery of synthetic fiber 'Vinylon'.

 (I). Sen-i Gakkaishi (Jonrnal of the Society of Textile and Cellulose Industry, Japan), 10, 93.
- Noboru Mori, Takashi Tanaka, Kiyoshi Sakurai and Sadayuki Okada: Preparation of synthetic fiber 'Vinylon' from partially saponified polyvinylacetate. *Ibid.*, 10, 155.
- Kiyoshi Hirabayashi, Noboru Mori and Koji Fukumi: Manufacture of synthetic fiber 'Vinylon' with various cross sectional forms. *Ibid.*, 10, 386.
- Seizo Okamura, Takuhiko Motoyama, Takuo Toda and Tomihiro Nishiyama: Reaction in emulsion. (I). Alkali-saponification of polyacrylic esters. Kogyo Kagaku Zasshi) Journal of the Chemical Society of Japan, Industrial Chemistry Section), 57, 31.
- Seizo Okamura, Takuhiko Motoyama, Takuo Toda and Tomihiro Nishiyama: Reaction in emulsion. (II). Alkali-saponification of polyvinylacetate. *Ibid.*, **57**, 33.
- Seizo Okamura and Takuhiko Motoyama: Solubilization and emulsion polymerization of various monomers. *Ibid.*, 57, 930.
- Waichiro Tsuji and Masazo Imai: Influence of boric acid and the other compounds upon the properties of polyvinylalcohol. Kasen Koenshu (Annual Reports of the Research Institute for Synthetic Fibers, Japan), 10, 1.
- Noboru Mori, Waichiro Tsuji and Ichiro Sakurada: Preparation and improvement of the resistance against the hot water of the pure polyvinylchloride fibers. *Ibid.*, 10, 35.
- Ichiro Sakurada, Akira Yamamoto, Osamu Yasutake and Waichiro Tsuji: Manufacture and properties of synthetic fiber 'Vinylon S' and its meaning for Vinylon industry. *Ibid.*, 10, 55.
- Noboru Mori: Tensile recovery of synthetic fiber 'Vinylon,' Ibid., 11, 134, 1991

- Ichiro Sakurada and Waichiro Tsuji: On the resilience of the chemical fibers. *Ibid.*, 11, 180.
- Waichiro Tsuji, Masazo Imai and Teruko Yagi: Research on the resin and other chemical treatments of silk. (II). The prevention of the yellowing and light deterioration. Jushi Kako (Resin Finishing and Applications), 3, 417.
- *Yoshimasa Takezaki and Chisato Takeuchi: Decomposition of methanol induced by methoxy radicals. *Journal of Chemical Physics*, 22, 1527.
- Shinjiro Kodama, Isoji Taniguchi, Sachio Yuasa, Tadahisa Ohta and Yutaka Terada: Continuous production of polyethylene in semi-industrial scale. Kogyo Kagaku Zasshi (Journal of the Chemical Society of Japan, Industrial Chemistry Section), 57, 439.
- Shinjiro Kodama, Isoji Taniguchi, Akio Watanabe, Isao Yoshida and Sachio Yuasa: Studies on the 'Oxo reaction'. (I). Hyoxymethylation of oils and fatts. *Ibid.*, **57**, 395.
- Shinjiro Kodama, Susumu Fukushima, Shinji Nose and Tetsuro Kisaichi: Reaction between ammonia and carbon disulfide under pressure. (III). Condition for the formation of thiourea. *Ibid.*, **57**, 91.
- *Shinjiro Kodama, Isoji Taniguchi, Sachio Yuasa, Tadahisa Ohta and Yutaka Terada: Continuous production of polyethylene in semi-industrial scale. *Memoirs of the Faculty of Eugineering, Kyoto University*, 16, 253.
- *Teiji Tsuruta, Ken-ichi Sasaki and Junji Furukawa: Kinetics of iodine-catalyzed bromination. (II). Bromination of toluene. Journal of the American Chemical Society, 76, 994.
- *Junji Furukawa, Akira Onishi, Teiji Tsuruta and Shiro Oshima: Addition reactions of amino compounds to ethyl vinyl ether. Bulletin of the Chemical Society of Japan, 27, 184.
- Masayoshi Ishibashi, Taitiro Fujinaga and Yuzuru Kusaka: Chemical studies on radioactive indicators. (XVIII). Controlled potential electro-separation of copper, bismuth and lead, and its radio-active indication using Th-band and Th-C as tracers. Nippon Kagaku Zasshi (Journal of the Chemical Society of Japan, Pure Chemistry Section), 75, 13.
- Masayoshi Ishibashi, Koichi Емі and Kyoji Торі: Studies on selective and specific exchange resins. (I). Synthesis of polyhexyl (potassium ion exchange resin). *Ibid.*, 75, 295.
- Masayoshi Ishibashi and Taitiro Fujinaga: Studies on the controlled potential electrolysis. (VI). Construction of sensitive automatic instrument. Bunseki Ka-

- gaku (Japan Analyst), 3, 96.
- Masayoshi Ishibashi and Shinnosuke Higashi: Determination of μg amount of thorium. *Ibid.*, **3**, 213.
- Masayoshi Ishibashi, Tsunenobu Shigematsu and Yasuharu Nakagawa: Studies on the fluorometric analysis. (I). A trial construction of the fluorophotometer and fluorocolorimetric determination of aluminium with morin. *Ibid.*, 3, 293.
- *Nobuji Sasaki and Masaru Onchi: The effect of vapours of halogen compounds on the emission of positive ions from platinum. *Nature*, 174, 84.
- *Nobuji Sasaki and Toshiyoshi Yuasa: Chemical studies on ion emission from solids. (II). A method of micro-determination of an alkali salt in aqueous solution by measuring positive-ion emission. Bulletin of the Chemic1l Society of Japan, 27, 46.
- Tatsuo Kariyone and Kiyoshi Tsukida: Microchemical studies on plant components. (XXXVII). Hydroxyanthrones in plants containing hydroxyanthraquinones. (I). Separatory detection of chrysophanic acid and distribution of chrysophanic acid anthrone in plants. Yakugaku Zasshi (Journal of the Pharmaceutical Society of Japan), 74, 232.
- Tatsuo Kariyone, Kiyoshi Tsukida and Nobuo Suzuki: Microchemical studies on plant components. (XXXVIII). Hydroxyanthrones in plants containing hxdroxyanthraquinones. (2). Microchemical detection of hydroxyanthrones. *Ibid.*, 74, 234.
- Tatsuo Kariyone and Takao Inoue: Microchemical studies of plant components. (XX). Separation of purines and pyrimidines by paper chromatography and paper electromigration. *Ibid.*, 74, 301.
- Tatsuo Kariyone and Takao Matsuno: Studies on the components of *Citrus* species (*Rutaceae*). (II). *Ibid.*, 74, 493.
- Tatsuo Kariyone, and Takao Matsumoto: Studies on the components of *Citrus* species (*Rutaceae*). (III). Studies on the constituents of orange oil. (2). *Ibid.*, 74, 493.
- Tatsuo Kariyone and Koichiro Isoi: Studies on plant waxes. (VI). Lignans from the leaves of *Coniferae*. (I). *Ibid.*, 74, 1312.
- Akira Watanabe, Fukuji Tsuji, Kazuo Nishizawa and Shizuo Ueda: Studies on surface electricity. (VII). On theory and application of U-effect II. Denki Kagaku (Journal of the Electrochemical Society of Japan), 22, 179.
- Akira Watanabe, Fukuju Tsuji and Shizuo Ueda: Studies on surface electricity. (VIII). On capacity measurement of dropping mercury electodes by resonance method. *Ibid.*, **22**, 521.

- *Shizuo Ueda, Akira Watanabe and Fukuju Tsuji: Studies on surface electricity. (V). Capacity measurement at mercury-solution interfaces by impedance matching method. (2). Memoirs of the College of Agriculture, Kyoto University, 67, 53.
- *Shizuo Ueda, Akira Watanabe and Fukuju Tsuji: Studies on surface electricity. (VI). On several characters of U-effect. *Ibid.*, 67, 61.
- *Shizuo Ueda, Fukuju Tsuji and Akira Watanabe: Study on surface electricity. (VII). On counter U₇effect. *Ibid.*, **67**, 69.
- *Akira Watanabe, Fukuju Tsuji and Shizuo Ueda: Study on surface electricity. (VIII). Theory and application of U-effect. (Continued). *Ibid.*, 67, 73.
- *Akira Watanabe, Fukuju Tsuji and Shizuo Ueda: Study on surface electricity. (IX). Capacity measurement at mercury-solution interfaces by resonance method using U-effect. *Ibid.*, **67**, 79.
- *Hideo Takai, Shigeo Nakamura et al.: The production of single crystals of metals and alloys with any desired orientation by solidification at high temperature. Journal of the Physical Society of Japan, 9, 204.
- Masayoshi Іshіваshi, Hideo Такакі, Yuzuru Kusaka and Yasuo Deguchi: Production and chemical analysis of magnetite. Nihon Kinzoku Gakkai Bunkakai Hokoku (Bulletin of Subdivision, Journal of the Japan Institute of Metals), 12, 49.
- *Hideo TAKAKI and Yoji NAKAMURA: The magnetostriction constants of silicon steel. (I). Journal of the Physical Society of Japan, 9, 507.
- *Hideo TAKAKI and Yoji NAKAMURA: The magnetostriction constants of silicon steel. (II). *Ibid.*, **9**, 748.
- *Eiji Suito and Kazuyoshi Takiyama: Formation and aging of precipitates. (I). Electron microscopic studies of the formation of barium sulfate precipitate. Bulletin of the Chemical Society of Japan, 27, 121.
- *Eiji Suito and Kazuyoshi Takiyama: Formation and aging of precipitates. (II). Electron microscopic studies of the aging of barium sulfate precipitate. *Ibid.*, 27, 123.
- Eiji Suito, Masafumi Arakawa and Teru Arakawa: Surface area measurement of powders by adsorption in liquids phase. (I). Calculation of specific surface area of calcium carbonate powders from the adsorption of stearic acid. Nippon Kagaku Zasshi (Journal of the Chemical Society of Japan, Pure Chemistry Section), 75, 596.
- Eiji Suito, Masafumi Arakawa and Teru Arakawa: Surface area measurement of

- powders by adsorption in liquids phase. (II). Effect of adsorbates and solvents. *Ibid.*, 75, 599.
- Kazuyoshi Takiyama and Eiii Suito: An electron microscopic study on the suspension for the nephelometry of sulfate ion. Bunseki Kagaku (Japan Analyst), 3, 291.
- *Eiji Suito and Kazuyoshi Takiyama: Electron microscopy and diffraction studies of vanadium pentoxide sols. *Proceedings of the Japan Academy*, **30**, 752.
- Eiji Suito and Natsu Uyeda: Electron micro-diffraction method. Kagaku no Ryoiki (Journal of Japanese Chemistry), 8, 147.
- Eiji Suito: Particle size analysis of fine powder. Kagaku (Science), 24, 466.
- Eiji Suito: Powders-particle size and shape. Kagakn-Kogaku (Chemical Engineering), 18, 556.
- Masazo Nishida and Junji Furukawa: The action of free radicals on natural rubber. Nippon Gomu Kyokaishi (Journal of the Rubber Society, Japan), 27 (6), 17.
- Masazo Nishida and Junji Furukawa: On the tensile strength of vulcanized rubber. *Ibid.*, 27(6), 21.
- Tsutomu Ohmae and Junji Furukawa: Characteristics of fluidized particles. (VII). Consideration on the mean kinetic energy of particles and the temperature of the fluidized-particles system. Kogyo Kagaku Kaishi (Journal of the Chemical Society of Japan, Industrial Chemistry Section), 57, 6.
- Tsutomu Ohmae and Junji Furukawa: Surface tension of fluidized particles. *Ibid.*, **57**, 785.
- Tsutomu Ohmae and Junji Furukawa: Rheological property of fluidized particles. *Ibid.*, **57**, 788.
- Hiroshi Sawamura, Toshisada Mori and Isamu Iwatsuru: A supplement to the Investigation of equilibrium diagram of Fe-As-C system. On magnetic transformation temperature of Fe-As and Fe-As-C alloys. Suiyokaishi (Journal of the Suiyokai), 12, 8.
- *Hiroshi Sawamura and Toshisada Mori: Ditto. Memoirs of the Faculty of Engineering, Kyoto University, 16, 182.
- *Hiroshi Sawamura and Toshisada Mori: Effect of arsenic, copper, tin and molybdenum on impact properties of steels. *Ibid.*, **16**, 205.