

CONTENTS

—Reviews—

Kanke, M. and Yoshitomi, H.: Drug Delivery System	1
Kiryu, S.: Ion-Selective Electrodes Sensitive to Drug Ions	23
Tsuruta, Y., Ishido, R., and Kohashi, K.: Recent Progress of Determination of Histamine and Its Related Compounds in Biological Fluids by HPLC	35
Yamamoto, H.: Calcium and Action of Alcohol at Central Nervous System	53
Takeo, S.: Pharmacological Profile and Clinical Application of Calcium Antagonists.	65
Okamura, N. and Yagi, A.: Biologically and Pharmacologically Active Constituents in Zizyphus Fructus	75
Hibino, S.: Streptonigrin and Lavendamycin	92

—Abstracts of the Reports Published in 1984—

Nishihata, T., Takahagi, H., Yamamoto, M., Tomida, H., Rytting, J.H., and Higuchi, T.: Enhanced Rectal Absorption of Cefmetazol and Cefoxitin in the Presence of Epinephrine Metabolites in Rats and a High-Performance Liquid Chromatographic Assay for Cephamycin Antibiotics.	112
Tomida, H., Kiryu, S., Yotsuyanagi, T., and Ikeda, K.: Uptake of Phenothiazine Tran- quilizers by Lauromacrogol Micelles in Acidic Solution	114
Kobayashi, S., Sasaki, M., Kiryu, S., and Sugiura, M.: Autolysis of Semi-alkaline Protein- ase from <i>Aspergillus melleus</i>	116
Kobayashi, S., Tazawa, T., Sasaki, M., Kiryu, S., and Sugiura, M.: Chemical Modification of Tryptophan and Histidine Residues in Semi-alkaline Proteinase from <i>Aspergillus melleus</i>	117
Matsuyama, K., Sawahara, H., Noda, A., Goto, S., and Iguchi, S.: Effect of Environmental Temperature on the Elimination of Theophylline	118
Iguchi, S., Tanaka, T., Kaneo, Y., and Goromaru, T.: Biohydroxylation of Aminopyrine: Quantitative Studies of 3-Hydroxymethyl Metabolite in Rats	119
Kaneo, Y., Iguchi, S., Kubo, H., Iwagiri, N., and Matsuyama, K.: Tissue Distribution of Hydrazine and Its Metabolites in Rats.	120
Ikeda, I., Yoshitomi, H., Nakayama, T., Goto, S., and Kimura, T.: Plasma Protein Bind- ing of Frusemide in Renal Failure Rabbits: Investigation of Endogeneous Protein Binding Inhibitors	121
Tsuruta, Y., Kohashi, K., Ishida, S., and Ohkura, U.: Determination of Nicotinic Acid in Serum by High-performance Liquid Chromatography with Fluorescence Detection	122

Nohta, H., Zaitso, K., Tsuruta, Y., and Ohkura, Y.: Fluorimetric Assay for Monoamine Oxidase A and B by Means of <i>p</i> -Sulfamoylbenzylamine and Benzylamine.	123
Nakano, Y., Yamaguchi, M., Tsuruta, Y., Ohkura, Y., Aoyama, T., and Horioka, M.: Assay for Histidine Decarboxylase in Rat Stomach and Brain by High-performance Liquid Chromatography with Fluorescence Detection	124
Sakura, S. and Fujimoto, D.: Absorption and Fluorescence Study of Tyrosine-derived Crosslinking Amino Acids from Collagen	125
Sakura, S. and Imai, H.: Highly Sensitive Voltammetric Analysis by Re-oxidation of Reduced Substances Using Twin Working Electrodes	127
Imai, H., Yoshida, H., Masujima, T., and Owa, T.: Determination of Indole Derivatives by Flow Injection Method with Chemiluminescence Detection	128
Owa, T., Masujima, T., Yoshida, H., and Imai, H.: Determination of Tetracycline in Plasma by Flow Injection Method with Chemiluminescence Detection	129
Morita, I., Masujima, T., Yoshida, H., and Imai, H.: Studies of Variation of Tryptophan Metabolites Level in Rabbit Plasma with Preparation Procedures by High-performance Liquid Chromatography.	131
Tamai, G., Morita, I., Masujima, T., Yoshida, H., and Imai, H.: Simultaneous Determination of Propranolol and Its 4-Hydroxymetabolite by Liquid Chromatography	133
Yoshida, H., Morita, I., Tamai, G., Masujima, T., Tsuru, T., Takai, N., and Imai H.: Some Characteristics of Protein-coated ODS Column and Its Use for the Determination of Drugs by the Direct Injection Analysis of Plasma Samples	134
Sakanashi, M., Miyamoto, Y., Ito, H., Takeo, S., Noguchi, K., and Higa, T.: Possible α -Adrenoceptor Blocking Activity of Arotinolol (S-596), a New β -Adrenoceptor Blocking Agent in Isolated Dog Coronary Artery	136
Sakanashi, M., Takeo, S., Ito, H., Noguchi, K., Kato, K., and Higa, T.: Effect of Arotinolol (S-596) on Isolated and Perfused Rat Hearts	137
Sakanashi, M., Takeo, S., Ito, H., Noguchi, K., Miyamoto, Y., and Higa, T.: Effect of an Antihypertensive Agent, Nipradilol, on Isolated Coronary Artery of the Dog	138
Takeo, S., Tomomatsu, E., and Sakanashi, M.: Changes in Cardiac Myofibrillar ATPase Activity during Development of Hyperthyroidism in the Rabbits	139
Dhalla, N.S., Singal, P.K., Takeo, S., and McNamara, D.B.: Mechanism of the Beneficial Effects of Some Ca^{+2} -paradox in Myocardium	140
Yanagihara, Y., Taniyama, T., Misaki, H., Suzuki, Y., Matsumoto, M., and Mifuchi, I.: Phospholipases of <i>Leptospira</i> I. Presence of Phospholipase A_1 and Lysophospholipase in <i>Leptospira biflexa</i>	141

Yanagihara, Y., Kobayashi, S., and Mifuchi, I.: Sugar Synthesis in <i>Leptospira</i> I. Presence of Glucosephosphate Isomerase	143
Yanagihara, Y., Kobayashi, S., and Mifuchi, I.: Sugar Synthesis in <i>Leptospira</i> II. Presence of Glyoxylate Cycle Enzymes	144
Yanagihara, Y., Kamisango, K., Yasuda, S., Kobayashi, S., Mifuchi, I., Azuma, I., Yamamura, Y., and Johnson, R.C.: Chemical Composition of Cell Walls and Polysaccharide Fractions of Spirochetes	145
Iwamoto, Y., Mifuchi, I., Yielding, L.W., Firth III, W.J., and Yielding, K.L.: Induction of Cytoplasmically Inherited Respiration-deficient ('Petit') Mutant by Photodynamic Action of Acridine Compounds	147
Iwamoto, Y. and Mifuchi, I.: Induction of "Petit" Mutant of Yeast, <i>Saccharomyces cerevisiae</i> , by Photodynamic Action of Acriflavine	149
Morita, T. and Mifuchi, I.: Ethanol Enhancement of Cytochrome P-450 Content in Yeast, <i>Saccharomyces cerevisiae</i> D7	150
Shimizu, T., Matsusaka, E., Masuzawa, T., Yanagihara, Y., Mifuchi, I., Iguchi, T., Kondo, S., and Hisatsune, K.: Mitogenicity and Adjuvantcity of Lipopolysaccharide from a Marine Bacterium, <i>Vibrio anguillarum</i> , in Mice	151
Ueki, H., Haraguchi, F., Motoshima, A., Funakoshi, T., Shoji, S., and Kubota, Y.: Effect of Elastase on Glucose and Lipid Metabolism in Rat Fat Cells	152
Ueki, H., Matsutani, Y., Motoshima, A., Funakoshi, T., Shoji, S., and Kubota, Y.: Insulin-like Activity of Protease. VIII. Stimulation of Lipogenesis and Pyruvate Dehydrogenase and Suppression of Epinephrine-Sensitive Lipolysis in Rat Epididymal Adipose Tissue by an <i>N</i> -Succinyl-L-trialanine <i>p</i> -Nitroanilide-Hydrolyzing Protease from Pronase	154
Kubota, Y., Shoji, S., Funakoshi, T., Shionaga, K., and Ueki, H.: Hydroxyproline-Containing Citrus Esterase. II. Kinetic Properties, Chemical Modification, and Stability	156
Ishiguro, M., Harada, H., Ichiki, O., Sekine, I., Nishimori, I., and Kikutani, M.: Effect of Ricin, a Protein Toxin, on Glucose Absorption by Rat Small Intestine. (Biochemical Studies on Oral Toxicity of Ricin. II)	158
Erturk, E., Ichikawa, M., Morris, C.R., Hatcher, J.F., and Bryan, G.T.: Comparative Antibacterial and Mutagenic Activities, and Tumorigenicity in Sprague-Dawley (SD) Rats of 5-Nitrofurantoin (NF) and Their Nor-Nitro Analogs	160
Erturk, E., Ichikawa, M., Yamamoto, K., Tanaka, A., Hatcher, J.F., and Bryan, G.T.: Comparative Mutagenicity of 3,4-Diphenyl-Substituted Analogs of <i>N</i> -[4-(5-Nitro-2-furyl)-thiazolyl] formamide (FANFT)	162

Yagi, A., Hamada, K., Mihashi, K., Harada, N., and Nishioka, I.: Structure Determination of Polysaccharides in <i>Aloe saponaria</i> (Hill.) Haw. (Liliaceae)	163
Nagao, Y., Miyasaka, T., Hagiwara, Y., and Fujita, E.: Total Synthesis of Parabactin, a Spermidine Siderophore	164
Hibino, S., Kano, S., Mochizuki, N., and Sugino, E.: A New Route to the Pyridine Nucleus Fused to some Heterocycles	165
Ogura, F., Otsubo, T., Sakamoto, T., and Yamaguchi, H.: A Short Synthesis of Dihydrojasmon, <i>cis</i> - and <i>trans</i> -Jasmones	167

(1983)

Ogura, F., Otsubo, T., Ohira, N., and Yamaguchi, H.: Preparation of Alkylvinylsilanes via 1-Phenylchalcogeno-1-trimethylsilylalkanes	169
--	-----