

CONTENTS

— Reviews —

Imai H., Sakura S., and Tamai G. : Therapeutic Drug Level Monitoring (TDA) - Recent Methods and Problems	1
Mifuchi I. : Chemotaxonomy of <i>Leptospira</i> and Related Spirochetes by Chemical Compositions of Cell walls and Polysacchride Fractions	18

— Abstracts of the Reports Published in 1986 —

Mifuchi I., Masuzawa T., Koike M., Shimizu T., and Yanagihara Y. : Antitumor Activity of <i>Sphaerotilus natans</i> and Its Slime Fraction in Mice	35
Okamura N., Stoskopf, M., Yamaguchi H., and Kishimoto Y. : Lipid Composition of the Nervous System of Earthworms (<i>Lumbricus terrestris</i>)	37
Okamura N., Stoskopf, M., Hendricks F., and Kishimoto Y. : Phylogenetic dichotomy of nerve glycosphingolipids	39
Takada S., Ono Y., and Ueda Y. : Extension of the CNDO/S Method to the Calculation of Aromatic and Heterocyclic Compounds Containing Si, P, S and Cl	41
Yokota, S., Tsuji H., and Katoh K. : Immunocytochemical Localization of Cathepsin D in Lysosomes of Cortical Collecting Tubule Cells of the Rat Kidney	42
Yokota S., Tsuji H., and Katoh K. : Localization of cathepsin D in rat liver Immunocytochemical study using post-embedding immunoenzyme and protein A-gold techniques	44
Sakura S., and Imai H. : Effect of Coupled Chemical Reactions on Electro- chemical Analysis by Flow Cell Voltammetry with Twin Electrodes	46
Rafael E., Vasquez and Imai H. : Voltammetric Studies on the Adsorption and Electrode Reaction of Dopamine at Electrochemically Pretreated Glassy Carbon Electrodes	47
Imai H., and Masushima T. : Application of Photoacoustic Spectroscopy (PAS) to Microdetermination of Biopolymers and Immunoassay	49
Wada K., Masushima T., Yoshida H., Murakami T., Yata N., and Imai H. : Laser Photoacoustic Microscopy for the Determination of Dye on a Solid Biopolymer	51
Tamai G., Yoshida H., Imai H., Takakai T., Kotoo K., Fuwa T., Tsuchioka Y., Matsuura H. and Kajiyama G. : Isolation of New Quinidine Metabolites and Simultaneous Determination of Quinidine and its Metabolites in Blood and Urine by Direct Injection HPLC Analysis	53
Imai H., and Tamai G. : Determination of Biologically Important Amines by High Performance Liquid Chromatography	55

Huda A., Shiomi H., Matthews, J. : Induction of the Intermediate Pituitary by Stress : Synthesis and Release of a Nonopioid Form of β -Endorphin	56
Ueda H., Yoshiwara Y., Nakamura A., Shiomi H., Satoh M., and Takagi, H. : How is Kyotorphin (Tyr-Arg) Generated in the Brain?	58
Shiomi H., and Ueda H. : Isolation and Analgesic Mechanism of Opioid Analgesic Neuropeptide, Kyotorphin (Tyr-Arg)	60
Shoji S., Ohnishi J., Funagoshi T. Kubota Y., Fukunaga K., Miyamoto E., and Ueki, H. : Simple and Rapid Identification of Phosphorylated Peptides from Bovine Brain Myelin Basic protein by Reversed-phase High-performance Liquid Chromatography	62
Ueki H., Motoshima A., Funagoshi T., Shoji S., and Kubota Y. : Effect of an <i>N</i> -Succinyl-L-trialanine <i>p</i> -Nitroanilide-hydrolyzing Protease from Pronase on Glucose Metabolism in Mice	64
Shoji S., Narimatsu S. Morita T. Funagoshi T. Ueki H. and Kubota Y. : The Structure and Function of Carboxypeptidase CN	66
Takeo S., and Sakanashi M. : Calcium Accumulating Ability of Mitochondria from Bovine Coronary Artery-Comparison with Aortic Mitochondria	68
Takeo S., Elimban V., and Dhalla, N. S. : Modification of cardiac sarcolemmal $\text{Na}^+ - \text{Ca}^{2+}$ exchange by Diltiazem and Verapamil	70
Takeo S., Adachi K., and Sakanashi M. : A Possible Action of Nicardipine on the Cardiac Sarcolemmal $\text{Na}^+ - \text{Ca}^{2+}$ Exchange	72
Sakanashi M., Katoh T., Miyamoto Y., Takeo S., Itoh H., Aniya Y. : Comparison of the Effects of Nifedipine on Ureter and Coronary Artery Isolated from the Dog	74
Takeo S., and Sakanashi M. : Microsomal Calcium-Accumulating Ability of Bovine Coronary Artery and Aorta	75
Sakanashi M., Noguchi K., Takeo S., Itoh H., Miyamoto Y., Katoh T. : Effects of Nipradilol (K-351) on Cardiac Function in Anesthetized Open-Chest Dogs	77
Takeo, S. Sakanashi, M. : Hypoxia induced damage and reoxygenation induced recovery in myocardial high energy phosphates	78
Heyliger C. E., Takeo S., and Dhalla, N. S. : Alterations in sarcolemmal $\text{Na}^+ - \text{Ca}^{2+}$ exchange and ATP-dependent Ca^{2+} -binding in hypertrophied heart...	79
Matsuyama K., Tanaka T., Noda A., Gotoh S., and Iguchi S. : Product inhibition of Aminopyrine N-Demethylation in Isolated Hepatocytes.....	81
Ishikawa A., Ishiyama H., Enokimoto T., Ozaki A., Fukao K., Okamura T., Iwasaki Y., and Yamamoto H. : Hepatic Coma and Amino Acids in The Nerve Endings of The Central Nervous System	83

Nishihata T., Tomida H., Frederick G., Rytting J. H., and Higuchi T. : Comparison of the effects of sodium salicylate, disodium ethylenediamine- tetraacetic acid and polyoxyethylene-23-lauryl ether as adjuvants for the rectal absorption of sodium cefoxitin	85
Shida T., Yagi A., Nishimura H., Nishioka I. : Effect of <i>Aloe</i> Extract on Peripheral Phagocytosis in Adult Bronchial Asthma	87
Yagi A., Machii K., Shida T., Nishioka I. : Effect of aloelectin on deoxyribo- nucleic acid synthesis in baby hamster kidney cells	88
Kobayashi S., Endoh H., Sasaki M., Kiryu S., and Sugiura M. : The Role of Calcium in Semi-Alkaline Proteinase from <i>Aspergillus melleus</i>	89
Sasaki M., Kobayashi S., Shimada K., Iinuma R., Kiryu S., and Sugiura M. : Studies on the Quality of Commercially Available Semi-alkaline Proteinase Preparations Using High-Performance Liquid Chromatography	90
Miyasaka T., and Noguchi S. : High Chemoselective Synthesis of Carboxam- ides by Using Syn-Phenylpyridyl-O-Acyl Oximes (PPAO)	91
Ichikawa M., Hibino S., Ohnishi M., Hatcher J. F., Pamucku A. M. and Bryan G. T. : Selective Halogenation of Flavonols by Hydrohalogenic Acids in Oxidation System	92
Hibino S., Okazaki M., Ichikawa M., Satoh K., and Ishizu T. : Formal Synthesis of Lavendamycin Methyl Ester : The Regioselective Synthesis to the Bromoquinolinequinone Systems of Key Intermediate	93
Inoue Y., Okada H., Roy S. K., Miyasaka T., Hibino S., Tanaka N., and Nakamura, S. : Biological Properties of Streptonigrin Derivatives I. Antimicrobial and Cytocidal Activities	96
Kimura E., Fujioka H., Yatsunami A., Nihira H., and Kodama M. : A New Macro- cyclic Hexaamine Ligand for the Dissolution of Human Inorganic Calculi	97
Yasuhara M., Katayama H., Fujiwara J., Okamura K., and Hori R. : Influence of Acute Renal Failure on Pharmacokinetics of Phenolsulfonphthalein in Rats : A Comparative Study <i>in vivo</i> and in the Simultaneous Perfusion System of Liver and Kidney	99
Hori R., Okamura K., Yasuhara M., and Katayama H. : Reduced Hepatic Uptake of Propranolol in Rats With Acute Renal Failure	101