

Memoirs of the
FACULTY OF ENGINEERING
KYOTO UNIVERSITY

VOLUME XXXVIII

1976

Published by
KYOTO UNIVERSITY
KYOTO, JAPAN

CONTENTS

	PAGE
PART 1	
Hidekiyo ITAKURA and Yoshikazu NISHIKAWA <i>A Two-Phase Decomposition Algorithm for Linear Programs with Angular Structure</i>	1
Yuichi IWAGAKI and Tetsuo SAKAI <i>Representation of Water Particle Velocity of Breaking Waves on Beaches by Dean's Stream Function</i>	11
Mamoru SENDA, Kenjiro SUZUKI and Takashi SATO <i>Study on Turbulent Boundary Layer with Injection and Combustion</i>	21
PART 2	
Naruhito SHIRAISHI and Masaru MATSUMOTO <i>On Vortex Shedding Excitations of Cable-Stayed Bridge of Closed Polygonal Cross Sections</i>	37
Junji SHIBATA, Sanji NISHIMURA and Shigeru MUKAI <i>Effect of Ammonium Salts on the Solvent Extraction of Some Transition Metals with Liquid Cation Exchangers</i>	55
Hajime AKASHI, Hiromitsu KUMAMOTO and Kazuo NOSE <i>The Monte Carlo Approach to State Estimation for Linear Dynamical Systems with State-Dependent Measurement Noise</i>	74
Hajime AKASHI, Kazuo NOSE and Kamal MOUSTAFA <i>Parameter and Order Estimation in A Class of Multivariate Stochastic Systems</i>	88
PART 3	
Takuma TAKASAO, Shuichi IKEBUCHI and Toshiharu KOJIRI <i>An Approach to the Adaptive Flood Control by Multi-Reservoir Systems</i>	103
Susumu SHIMA, Tsuyoshi TABATA, Moriya OYANE and Takashi KAWAKAMI <i>Upper Bound Theory for Deformation of Porous Materials</i>	117

Takehisa HARA, Nobuhiko HAYANOSE and Jūrō UMOTO <i>Two Dimensional Analysis of Faraday Type Linear Diverging Combustion Gas MHD Generator</i>	138
Kazuo SHIN, Yoshihisa HAYASHIDA, Seiji SHIROYA and Tomonori HYODO <i>Measurements of High-Energy Gamma Rays by an Organic Liquid Scintillator</i>	149
PART 4	
Hisashi MINE and Hajime KAWAI <i>Preventive Maintenance of a Two-Unit Standby Redundant System with a Good State</i>	159
Hisashi MINE and Harunori SHISHIDO <i>A Method of Determining Characteristic Functions for Cooperative Differential Games without Side Payment</i>	169
Motoo ISHIKAWA and Jūrō UMOTO <i>Two-Dimensional Analysis of End Effects in Diagonal Type Nonequilibrium Plasma MHD Generator</i>	182
Naoto KAKIMOTO, Yasuharu OSAWA and Muneaki HAYASHI <i>Improvement of Transient Performance of Synchronous Generator via Excitation Control</i>	198
Hiromu ISA and Muneaki HAYASHI <i>The Leader Development and its Mechanism in Air under Impulse Voltage</i>	218
Koichi AKAI, Toshihisa ADACHI, Kazuo YAMAMOTO and Yuzo OHNISHI <i>Strength Characteristics of Weathered Granite</i>	240
Hidetoshi SUEMITSU, Yoshio MATSUURA, Fumio NAKO and Kuniya FUKUDA <i>Emission from C-, N- and O-Impurity Ions in Linear Pinch He Plasma in Vacuum Ultraviolet λ500 to 1,500Å Region</i>	255