

Memoirs of the
FACULTY OF ENGINEERING
KYOTO UNIVERSITY

VOLUME XL PART 4

OCTOBER 1978

Published by
KYOTO UNIVERSITY
KYOTO, JAPAN

MEMOIRS OF THE FACULTY OF ENGINEERING
KYOTO UNIVERSITY

VOLUME XL

PART 4

OCTOBER 1978

CONTENTS

Hiroji NAKAGAWA and Iehisa NEZU <i>Bursting Phenomenon near the Wall in Open-channel Flows and its Simple Mathematical Model</i>	213
Yoshitaka NAKAHIRO <i>Effect of Sodium Sulphide on the Prevention of Copper Activation for Sphalerite</i>	241
Hajime AKASHI and Teruo HAMATSUKA <i>Minimal Dimension Realization for Stochastic Discrete Time Systems</i>	258
Isamu UKITA and Kenji OHSHIMA <i>Stability of the Welding Arc in a Constant Feeding Speed System</i>	274
Hiromu ISA, Tohru NISHI, Muneaki HAYASHI and Chikasa UENOSONO <i>Breakdown and Corona Characteristics of Rod-to-Plane Gap in Atmospheric Air under AC Voltage</i>	286
Hiromu ISA, Yasuhiro HAYASHI, Muneaki HAYASHI and Chikasa UENOSONO <i>Observation of Corona Discharges in Atmospheric under AC Voltage</i>	312
Hideki ZUSHI and Itaru MICHIOYOSHI <i>Propagation of Electrostatic Waves near the Lower Hybrid Frequency in a Toroidal Plasma, Nova-I</i>	335
Tatsuo NOGI and Hiroshi OHWAKI <i>A Consolidation Problem and its Solution</i>	342
Chikasa UENOSONO, Kazuhiro KANEKO and Sandor MARKON <i>Numerical Solution of Three-dimensional Eddy Current Problems</i>	361
Chikasa UENOSONO, Kazuhiro KANEKO and Sandor MARKON <i>A Network Analogy for Three-dimensional Eddy Current Problems</i>	367

This memoirs is issued quarterly by the University to publish the original contributions to engineering science made or communicated by the members of the faculty. The faculty consists of following departments:

Dept. of Civil Engineering	Dept. of Nuclear Engineering
Dept. of Mechanical Engineering	Dept. of Sanitary Engineering
Dept. of Electrical Engineering	Dept. of Applied Mathematics and Physics
Dept. of Mineral Science and Technology	Dept. of Precision Mechanics
Dept. of Metallurgy	Dept. of Synthetic Chemistry
Dept. of Industrial Chemistry	Dept. of Electrical Engineering, II
Dept. of Architecture	Dept. of Metal Science and Technology
Dept. of Hydrocarbon Chemistry	Dept. of Transportation Engineering
Dept. of Chemical Engineering	Dept. of Architectural Engineering
Dept. of Polymer Chemistry	Dept. of Information Science
Dept. of Electronics	Dept. of Engineering Science
Dept. of Aeronautical Engineering	Automation Research Laboratory
	Ionosphere Research Laboratory
	Ion Beam Engineering Experimental Laboratory

All communications regarding the memoirs should be addressed to the dean of the faculty.

Vol. XL, Part 4

October 1978.

昭和54年1月25日 印刷

昭和54年1月31日 発行

編集兼発行者 京都大学工学部

印刷者 中西 亨
京都市上京区下立売小川東入

印刷所 中西印刷株式会社
京都市上京区下立売小川東入