## Memoirs of the FACULTY OF ENGINEERING KYOTO UNIVERSITY

VOLUME XXXI PART 4
OCTOBER 1969

Published by
KYOTO UNIVERSITY
KYOTO, JAPAN

## MEMOIRS OF THE FACULTY OF ENGINEERING KYOTO UNIVERSITY

VOLUME XXXI

PART 4

OCTOBER 1969

## CONTENTS

	buro TAMAMURA and Takeo TANIGUCHI: tatical Analysis of Rigid Framed Structure
	441
	Mechanism of Friction and Wear of Steel
Kenjiro Okamura and Toshikatsu N Wheel	
	Takashi Hiyama: Stability Calculation
JUTO UMOTO: Some Contributions to Generator Duct	Design Theory of Magnetohydrodynamic
Takeshi Kiyono and Masaaki Shima Electrodes. II	SAKI: On a Generalized Problem of Disc
Hisanao Ogura: Simultaneous Spectra	l Representations of Isotropically Correlated
	RAKAMI: Elektronenmikroskopische Unter-
	OZUKA: Thermodynamic Study on Sn-Fe
Teruo Tanabe, Sanji Nishimura and	1 Yoshio Kondo: Studies on the System  thate 598
Kimio TARAMA, Shiichiro TERANISHI Some Physical Properties and Catal	Kentaro Hattori and Akio Yasui:  Lytic Activities of Vanadium Oxide (III)  611
Hideo Hanafusa and Keiichiro Miyar	A: Bang-Bang Control of Electro-hydraulic
	e University to publish the original contributions unicated by the members of the faculty. The s:
Dept. of Civil Engineering Dept. of Mechanical Engineering Dept. of Electrical Engineering Dept. of Mineral Science and Technology Dept. of Metallurgy Dept. of Industrial Chemistry Dept. of Architecture Dept. of Hydrocarbon Chemistry Dept. of Chemical Engineering Dept. of Polymer Chemistry Dept. of Electronics Dept. of Aeronautical Engineering	Dept. of Nuclear Engineering Dept. of Sanitary Engineering Dept. of Applied Mathematics and Physics Dept. of Precision Mechanics Dept. of Synthetic Chemistry Dept. of Electrical Engineering, II Dept. of Metal Science and Technology Dept. of Mechanical Engineering, II Dept. of Transportation Engineering Dept. of Architectural Engineering Automation Research Laboratory Ionosphere Research Laboratory Plasma Physics Laboratory
All communications regarding the mamoi	es abould be addressed to the deep of the femiliar

Vol. XXXI, Part 4

October 1969,

昭和45年3月27日 印刷 昭和45年3月31日 発行

編集兼発行者 京都大学工学部

印刷者 小 林 稜 造

大阪市福島区亀甲町2ノ62

印刷所 日本印刷出版株式会社 大阪市福島区亀甲町2/62