## Memoirs of the FACULTY OF ENGINEERING KYOTO UNIVERSITY

VOLUME XXXV PART 3

JULY 1973

Published by KYOTO UNIVERSITY KYOTO, JAPAN

## MEMOIRS OF THE FACULTY OF ENGINEERING KYOTO UNIVERSITY

VOLUME XXXV

## PART 3

JULY 1973

1

## . У "л "С. У CONTENTS

Hiromichi KAWAI, Taisuke ITO, Takashi ODA, Hiroaki HIRATSUKA and	
Shoji SUEHIRO	
Dynamic X-ray Diffraction Technique for Measuring Rheo-optical	
Properties of Crystalline Polymeric Materials	201
Kozo ICHIDA, Fujiichi YOSHIMOTO and Takeshi KIYONO	
Data Fitting by a Spline	237
Tatsuo INOUE and Kikuaki TANAKA	
A Finite Element Formulation of the Coupled Thermoelastic-Plastic	
Problems	251
Mikio NAKAI, Susumu SATO und Toshio AIDA	
Entwurf eigendrehungsfreier Litzenseile	262
Mikio NAKAI, Susumu SATO und Toshio AIDA	
Beanspruchung der Seildrähte bei Zugbelastung	277
The Nova Group: Masayuki FUKAO, Hiromu MOMOTA, Hiroshi KUBO,	
Hiroshi OSHIYAMA, Sadao NAKAMURA, Tokuhiro OBIKI, Seiichi ARIGA,	
Yasushi TERUMICHI, Hidetoshi SUEMITSU, Tetsumori YUYAMA and Hiroshi	
NISHIHARA	
A Shell-less Tokamak "NOVA"	297
Seiji NISHINO, Takashi NAKAMURA and Tomonori HYODO	
Response Function of a 1-inch Diameter by 6-inch Long <sup>3</sup> He Proportional	
Counter to Neutrons	309

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	Dept. of Precision Mechanics
Technology	Dept. of Synthetic Chemistry
Dept. of Metallurgy	Dept. of Electrical Engineering, II
Dept. of Industrial Chemistry	Dept. of Metal Science and Technology
Dept. of Architecture	Dept. of Mechanical Engineering, II
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	Automation Research Laboratory
Dept. of Aeronautical Engineering	Ionosphere Research Laboratory
	Plasma Physics Laboratory

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

Vol. XXXV, Part 3	JULY 1973.
昭和48年 9 月25日 印刷 昭和48年 9 月29日 発行	•
編集兼発行者	京都大学工学部
印刷者	中西。 亨 京都市上京区下立壳小川東入
印刷所	中 西 印 刷 株 式 会 社 京都市上京区下立売小川東入