

Research Reports of the Faculty of Engineering,  
Mie University

Vol. 12

December 1987

CONTENTS

Original Papers

Toshihiko SHAKOUCHI :	
Flow Characteristics of a Three-dimensional, Rectangular Jet Reattaching to an Adjacent Flat Plate .....	1
Masataka TOKUDA and Kenji YAMADA :	
Constitutive Equations of Inelastic Behaviours of Polycrystalline Metals Subjected to Finite Deformation .....	21
Akira NARUMI, Kouji SATO and Masanori SAKATA :	
A Study on Reading Methods of Young's Fringe in Laser Speckle Photography Technique .....	29
Toshinobu YOKO, Akira YUASA, Kanichi KAMIYA, Katsuhisa TANAKA and Sumio SAKKA :	
Photoelectrochemical Properties of the Sol-Gel Derived TiO <sub>2</sub> Film Electrode — Surface States of the Illuminated TiO <sub>2</sub> Film Electrode .....	41
Toshinobu YOKO, Kanichi KAMIYA and Sumio SAKKA :	
Preparation of SrTiO <sub>3</sub> and BaTiO <sub>3</sub> Films by the Sol-Gel Method and Their Photoelectrochemical Properties .....	49
Shigemitsu HATANAKA and Yasuo TANIGAWA :	
Analytical Study on Ductility of Reinforced Concrete Beams under Flexure .....	65
Yasuo TANIGAWA and Hiroshi MORI :	
Rheological Model of Fresh Concrete .....	77
Reviews	
Shuhei NAKAMURA, Kazuo IIDA and Goro SAWA :	
Degradation of Dielectric Properties of Polyethylene by Combination of $\gamma$ -Irradiation and Thermal Aging .....	85
Hiroyasu SATO :	
Photodissociation of Simple Molecules in the Gas Phase Supplement I .....	103
Abstracts of Papers (Published in 1986) .....	119
Abstracts of Books and Reviews (Published in 1986) .....	153