

# PROCEEDINGS

## OF THE

# JAPAN ACADEMY

---

### SERIES A

### MATHEMATICAL SCIENCES

---

### CONTENTS

#### Papers Communicated:—

	Page
S. TANABÉ: Quelques exemples d'opérateurs hypoelliptiques à caractérisitiques doubles . . . . .	31
A. INOUE: A Certain Functional Derivative Equation Corresponding to $\square u + cu + bu^2 + au^3 = g$ on $R^{d+1}$ . . . . .	35
T. NODA: A Modification of the Gradient Method and Function Extremization . . . . .	39
K. UENO: A Geometric Study on Systems of First Order Differential Equations . . . . .	43
S. SAITO: Global Behavior of Solutions of Quasilinear Ordinary Differential Systems . . . . .	47
A. FUJII: On a Theorem of Landau . . . . .	51
M. TAKEUCHI: Quantum Orthogonal and Symplectic Groups and their Embedding into Quantum $GL$ . . . . .	55
K. IWASAWA: A Note on Capitulation Problem for Number Fields . .	59
K. HATADA: Correspondences for Hecke Rings and $l$ -Adic Cohomology Groups on Smooth Compactifications of Siegel Modular Varieties . . . . .	62
Proceedings at the 826th General Meeting . . . . .	.III

# THE JAPAN ACADEMY

(THE IMPERIAL ACADEMY OF JAPAN TILL DEC., 1947)

---

PRESIDENT: Yoshitaro WAKIMURA

SECRETARY-GENERAL: Yoshio FUJITA

CHAIRMAN OF SECTION I: Teiji ICHIKO

CHAIRMAN OF SECTION II: Masao KOTANI

## PUBLICATION COMMITTEE

CHAIRMAN: THE SECRETARY-GENERAL

Setsuro EBASHI ( <i>Pharmacology and Biophysics</i> )	Tsunahiro KIKUI ( <i>Law of Civil Procedure</i> )
Shinji FUKUI ( <i>Mechanical Engineering</i> )	Motoo KIMURA ( <i>Genetics</i> )
Naohide HIRATSUKA ( <i>Plant Pathology and Mycology</i> )	Takeo NAGAMIYA ( <i>Solid State Physics</i> )
Teiji ICHIKO ( <i>Japanese Literature</i> )	Fumio NAKAJIMA ( <i>English Linguistics</i> )
Yasuji KATSUKI ( <i>Physiology</i> )	Yuzo YAMADA ( <i>Economics</i> )
Masaakira KATSUMOTO ( <i>Civil Law and Copyright Law</i> )	Kisaburo YOKOTA ( <i>Public International Law</i> )
	Kôzaku YOSIDA ( <i>Mathematics</i> )

---

## NOTES

The papers printed in the Proceedings are generally résumés, while the publication of the full texts is left to the respective authors' choice.

---

All communications relating to the Proceedings should be addressed to the Secretary-General at the Office of the Academy, Ueno Park, Tokyo, 110.

Those who desire for particular articles may apply for their reprints to the respective authors.

---

Agents: Maruzen Co. Ltd., 3-10, Nihonbashi 2 Chome, Chuo-ku, Tokyo, 103