

**Memoirs of
the Faculty of Engineering
Nagoya University**

Vol. 22, No. 2

**November, 1970
Nagoya, Japan**

These publications are issued periodically.

The original and selected works are collected and recorded for the future and for information abroad; the authors of these works are the researchers of the Faculty, *i.e.*, the professors, the lecturers and the co-workers.

The authors alone are responsible for the contents of these Memoirs.

All communications relating to these Memoirs should be addressed to the Dean of the Faculty of Engineering, Nagoya University, Furō-chō, Chikusa-ku, Nagoya, Japan.

Dean of the Faculty: Prof. Kenzō YAMAMOTO

Editorial Committee

Chairman: Prof. Takehiko TAKAHASHI

| | |
|------------------------|--------------------------|
| Prof. Toshio YAMAMOTO | (Mechanical Eng.) |
| Prof. Katumi YAMAGUCHI | (Mechanical Eng.) |
| Prof. Minoru UEDA | (Electrical Eng.) |
| Prof. Masayoshi UMENO | (Electronics) |
| Prof. Ikumi KAGAWA | (Applied Chemistry) |
| Prof. Akira KANEMATSU | (Synthetic Chemistry) |
| Prof. Tōru IMURA | (Metallurgy) |
| Prof. Hiroshi SAKAO | (Iron and Steel Eng.) |
| Prof. Yukio SUGIYAMA | (Chemical Eng.) |
| Prof. Eiichi TAKIZAWA | (Aeronautical Eng.) |
| Prof. Masao SHIMIZU | (Applied Physics) |
| Prof. Isao NISHIHATA | (Civil Eng.) |
| Prof. Naotsune TAGA | (Architecture) |
| Prof. Minoru KAWANO | (Nuclear Eng.) |
| Prof. Masami ITO | (Automatic Control Eng.) |