

Memoirs of the
FACULTY OF ENGINEERING
KYOTO UNIVERSITY

VOLUME XXX PART 1

JANUARY 1968

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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:

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Dept. of Mechanical Engineering	Dept. of Sanitary Engineering
Dept. of Electrical Engineering	Dept. of Applied Mathematics and Physics
Dept. of Mineral Science and Technology	Dept. of Precision Mechanics
Dept. of Metallurgy	Dept. of Synthetic Chemistry
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