

Title	List of Master's theses submitted to the faculty of engineering Keio University : 1970
Sub Title	
Author	
Publisher	慶應義塾大学藤原記念工学部
Publication year	1970
Jtitle	Proceedings of the fujihara memorial faculty of engineering keio university Vol.23, No.96 (1970. ) ,p.175- 181
JaLC DOI	
Abstract	
Notes	Summaries of Doctoral Theses
Genre	
URL	<a href="https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO50001004-00230096-0175">https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO50001004-00230096-0175</a>

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the Keio Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

---

LIST OF MASTER'S THESES  
SUBMITTED TO THE FACULTY OF ENGINEERING  
KEIO UNIVERSITY

---

— 1970 —

---

Due to the recent change of editorial policy concerning the handling of master's theses, this section has newly been established to present the author and title of each thesis submitted to the Faculty. The abstracts thus far published here will no longer appear in the PROCEEDINGS. Each thesis is written in Japanese unless otherwise specified.

DEPARTMENT OF ADMINISTRATION ENGINEERING	
AKIMOTO Hiroshi	OZAWA Masanori Identification of Linear Discrete System : Methods and Comparisons
Ship Routing : Monthly Aircraft Scheduling at Airline	SAKANO Hiroshi Application of Stochastic Process to Reliability
ANZAI Yuichiro	SHINOZAKI Nobuo On a Generalized Inverse of a Matrix : Its Computational Methods and Applications to Least Squares Method
Optimal Control of Fluid Supply Systems with Profitable Utilization of Holders	SONOBE Toru Experiment for Concept Learning with IPL-V
ARAKAWA Takashi	TAKAGI Hidefumi Seasonal Adjustments of Economic Time Series
On Factor Analysis	TAKEI Takashi Statistical Inference for Markov Processes
KOBAYASHI Toshiomi	TAMURA Michio Data analysis
Application of Computer to Mathematics : Formula Manipulation	TEJIMA Tamio Regression Analysis by Mean Square Error
KOJIMA Masakazu	UEDA Yasuo Measurement Method of Goods' Complexity from a Plan and its Application to a Foundry Manufacturing
Optimization Problems under Ordering Relations	UENO Fumihiko On a Statistical Decision Theoretic Approach to Adaptive Control Systems
KONOMI Yoshinobu	
Design of Retailing Control System	
KOSAKA Hiroyuki	
Simulation of the Estimation of Economic Model	
MACHIDA Shoichiro	
On the Study of CAI	
NEMOTO Tadaaki	
Integration Process of OR Activities into Organization	
OOTSUKA Tsuneto	
Approximating Method for the Selection of Risky Assets Mix	

- WATANABE Michito  
Information Theory on Stochastic Processes
- YAMAMOTO Hiroyoshi  
Consideration of the Rate of Interest in Capital Investment
- YAMAMOTO Yoshikazu  
An Example of System Simulation Including Scheduling Problem: Train Management, Inspection and Repair System for TOKAIDO New Line
- YONEKAWA Masato  
Accounting Information System for Fiscal Year Profit Planning

---

**DEPARTMENT OF  
APPLIED CHEMISTRY**

---

- ABE Hisamasa  
Synthesis of Branched-Chain Sugar: Methyl 3-amino-3-deoxy-4- $\alpha$ -methyl- $\beta$ -D-xylopyranoside
- DAIGO Takaji  
Study on the Electrorefining of Palladium
- DOI Yoshinao  
Conversion of Paper Properties with Polyvinyl Alcohol-Methyl Acrylate Graft Copolymer
- FUJII Hiromitsu  
Kinetics of Solid State Reaction between BaCO<sub>3</sub> and SiO<sub>2</sub>
- FUJII Toshiyuki  
Synthesis of 5-0-(2-Amino-2-deoxy- $\alpha$ -D-glucopyranosyl)-deoxystreptamine
- FUNAKI Takeshi  
Properties of Processed Paper by Polymer Aqueous Solution
- HATTORI Yukinori  
Copper Corrosion with Hydrogen Sulfide
- HIBIYA Taketoshi  
Behavior of Pores in the Sintering of Oxides
- HORIUCHI Yukio  
Structural Elucidation of Dienomycins: New Antibiotics
- INOUE Katsuhiko  
Properties of Graft Copolymer Latexes of Polyvinyl Alcohol
- INOUE Toshio  
Studies in the Mechanism of Film Formation for Synthetic Latexes
- IWAHORI Toru  
Electrochemical Study on Copper-Zinc Alloys in Aqueous Chloride Solutions
- IWAMA Masanori  
Electrical Properties of Mg-Substituted MnTe<sub>2</sub>
- IWASAKI Akihiro  
Utility of Acyloins
- KAMOSHITA Masaru  
Observation on the Microstructure of Sintered Ferrite
- KATO Naoyuki  
Synthesis of Sugar Derivatives
- KONNO Shinya  
Determination of Fluorine in a Living Body
- KUDO Yoshitaka  
Dibasic Acids Containing Ether Linkages
- KUROSAWA Noriko  
Solubilization of "Wirkstoffe" by Introducing Polyoxyethylene Groups
- MAKABE Osamu  
Synthesis of New Nucleosides
- MATSUMURA Shuichi  
Amphoteric Surface Active Agents Containing Ether Linkage
- NAKAGOME Masaki  
Synthetic Studies of Aminocyclitols Analogs
- NOJIMA Kazuhiro  
Synthetic Studies of Bromination of Aminocyclitols
- OGAWA Masahiro  
Effects of Pressure on the Curie Points of Pseudo-NiAs-Type Intermetallic Compounds with Magnetic Lattice Defects
- OKAMOTO Akira  
Behavior of Pores in the Sintering of Ferrites

- OKAZAKI Yasushi  
Synthesis of 3', 4'-Dideoxykanamycin B
- OKUNO Takeshi  
Grafting of Vinyl Monomer onto Natural Polymer
- SAKOTA Yukio  
Synthetic Studies of Nucleoside Analogues
- SATO Koichi  
Elemental Analysis of Organic Compounds by Pressure Measurment. (1) Carbon Determination
- SHIMOYAMA Yasuhiko  
Physical Properties of Synthetic Resin Emulsion Containing Carboxyl Groups
- SHIRAISHI Takashi  
Study on  $\text{CuFe}_2\text{O}_4\text{-Fe}_3\text{O}_4$  Spinel Solid Solution
- SHOYAMA Takahiko  
Synthesis of Homogenous Polyoxyethylenealkylethers of Decyl and Dodecyl Alcohols.
- TAKAGI Yasushi  
A New Method for the Simultaneous Protection of Amino and Hydroxyl Groups in Aminosugars and Aminocyclitols
- TAKEDA Ryuichiro  
Ferroelectric Glass-Ceramics: Crystallization of  $\text{TiO}_2\text{-PbO-B}_2\text{O}_3\text{-SiO}_2$  Glass
- TAKESHITA Hiroshi  
Oxidation of Fe-Cr Alloys
- TAKI Kiyotaka  
Electrochemical Studies on Vanadium Pentoxide Electrodes
- TOKUOKA Yasumichi  
Studies on Electrophoretic Deposition of Nickel Ferrite Particles
- TOMIFUJI Osamu  
Synthesis of Polymer Latexes Containing Carboxyl Groups
- TSUKAHARA Masayasu  
Fundamental Study on the Metallization of Plastics
- USUI Takayuki  
Studies on a New Metabolite Sphydrofuran
- WADA Masao  
Synthesis of Antimycin A<sub>3</sub> and Its Diastereomer
- WADA Yasuaki  
Dispersion Effect of Organic Inhibitors on Their Inhibition against Metallic Corrosion
- WATANABE Kohei  
Synthesis of Kanamycin and 3'-Deoxykanamycin
- YATABE Mitsuru  
Nitrogenation of Fe-Cr Alloys
- YOSHIKI Nobuya  
Mass Transfer with Chemical Reaction from Successive Bubbles
- 
- DEPARTMENT OF  
ELECTRICAL ENGINEERING**
- 
- AKIMA Koichiro  
Studies on the Neodymium Lasers
- HAYAKAWA Akihiro  
Simulation of Plastoviscoelasticity of Rubber
- HONDA Ikuji  
Stochastic Matrix Representation of Random Processes
- HONDO Haruo  
Noise in Rippled Electron Beams
- IKEDA Hiroyuki  
Light Beam Scanning Using Holographic Techniques
- INOMOTO Norihiko  
On the Third-Order Nonlinear Differential Equation with a Periodic External Force
- ISHIHARA Nobuaki  
Synthesis of Phase Splitting Network
- IWAOKA Hideto  
Study of Power Characteristics of the Sealed off CO<sub>2</sub> Lasers
- JINMON Masashi  
Study on Semiconductive Infrared Detector (Ge-Au)

- KATO Tatsunori  
New High Speed Stroboscope and Its Application
- KAWAGUCHI Ikuo  
On the Correlation Between the Avalanche Multiplication and the Second Breakdown of Transistor
- KEMMOCHI Yoichi  
Hybrid Computer Solution of Hyperbolic Partial Differential Equations
- KIKUCHI Hiroshi  
Field Effect in Liquid Crystals
- KIKUCHI Makoto  
Application of Identification Method with Pseudorandom Signals
- KINOSHITA Kouta  
Study on the Spectrum of a CO<sub>2</sub> Laser
- KISHI Masashichi  
Realization of a Constant Phase Impedance with Uniformly Distributed RC Lines
- KOBAYASHI Soichi  
Holographic Memory Using Sampling Technique at Fourier Transform Domain
- MIYOSHI Morimasa  
Numerical Analysis on Transistor Junction Temperature by Means of Difference Method
- NAKAGAWA Masao  
Effect of Noise in Nonlinear Systems
- NANAO Kazuhiko  
Transverse Modes Switching by Electric Optical Crystal in He-Ne Gas Laser
- OBITSU Ryoji  
Analysis of the Constant Speed Control of a DC Servo System with a Thyristor Power Supply
- ONO Hiroshi  
Effect of Phase and Tinbre Detection of Complex Tone
- OOKI Yasutugu  
Large Forward Biased PIN Silicon Diode Admittance at Microwave Frequencies
- SAKAMURA Yasushi  
A superconducting Josephson Junction
- SATAKE Michioki  
Study on the Digital Computer for Control Use
- SUDA Toshikazu  
Infrared Quenching in Evaporated Film of CdS<sub>1-x</sub>CdSe<sub>x</sub>
- TAJIMA Eiichi  
Two Modes of Transistor Secondbreakdown
- TANAKA Kaoru  
Study on Loaded Array Antennas
- TORAIWA Eiji  
Pico-second Pulse Generation with Non-linear LC Distributed Line
- TSURUTA Shichiro  
Note on Signal-to-Noise Ratio in Band-Pass Biased Power-Law Device
- UETAKE Yoshinari  
Analysis of Thyristors in High Frequency Operation
- UMEMURA Mamoru  
Optimization of a Non-Linear Heat Transfer System by Means of Hybrid Computation
- WATAYA Hideo  
Timing Extraction by Push-Pull Oscillator in PCM Systems
- YANAGISAWA Yoshikazu  
Stabilizing Methods of Quartz Crystal Oscillators
- YANASE Tomoo  
Rotational Competition of Carbon Dioxide Laser
- YOSHIMURA Kozo  
Phase Velocity of Coupled Yagi Arrays
- 
- DEPARTMENT OF  
INSTRUMENTATION ENGINEERING**
- 
- ENDO Norio  
Negative Resistance and Oscillations of Co doped Si p-i-n Diodes
- ISHIYAMA Toshio  
Study of Optimal Control of the System with Time-lag

- KATO Tsuguhiko  
Study of Walsh Functions
- KANEKO Hirokazu  
Laboratory Fabrication of p-type MOS (Si-SiO<sub>2</sub>-Al) Diodes and the Magnetic Field Dependence of Their C-V Curves
- MATSUBARA Youichi  
Concentration Polarization Phenomena in Ion-Exchange Membrane System and Its Application
- MISAWA Hiroshi  
Stability Boundary of Parametric Oscillations
- MIYAMOTO Tadaaki  
Study of Optimization Control of Hot Tandem Mill
- NAGAI Yoshihiro  
On Learning Processes
- SHIIKI Kazuo  
Tunneling Spectroscopy in Graphite
- TAKEDA Nagao  
Photoconduction of 9, 10-dichloroanthracene Films
- TATEISHI Mizuo  
Dispersion Relations in Plasmas
- YANAGITA Tomoatsu  
Study on the Automatic Recognition of Voice
- YOSHII Hiroshi  
Experimental Analysis of Switching Behavior of Wall Attaching Type Fluid Amplifier.
- CHOSOKABE Tadashi  
Stability of Flow between Two Elastic Plane Walls
- FUJIKAWA Yasuo  
On the Study of Flow within Impeller of Inward-Flow Radial Turbine
- FUSE Kenichi  
Elastic Responses of a Polyethylene Melt in a Round Tube Extrusion
- HIGUCHI Kazuo  
Behaviors of Automobile Occupant in Collision
- INA Fumio  
Study on the Mutual Interference of Transfer Rate: On the Mass Transfer from Two Parallel Cylinder
- ISHII Takashi  
Volume Change in Viscoelastic Composite Propellant
- ISHIMOTO Shozaburo  
Study of Thermodynamic Properties of Ordinary Water Substance in the Critical Region
- ISHIZEKI Kohji  
Plasma Confinement in Toroidal Quadrupole Magnetic Field
- ITO Masayori  
Study on Fine Infeed Mechanism
- KAWAI Chikahiro  
Study of Rotary Regenerator: A Theoretical Study
- KISHI Toshikazu  
Experimental Study of the Detached Shock Wave in front of Two Circular Cylinders
- KOBASHI Masaaki  
Investigation of the Resonance Tube: On the Influence of the Change of Tube's Internal Geometries
- KOBAYASHI Yoshito  
Strength and Fracture of Ductile Materials
- KURODA Masao  
Effect of the Concentrated Constant System on the Earthquake-Proof Design of Piping Systems of a Nuclear Reactor.

---

**DEPARTMENT OF  
MECHANICAL ENGINEERING**

---

- AKUTO Tsuneo  
Study on the Thermodynamic Properties of Ammonia
- ARAI Hitoshi  
Transient Response of Oil Lines with Accumulator
- ARAKI Ryuichi  
Behavior of Crack Propagation on Low Cycle Fatigue at Elevated Temperature

- KUROSAKI Takefumi  
Research of Grinding Mechanism on Abrasive Belt Grinding
- MIZUKI Shinpei  
Investigation Concerning the Blade Loadings on the Centrifugal and Mixed-Flow Compressors
- MORI Takahiko  
Study on the Rotating Fluids: On the Stability of Three-Dimensional Flow between Two Rotating Coaxial Disks
- MORI Yasuhiko  
Investigation on the Collapse Phenomenon of Superheated Liquids: The Experiment by the Superheated Droplets of Water in the Non-Soluble Heating Liquid
- MURAI Yukio  
Study of Transport Properties of Gases at High Temperatures and Pressures
- NAGASAKA Hideo  
On the Bubble Nucleation within Superheated Boundary Layer
- NAKAGAWA Yukio  
Finite Element Technique for Viscoelastic Analysis under Finite Deformation Based on Relaxation and Creep Integral Laws
- ŌHASHI Toshijirō  
Study on the Low Cycle Fatigue
- OKADA Shigeru  
Investigation Concerning Inducer of Centrifugal and Mixed-Flow Compressors
- OKURA Hirotaka  
Research of the Interaction of a Plane Shock Wave in Air with a Plane Rigid Wall
- OZONO Jiro  
Experimental Investigation of Regenerative Compressor
- RO Yoshihito  
Initiation and Propagation of the Fatigue Crack in the Martensitic Structure
- SAITO Jiro  
Influence of the Ultrasonic Vibration to the Coefficient of Friction Using Jumps of the Semi-Circular Ring
- SAITO Makoto  
Analysis of a Class of Optimal Control Problems by Functional Analysis Approach
- SAWADA Hiroshi  
Stability Analysis of Nonconservative Elastic Systems via Lyapunov's Direct Method
- SHIMIZU Naoaki  
Study on Non-Newtonian Flow in a Pipe: On the Flow through Orifice Plate
- SHIMOSEKI Masayoshi  
Problem of Large Deflection of Coiled Springs: Basic Theory
- SHINOHARA Kanae  
Viscosity Flow of Revolving Radial Leakage
- SHIROSE Haruya  
Research of Automatic Monitoring of Computer Controlled Engine Testing
- SONG Samhong  
Observation on the Crack Initiation in the High Hardened Steel
- SUEFUSA Hiroshi  
Effects of Reynolds Number on Performance Characteristics of a Centrifugal Compressor
- SUZUKI Hideto  
Relationship between Static Strength and Fatigue of a Ferrite Matrix Reinforced with Martensite
- SUZUKI Yasuo  
Optimal Heating in Continuous Kilns
- SUZUKI Yasuo  
Flow over a Waving Plate
- SUGIURA Masayoshi  
Testing of the Self-Crowbaring Gap
- TAKEI Takashi  
Diffusion Flame in the Boundary Layer in a Porous Surface: Measurement on the Flow in the Boundary Layer
- TAKEUCHI Hiromu  
Two-Dimensional Stress Analysis of a Strip with a Central Circular Insertion by Scattered Light Method

- TSUCHIYA Asahi  
Designing of Tapered-Pipe Forming Equipment
- TSUJITA Mineo  
Study of the Diesel Engine on the Model of the Constant Volume Combustion Chamber
- WATANABE Masahiro  
Experimental Investigation of Non-Steady Flow in a Radial Turbine
- YAMADA Tamotsu
- Interpretation of Jetmajer's Empirical Formula for Column Design
- YAMAGUCHI Nobumasa  
Production Control Planning by E.D.P.S.
- YAMAGUCHI Tadashi  
Study of the Thermodynamic Properties of Refrigerants
- YAMAMOTO Yasuo  
Study on the Photoviscoelastic Strain Analysis of Polyurethane Rubber under Finite Deformation