

役職 Title	教員名 Name	教育・研究分野 Educational and Research Area	
		名称 Specialization	内容 Theme
Professor	Hiroki Ishikawa	Power Electronics	Reseach and education on power conversion and the related applications.
Professor	Kazuaki Ito	Motion control	Education and research on advanced motion control for mechatronic systems
Professor	Satoshi Ito	Engineering of intelligent control systems	Education and research on motor control systems of humans and robots
Professor	Takashi Itoh	Electronic Materials Engineering	Study and education on evaluation of fundamental properties of electronic materials mainly semiconductors and their application to devices such as solar cells
Professor	Yoshihiko Uematsu	Strength and Fracture of Materials	Research and education for the understanding of fracture mechanisms of engineering materials, improvement of structural reliability and fracture prevention.
Professor	Kazuhiro Uemura	Coordination Chemistry	Education and Studies on the Synthesis and Physical Properties of Novel Assembled Coordination Compounds
Professor	Michio Uneda	Precision Engineering	Education and research on the visualization of ultra-precision manufacturing processes and the development of next-generation manufacturing systems, as well as the systematization of cutlery science
Professor	Daohong Wang	Electric energy engineering	Lightning physics, Lightning protection, Photovoltaic power
Professor	Tomoyuki Ohtani	Engineering Geology	Geothermal resource geology and fault rock study of active fault
Professor	Natsuhisa Oka	Design of functional molecules	Education and research on design, synthesis, and applications of functional organic molecules
Professor	Kunihito Kato	Computer Vision	Image processing, Image recofnition, Computer Vision
Professor	Kohji Kamiya	Groundwater engineering	Education and research for groundwater resources management
Professor	Atsushi Kameyama	Dynamical Systems	Mathematics of vector fields, discrete dynamical systems, and chaos
Professor	Keiichirou Kusakari	Program Theory	Research on computational models that are mathematical models and define the semantics of functional programs, and formal verification of functional programs
Professor	Minoru Kunieda	Construction Materials	Advanced construction materials and structures for resilient infrastructures
Professor	Osamu Kubo	Solid state physics, Physics on surface and interface	Education on solid state physics, physics on surfaces/interfaces, and Reserch on creation of nanomaterials as well as evaluation of their physical properties
Professor	Fumitaka Kurauchi	Transport System Design	Research and education on planning, designing and evaluating transport system for improving its efficiency, safety and sustainability
Professor	Hiroyuki Kousaka	Functional Surface Manufactureing	Resrach and education on functional surface manufacturing focusing on tribology and plasma technologies
Professor	Shintaro Kondo	Mathematical analysis	Education and research on mathematical analysis of nonlinear differential equations describing plasma phenomena and reaction diffusion equations
Professor	Koichi Kobayashi	Maintenance Engineering	Education and research on evaluation of materials and their deterioration for building infrastructure maintenance systems
Professor	Tomonao Kobayashi	Natural Energy	Evaluation and prediction of electric power generation of photovoltaic systems based on weather forecasting, and prediction of waves and physical processes in the ocean
Professor	Nobusuke Kobayashi	Energy conversion process	Study and Education on High Efficiency Energy Conversion Process with Solid-Gas Reaction
Professor	Kazuhide Sawada	Geotechnical Engineering	Engineering technique and information for prevention or reduction of geo-disaster
Professor	Mutsuhiro Shima	Materials Science	Materials science with particular focus on investigating structure-property relationships in functional magnetic nanomaterials and composites
Professor	Xiangrong Zhou	High-dimensional medical image processing	Education and research on automatic recognition, extraction, modeling and application of human body information from high-dimensional medical images
Professor	Fumitoshi Shibahara	Design of Transformation in Organic Synthesis	Education and research on design of transformations for organic synthesis of valuable compounds
Professor	Yu Suzuki	Data Engineering	Education and research of data analysis based on data centric approach
Professor	Akiyoshi Takagi	Regional Planning	Education and research on regional planning based on socio-economic evaluation of safety, comfort and convenience
Professor	Shuhei Takahashi	Reacting Thermo-fluid Engineering	Education and research on thermo-fluid phenomena with chemical reaction
Professor	Masayasu Taki	Biofunctional chemistry	Education and research on rational fluorescent probe design and imaging-based functional analysis of biological systems
Professor	Masahiro Tanaka	Computer Simulation	Education and research on computational methods, numerical techniques, and algorithms in computer simulation
Professor	Ichiro Tamagawa	Hydrometeorology	Energy and water exchange between land and atmosphere and atmospheric boundary layer

役職 Title	教員名 Name	教育・研究分野 Educational and Research Area	
		名称 Specialization	内容 Theme
Professor	Hirohisa Tamagawa	Polymeric materials	Education and Research on Fabrication of electroactive polymer, Elucidation of electric characteristics of hydrophillic polymer
Professor	Takamichi Terao	Computational science and engineering	Computational physics (colloids, soft materials, metamaterials), molecular simulations, high-performance computing
Professor	Osamu Terashima	Fluid Mechanics and Its Applications	Education and research on the physical phenomena in fluid mechanics and its industrial applications
Professor	Kazunori Terada	Intelligent Interaction	Education and research on intelligent interaction between human-human and human-machine
Professor	Yoshifumi Demura	Urban History, Landscape Planning	Spatial and Historical Study of Urban and Humanized Landscape, Landscape Design
Professor	Asami Nakai	Engineering of Composites	Education and research on basic theory on molding, structure, properties, and functions of composite materials and its application
Professor	Makoto Nakamura	Integrated Circuit Engineering	Studies on optical-electrical interface circuits for optical communication systems
Professor	Takahiro Nitta	Biophysics, Polymer physics	Research and education on soft materials and biomaterials
Professor	Nobuoto Nojima	Earthquake Engineering	Seismic Hazard and Risk Assessment and its Application to Earthquake Disaster Prevention and Mitigation
Professor	Takeshi Hara	Medical Image Analysis and Processing	Quantitative imaging and computerized analysis for medical images
Professor	Takayuki Ban	Inorganic Materials Chemistry	Education and research on the syntheses of ceramic nanomaterials by solution processes and their characterization methods
Professor	Shintaro Hisatake	Terahertz Photonics	Generation, manipulation, and detection of millimeter-wave and terahertz wave based on photonics technology
Professor	Hiroyuki Fujiwara	Semiconductor Device Engineering	Fabrication of solar cells based on new materials and construction of solar cell device simulators
Professor	Kazumasa Funabiki	Design of Functional Organic Molecule	Study and education on the synthesis of useful organic molecules and evalution of their properties
Professor	Morihiro Harada	River Engineering	River basin management harmonized with disaster prevention and environmental conservation
Professor	Kojiro Matsushita	Human Assist Robotics	Education and research on motion & bio-signal analysis and autonomous robots for human assist
Professor	Naoki Matsumaru	Computer Science and Innformation processing	Education and research on biosystem analysis and data science
Professor	Yuichi Matsumura	Vibration Engineering	Education and research on the elucidation and its application of the occurrence mechanism of acoustics and vibration
Professor	Miwako Mishima	Discrete Mathematics and its Applications	Education and research on digital communications, cryptography, and their underlying algebra and combinatorics
Professor	Takeshi Miyasaka	Space Propulsion Engineering	Education and Research on plasma and physical gas dynamics of space propulsion systems
Professor	Yohei Miwa	Chemistry in Molecular Assembly	Research and Education in Field of Self-Assemble Polymers and Liquid Crystals
Professor	Shigeyuki Murakami	Bridge Engineering	Education and Study on Satability, Ductility and Maintainance of Bridge Structures
Professor	Tetsuya Mouri	Intelligent Mechanical Engineering	Education and Research on System Integration of Robotics and Virtual Reality
Professor	Kisaragi Yashiro	Computational Materials Science	Research and education on various computational approaches for deformation and fracture of solid materials
Professor	Tadashi Yamaguchi	Numerical Analysis	Education and Research on Coupled Analysis between Recent Finite Element Method and Various Equations
Professor	Minoru Yamashita	Plasticity engineering	Research and education of elastic plastic deformation and plastic forming process of solid materials, and their numerical simulation
Professor	Takayoshi Yamada	Industrial Robotics and Mechatronics	Education and Research on Robotics, Mechatronics, and Robotic Assembly
Professor	Kouji Yamamuro	The theory of stochastic processes	Education and the study of mathematical theory of additive processes
Professor	Yasunari Yokota	Signal and Image Processing	Education and study related to processing and analysis for sound, biological signals, images, and videos.
Professor	Ryo Yoshiie	Energy and Environmental Engineering	Education and research on building of networks for energy and resources to support carbon-neutral society
Professor	Toyokazu Yoshida	Bioprocess engineering	Education and research on functional analysis of novel enzymes and application to the synthesis of useful compounds

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Professor	Yoshinori Yoshida	Advanced Structural Materials	Study on engineering structural materials and its control deformation processing technology
Professor	Jun Yoshino	Natural Energy	Estimation, prediction, and control on natural energy and environment based on high-resolution meteorological and oceanographic models
Professor	Fusheng Li	Environmental and water quality engineering	Water quality; Water and wastewater treatment; Pollution control; Solid waste treatment and reuse
Professor	Zhigang Wang	Combined forming processes	Development of combined forming processes to make precise products with complicated shapes
Associate Professor	Daisuke Ito	Electrical engineering	Circuit designe and functional systems for high-speed optical communications
Associate Professor	Toshiyasu Inuzuka	Natural Product Chemistry	Isolation, structure elucidation and biological activity evaluation of novel natural products
Associate Professor	Taro Udagawa	Quantum and computational chemistry	Development of computational methods for quantum mechanics and its applications
Associate Professor	Ting Wu	Atmospheric Electricity	Lightning physics, lightning observation technology, lightning protection technology
Associate Professor	Yasunori Oumi	Separation materials and engineering	Development of the design method and function elucidation of separated materials for realizing low environmental load process
Associate Professor	Fumitaka Ohashi	Semiconductor engineering	Education and research on characterizations of fundamental properties of novel materials and reliability of photovoltaic modules
Associate Professor	Hidehiro Ohwa	Dielectric Engineering	Education and research on basic characteristics and applications of electronic materials centering on dielectrics
Associate Professor	Toshifumi Kakiuchi	Strength and Fracture of Materials	Education and study on evaluation of strength in materials used for machine structures.
Associate Professor	Tomoya Kato	Harmonic analysis	Education and research on mathematical theory of harmonic analysis and partial differential equations
Associate Professor	Yoshihiro Kaneko	Network Theory	Education and research based on graph-theoretic network system
Associate Professor	Kiyoto Kamagata	Biophysics	Education and research on measurement, regulation, and design of liquid-liquid phase separation of proteins
Associate Professor	CARBALLO SEGURA Alexander	Intelligent Autonomous Systems	Research on intelligent autonomous systems, such as robots and self-driving vehicles, in the areas of autonomous mobility, environment perception and modeling, and motion behavior understanding, from a human-centric perspective.
Associate Professor	Satoshi Kikuchi	Fluid Engineering	Education and research of investigations and control of fluid flow phenomena
Associate Professor	Ryugo Kijima	Human Computer Interaction	Human sensation and perception for interfacing to computer, especially for Virtual Reality.
Associate Professor	Hiroshi Kimura	Polymer&Surface Chemistry	Education and research relevant to behavior and functional development of surface in polymeric system
Associate Professor	Masumitsu Kuse	earthquake engineering	Prediction of ground motion, Estimation of the fault model based on the strong motion records
Associate Professor	Yasuhiro Kubota	Organic Functional Chemistry	Molecular design and synthesis of functional dyes
Associate Professor	Toshiharu Kojima	Hydrology	Education and investigation of rainfall-runoff process and related various phenomena with remote sensing and GIS
Associate Professor	Yuki Kojima	Environmental Soil Physics	Education and research relevant to coupled heat, water, and chemical transfer in vadose zone
Associate Professor	Kenichi Komura	Materials for Catalyst & Catalysis Chemistry	Education and research on catalyst design for environmental benign chemical process.
Associate Professor	Maki Koyama	Disaster Risk Reduction, Earthquake Engineering	Mechanism of human casualties and building disaster resilient communities
Associate Professor	Yoshinao Goi	Bridge Engineering	Damage detection and soundness assessment of bridges by vibration measurement
Associate Professor	Masafumi Sakata	Structural Materials Science under High Pressure	Education and research on structural change of material and novel electronic properties such as a superconductivity under extremely high pressure

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Associate Professor	Hidetoshi Sano	Radio Astronomy, High-Energy Astrophysics	Observational studies of the interstellar medium and high-energy phenomena in supernova remnants
Associate Professor	Yuji Suzuki	Environmental and water quality engineering	Education and research on behavior of hazardous pollutants in water environment and their treatment technology
Associate Professor	Hiroataka Takano	Power Engineering	Energy Management Technologies for Electric Power Suppliers and Consumers
Associate Professor	Yasuhiro Takahashi	VLSI design	Low-voltage and Low-power digital/analog design of cryptographic VLSI using adiabatic logic, and front-end ICs for optical communication
Associate Professor	Satoshi Tamura	Multimodal processing	Integration, application and information processing of multiple modalities such as audio and visual ones
Associate Professor	Nakamura Toshiyuki	Travel Behavior Analysis and Urban Transportation planning	Urban Transportation Planning Research and education based on travel behavior analysis using a wide variety of data
Associate Professor	Makoto Niikawa	Processing engineering	Research and education on various processing phenomena focusing on die and mold
Associate Professor	Yohei Ogiwara	Organic Synthesis	Study on Organometallic Chemistry for Catalytic Molecular Transformation
Associate Professor	Kazuhiro Manseki	Materials science for photoenergy conversion	Development of solar cells and photocatalysts using organic-inorganic hybrid systems
Associate Professor	Hidekazu Miyaji	Supramolecular Chemistry	Education and research on molecular recognition and artificial construction of biological functions by supramolecules
Associate Professor	Manabu Miyamoto	Reaction and Separation Engineering	Catalysis, adsorption and membrane separation using porous materials
Associate Professor	Keisuke Yamada	Spintronics	Education and research on fabrication of nano magnetic materials and evaluation of these physical properties
Associate Professor	Michiyuki Yoshida	Ceramic Materials	Education and research for structural and material design based on powder technology
Associate Professor	Norimitsu Yoshida	Energy-Conversion Optoelectronic Engineering	Education and rearch on optical and electronic properties of semiconductors for thin film solar cells
Assistant Professor	Yuki Banno	Steel structural engineering	Fatigue of steel structure: life extension and defect tolerance analysis of peened welds
Assistant Professor	Hideto Yoshimura	Hydraulics, Computational Fluid Dynamics	Education and research on dynamics of free-surface turbulent flow and its application

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Professor	Tetsuji Kume	Solid State Physics and Engineering in High Pressure	Education and Investigation on Optical Properties in Functional Materials of Condensed Matter under High Pressure
Professor	Kazuaki Ito	Motion control	Education and research on advanced motion control for mechatronic systems
Professor	Satoshi Ito	Engineering of intelligent control systems	Education and research on motor control systems of humans and robots
Professor	Takashi Itoh	Electronic Materials Engineering	Study and education on evaluation of fundamental properties of electronic materials mainly semiconductors and their application to devices such as solar cells
Professor	Yoshihiko Uematsu	Strength and Fracture of Materials	Research and education for the understanding of fracture mechanisms of engineering materials, improvement of structural reliability and fracture prevention.
Professor	Daohong Wang	Electric energy engineering	Lightning physics, Lightning protection, Photovoltaic power
Professor	Nobusuke Kobayashi	Energy conversion process	Study and Education on High Efficiency Energy Conversion Process with Solid-Gas Reaction
Professor	Shuhei Takahashi	Reacting Thermo-fluid Engineering	Education and research on thermo-fluid phenomena with chemical reaction
Professor	Asami Nakai	Engineering of Composites	Education and research on basic theory on molding, structure, properties, and functions of composite materials and its application
Professor	Minoru Yamashita	Plasticity engineering	Research and education of elastic plastic deformation and plastic forming process of solid materials, and their numerical simulation
Associate Professor	Yasuhiro Takahashi	VLSI design	Low-voltage and Low-power digital/analog design of cryptographic VLSI using adiabatic logic, and front-end ICs for optical communication

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Professor	Lee Wah Lim	Instrumental and separation chemistry	Education and research on optimization and application of separation and instrumental analytical systems/devices
Professor	Natsuhisa Oka	Design of functional molecules	Education and research on design, synthesis, and applications of functional organic molecules
Professor	Kunihito Kato	Computer Vision	Image processing, Image recognition, Computer Vision
Professor	Mutsuhiro Shima	Materials Science	Materials science with particular focus on investigating structure-property relationships in functional magnetic nanomaterials and composites
Professor	Takahiro Nitta	Biophysics, Polymer physics	Research and education on soft materials and biomaterials
Professor	Takayuki Ban	Inorganic Materials Chemistry	Education and research on the syntheses of ceramic nanomaterials by solution processes and their characterization methods
Associate Professor	Hidekazu Miyaji	Supramolecular Chemistry	Education and research on molecular recognition and artificial construction of biological functions by supramolecules
Associate Professor	Keisuke Yamada	Spintronics	Education and research on fabrication of nano magnetic materials and evaluation of these physical properties