

生命科学・化学専攻

Department of Life Science and Chemistry

生命工学創薬領域

Medicinal Chemistry and Biotechnology Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|-------------------|--|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Masato Ikeda | Biomolecular Chemistry | Education and research on nanobiotechnology based on molecular machinery and supramolecular materials |
| Professor | Hiroshi Ueda | Medical molecular engineering | Education and research on cellular response mechanisms through biological membranes |
| Professor | Hiroshi Takemori | Therapeutic Science | Education and research for understanding of disease mechanisms and energy metabolism |
| Professor | Kyoji Furuta | Biofunctional molecule chemistry | Education and research on molecular design and synthesis of bioactive substances |
| Professor | Yoko Morita | Biochemistry of Signal Transduction | Education and research on the molecular mechanisms of intracellular signal transduction in the development and aging of the central nervous system |
| Professor | Takashi Yokogawa | Gene expression engineering | Education and research on the engineering of the protein synthesis systems |
| Associate Professor | Satoshi Ohno | Gene expression engineering | Education and research on development of methods for the synthesis of novel proteins |
| Associate Professor | Kentaro Oh-hashii | Biochemistry of signal transduction | Education and research on cellular stress responses and signal transduction |
| Associate Professor | Hiroko Koyama | Bioorganic chemistry | Education and research on design and synthesis of functional <i>in vivo</i> molecular probe |
| Assistant Professor | Yoshiaki Kitamura | Biomolecular Chemistry | Education and research on development of new methodologies in organic synthesis for drug discovery and chemical biology |
| Assistant Professor | Aya Shibata | Biomolecular Chemistry | Education and research of the development of functional molecule using nucleic acids |

生命工学化学領域

Applied Chemistry and Biotechnology Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|---------------------|---|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Kaori Ando | Organic Reaction Chemistry | Education and research on development of new synthetic methods and the reaction mechanism |
| Professor | Toyohide Takeuchi | Separation analytical chemistry | Education and research on design of novel separation analytical systems and their application |
| Professor | Tetsuro Fujisawa | Structural Biophysics | Education and research on protein dynamics probed by synchrotron radiation |
| Professor | Toshiaki Murai | Synthetic Organic Chemistry | Education and research of syntheses of valuable organic compounds and development of synthetic reactions |
| Professor | Toyokazu Yoshida | Bioprocess engineering | Education and research on functional analysis of novel enzymes and application to the synthesis of useful compounds |
| Associate Professor | Natsuhisa Oka | Design of functional molecules | Education and research on design, synthesis, and applications of functional organic molecules |
| Associate Professor | Keiichi Kameyama | Biophysical Chemistry | Education and research on characterization of biologically related supramolecular assemblies |
| Associate Professor | Fumitoshi Shibahara | Design of Transformation in Organic Synthesis | Education and research on design of transformations for organic synthesis of valuable compounds |
| Associate Professor | Koichi Mitsukura | Biocatalysis and green chemistry | Education and research on chemo-biocatalytic synthesis of useful compounds and on screening for novel enzymes and their applications |
| Associate Professor | Hidekazu Miyaji | Supramolecular Chemistry | Education and research on molecular recognition and artificial construction of biological functions by supramolecules |
| Associate Professor | Lee Wah Lim | Instrumental and separation chemistry | Education and research on optimization and application of separation and instrumental analytical systems/devices |

社会基盤工学専攻

Department of Civil and Environmental Engineering

環境領域

2018/4/1現在

Environmental Studies Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|------------------|---|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Tomoyuki Ohtani | Engineering Geology | Geothermal resource geology and fault rock study of active fault |
| Professor | Kohji Kamiya | Groundwater engineering | Education and research for groundwater resources management |
| Professor | Koichi Kobayashi | Maintenance Engineering | Education and research on evaluation of materials and their deterioration for building infrastructure maintenance systems |
| Professor | Seirou Shinoda | Water environmental system dynamics | Education and research work on a system dynamics for the transfer and circulation of water and substance in the water environment |
| Professor | Akiyoshi Takagi | Regional Planning | Education and research on regional planning based on socio-economic evaluation of safety, comfort and convenience |
| Professor | Ichiro Tamagawa | Hydrometeorology | Energy and water exchange between land and atmosphere and atmospheric boundary layer |
| Professor | Fusheng Li | Environmental and water quality engineering | Water quality; Water and wastewater treatment; Pollution control; Solid waste treatment and reuse |
| Associate Professor | Toshiharu Kojima | Hydrology | Education and investigation of rainfall-runoff process and related various phenomena with remote sensing and GIS |
| Associate Professor | Yoshifumi Demura | Urban History, Landscape Planning | Spatial and Historical Study of Urban and Humanized Landscape, Landscape Design |
| Associate Professor | Kayako Hirooka | environmental sanitary engineering | Research and Education on recovery of energy and material from wastewater and solid waste, and Energy-saving wastewater treatment technology |
| Associate Professor | Toshiro Yamada | Environmental and Sanitary Engineering | Evaluation and control of diffuse water pollution, source water quality control and management for safe drinking water |
| Assistant Professor | Yuki Kojima | Environmental Soil Physics | Education and research relevant to coupled heat, water, and chemical transfer in vadose zone |

防災領域

Disaster Reduction Studies Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|--------------------|--|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Yuichi Uchida | Concrete structures | Education and research on the behavior of reinforced concrete elements and of structures |
| Professor | Minoru Kunieda | Construction Materials | Advanced construction materials and structures for resilient infrastructures |
| Professor | Fumitaka Kurauchi | Transport System Design | Research and education on planning, designing and evaluating transport system for improving its efficiency, safety and sustainability |
| Professor | Satoru Kojima | Engineering Geology | Education and research on geological process and natural hazard characteristic of mobile belt like Japanese Islands |
| Professor | Kazuhide Sawada | Geotechnical Engineering | Engineering technique and information for prevention or reduction of geo-disaster |
| Professor | Nobuoto Nojima | Earthquake Engineering | Seismic Hazard and Risk Assessment and its Application to Earthquake Disaster Prevention and Mitigation |
| Professor | Shigeyuki Murakami | Bridge Engineering | Education and Study on Stability, Ductility and Maintenance of Bridge Structures |
| Professor | Atsushi Yashima | Geo-Hazard Mitigation | Education & Research on Mitigation of Geo-Hazard |
| Associate Professor | Koji Kinoshita | Steel Structural Engineering, Fracture Mechanics, Earthquake Engineering | Seismic performance and fatigue performance of bridges: linear and nonlinear analytical techniques for bridges subject to dynamic loads, earthquake and aging protective systems, and experimental large-scale bridges testing |
| Associate Professor | Masumitsu Kuse | earthquake engineering | Prediction of ground motion, Estimation of the fault model based on the strong motion records |
| Associate Professor | Maki Koyama | Disaster Risk Reduction, Earthquake Engineering | Mechanism of human casualties and building disaster resilient communities |
| Associate Professor | Morihiro Harada | River Engineering | River basin management harmonized with disaster prevention and environmental conservation |
| Assistant Professor | Keisuke Ohashi | River Engineering | Computational Grain Sizing, Discharge measurement, and Surface Water-Groundwater Interaction |
| Assistant Professor | Satoshi Sugiura | Infrastructure Planning and Management | Education and Research on efficient management of infrastructure considering disaster prevention and changing social situation |

物質・ものづくり工学専攻

Department of Materials Science and Processing

物質化学領域

Materials Chemistry Division

2018/4/1現在

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|-------------------|--|---|
| | | 名称 Specialization | 内容 Theme |
| Professor | Shigeyuki Uemiy | Reaction and separation engineering | Research and education on reaction and separation materials for environmentally-friendly chemical reaction processes |
| Professor | Masahiro Ebihara | Physicochemical Properties of Coordination Compounds | Structure and physicochemical properties of coordination compounds and their assembled ones |
| Professor | Yutaka Ohta | Inorganic Materials Chemistry and Engineering | Education and researches on processing and properties of ceramics |
| Professor | Shoichi Kutsumizu | Soft Matter Chemistry | Development of self-assembled materials such as liquid-crystalline and polymeric materials and elucidation of their structure-property relationship |
| Professor | Mamoru Koketsu | Functional Organic Molecular Chemistry | Study on preparation, analysis and characterization of functional organic molecule |
| Professor | Osamu Sakurada | Processing of Inorganic Materials | Study and education on processing, characterization and analysis of inorganic materials |
| Professor | Mutsuhiro Shima | Materials Science | Materials science with particular focus on investigating structure-property relationships in functional magnetic nanomaterials and composites |
| Professor | Takashi Sugiyura | Photoelectrochemistry | Synthesis and characterization of semiconductors for photoelectrochemical application |
| Professor | Akiyoshi Takeno | Functional polymer materials | Education and research on the functional polymer materials covering structure-property relationship and control |
| Professor | Akira Tsuchida | Colloid and Polymer Chemistry | Study and Education on the Structure and Functional Expression of Polymer and Colloidal Dispersion Systems. |
| Professor | Takayuki Ban | Inorganic Materials Chemistry | Education and research on the syntheses of ceramic nanomaterials by solution processes and their characterization methods |
| Professor | Kazumasa Funabiki | Design of Functional Organic Molecule | Study and education on the synthesis of useful organic molecules and evaluation of their properties |
| Associate Professor | Kazuhiro Uemura | Coordination Chemistry | Education and Studies on the Synthesis and Physical Properties of Novel Assembled Coordination Compounds |
| Associate Professor | Yasunori Omi | Separation materials and engineering | Development of the design method and function elucidation of separated materials for realizing low environmental load process |
| Associate Professor | Hiroshi Kimura | Polymer&Surface Chemistry | Education and research relevant to behavior and functional development of surface in polymeric system |
| Associate Professor | Kenichi Komura | Materials for Catalyst & Catalysis Chemistry | Education and research on catalyst design for environmental benign chemical process. |
| Associate Professor | Yuji Naruse | Structural organic chemistry | Research and education on design of molecules and reactions and their applications for materials |
| Associate Professor | Manabu Miyamoto | Reaction and Separation Engineering | Catalysis, adsorption and membrane separation using porous materials |
| Associate Professor | Yohei Miwa | Chemistry in Molecular Assembly | Research and Education in Field of Self-Assemble Polymers and Liquid Crystals |
| Assistant Professor | Toshiyasu Inuzuka | Natural Product Chemistry | Isolation, structure elucidation and biological activity evaluation of novel natural products |
| Assistant Professor | Taro Udagawa | Quantum and computational chemistry | Development of computational methods for quantum mechanics and its applications |
| Assistant Professor | Yasuhiro Kubota | Organic Functional Chemistry | Molecular design and synthesis of functional dyes |
| Assistant Professor | Shinya Takahashi | Synthesis and properties of functionalized interface materials | Education and research on molecular design of polymeric materials with functionalized interface and its control of functionality |
| Assistant Professor | Kazuhiro Manseki | Materials science for photoenergy conversion | Development of solar cells and photocatalysts using organic-inorganic hybrid systems |
| Assistant Professor | Keisuke Yamada | Spintronics | Education and research on fabrication of nano magnetic materials and evaluation of these physical properties |
| Assistant Professor | Michiyuki Yoshida | Ceramic Materials | Education and research for structural and material design based on powder technology |

設計生産領域

Materials Processing Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|--------------------|--|--|
| | | 名称 Specialization | 内容 Theme |
| 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 | Hirofumi Kousaka | Functional Surface Manufacturing | Research and education on functional surface manufacturing focusing on tribology and plasma technologies |
| 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 | Takushi Miyake | Mechanics of composites | Research and education on mechanical behavior and deformation mechanism of composite materials and its application to molding. |
| Professor | Kisaragi Yashiro | Computational Materials Science | Research and education on various computational approaches for deformation and fracture of solid materials |
| Professor | Minoru Yamashita | Plasticity engineering | Research and education of elastic plastic deformation and plastic forming process of solid materials, and their numerical simulation |
| Professor | Zhigang Wang | Combined forming processes | Development of combined forming processes to make precise products with complicated shapes |
| Associate Professor | Yoshihiro Inoue | Complex Turbulent Shear Flow | Research and education of instrumentation system development and data analysis for turbulent structures in complex shear flows |
| Associate Professor | Toshifumi Kakiuchi | Strength and Fracture of Materials | Education and study on evaluation of strength in materials used for machine structures. |
| Associate Professor | Makoto Niikawa | Processing engineering | Research and education on various processing phenomena focusing on die and mold |
| Associate Professor | Yoshinori Yoshida | Advanced Structural Materials | Study on engineering structural materials and its control deformation processing technology |

知能理工学専攻

Department of Intelligence Science and Engineering

知能機械領域

2018/4/1現在

Intelligent Mechanical Engineering Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|-------------------|--|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Satoshi Ito | Engineering of intelligent control systems | Education and research on motor control systems of humans and robots |
| Professor | Minoru Sasaki | Electromechanical control engineering | Education and research on computer-controlled electromechanical systems, robotics engineering and modern control theory |
| Professor | Takeshi Miyasaka | Space Propulsion Engineering | Education and Research on plasma and physical gas dynamics of space propulsion systems |
| Professor | Takayoshi Yamada | Industrial Robotics and Mechatronics | Education and Research on Robotics, Mechatronics, and Robotic Assembly |
| Professor | Hironao Yamada | Computer Control Engineering | Education and research on computer control engineering, image processing, human support engineering |
| Professor | Hidehiko Yamamoto | Intelligent Production Engineering | Education and Research on Intelligent Systems Development for Factory's Design, Controls and Operations |
| Associate Professor | Kazuaki Ito | Motion control | Education and research on advanced motion control for mechatronic systems |
| Associate Professor | Takuya Kawamura | Human informatics | Education and Research on Perceptual information processing (Tactile sensor, Contact sensing processing), Experimental psychology (Tactile sensation, Sensitivity), Mechatronics |
| Associate Professor | Hirohisa Tamagawa | Polymeric materials | Education and Research on Fabrication of electroactive polymer, Elucidation of electric characteristics of hydrophilic polymer |
| Associate Professor | Gakuji Nagai | Computational Engineering | Education and Research on Strength of Materials, Finite Element Method for Smart Materials, High Performance Computing, Visualization |
| Associate Professor | Nojiro Matsushita | Human Assist Robotics | Education and research on motion & bio-signal analysis and autonomous robots for human assist |
| Associate Professor | Tetsuya Mouri | Intelligent Mechanical Engineering | Education and Research on System Integration of Robotics and Virtual Reality |

知能情報学領域

Informatics Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|---------------------|---|---|
| | | 名称 Specialization | 内容 Theme |
| Professor | Hiroshi Kamabe | Information Theory and Coding Theory | Information Theory and Coding Theory for Input Constrained Channels and Application of Theory of Symbolic Dynamical System |
| Professor | Yoshihiro Kawase | Applications of numerical analysis | Discretization of large scale nonlinear equation and development of numerical algorithm for finite element method and its education and research |
| 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 | Fumihiko Saitoh | Image Engineering | Learning and research for image sensing system and image recognition algorithm |
| Professor | Masahiro Tanak | Computer Simulation | Education and research on computational methods, numerical techniques, and algorithms in computer simulation |
| Professor | Satoru Hayamizu | Media Informatics | Education and research on media informatics |
| Professor | Miwako Mishima | Discrete Mathematics and its Applications | Education and research on digital communications, cryptography, and their underlying algebra and combinatorics |
| Professor | Yasunari Yokota | Signal and Image Processing | Education and study related to processing and analysis for sound, biological signals, images, and videos. |
| Associate Professor | Munihito Kato | Computer Vision | Image processing, Image recognition, Computer Vision |
| Associate Professor | Yoshihiro Kaneko | Network Theory | Education and research based on graph-theoretic network system |
| Associate Professor | Ryugo Kijima | Human Computer Interaction | Human sensation and perception for interfacing to computer, especially for Virtual Reality. |
| Associate Professor | Motoki Shiga | Data Science | Theory of statistical data analysis and its applications on science and engineering |
| Associate Professor | Satoshi Tamura | Multimodal processing | Integration, application and information processing of multiple modalities such as audio and visual ones |
| Associate Professor | Kazumori Terada | Intelligent Interaction | Education and research on intelligent interaction between human-human and human-machine |
| Associate Professor | Takeshi Hara | Medical Image Analysis and Processing | Quantitative imaging and computerized analysis for medical images |
| Associate Professor | Michiko Harayama | Information networks | Computer network architecture of the Internet. |
| Associate Professor | Tadahiro Matsumoto | Natural Language Processing | Education and research on computer processing and representations of natural language |
| Associate Professor | Musami Mohri | Coding Theory and Network Security | Fundamental theory for improving security and reliability of media communications and its application to communication service |
| Associate Professor | Tadashi Yamaguchi | Numerical Analysis | Education and Research on Coupled Analysis between Recent Finite Element Method and Various Equations |
| Assistant 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 |
| Assistant Professor | Hidekazu Fukai | Biological Signal Processing | Studies on from systems biology to cognition by signal processing and statistical science |
| Assistant Professor | Shan Lu | Information theory and coding theory for multiuser communications | Research and education on the evaluation of the theoretical limits and encoding/decoding methods to approaching the theoretical limits for multiuser communications |

応用数学物理領域

Applied Mathematics and Physics Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|--------------------------|--|---|
| | | 名称 Specialization | 内容 Theme |
| Professor | Hisato Aoki | Computational Materials Science | Modeling and prediction of materials by theoretical and computational methods |
| Professor | Hiroyuki Usami | Differential equations | Asymptotic analysis of ordinary differential equations and partial differential equations |
| Professor | Atsushi Kameyama | Dynamical Systems | Mathematics of vector fields, discrete dynamical systems, and chaos |
| Professor | Shoji Shimura | Theoretical Nuclear and Hadron Physics | Quantum physics, hypernuclear and strange-particle physics |
| Professor | Mitsuhiro Tanaka | Nonlinear waves, Fluid mechanics | Theoretical and numerical studies on nonlinear wave phenomena in fluids |
| Professor | Takanichi Terao | Computational science and engineering | Computational physics (colloids, soft materials, metamaterials), molecular simulations, high-performance computing |
| Associate Professor | Nobuo Kashiwagura | Materials science | Education and research on thin film semiconductor and functional ceramics |
| Associate Professor | Takao Kuzumaki Kobayashi | Number theory | Education and the study on classical algebraic number theory and analytic number theory |
| Associate Professor | Shintaro Kondo | Mathematical analysis | Education and research on mathematical analysis of nonlinear differential equations describing plasma phenomena and reaction diffusion equations |
| Associate Professor | Hideo Sakamoto | quantum many-body physics | Quantum many-body problems, nuclear structure, collective motions and particle interactions |
| Associate Professor | Okhiro Sawada | Partial Differential Equations | Research and Education on the mathematical analysis to the Navier-Stokes equations and related topics |
| Associate Professor | Hiroshi Takaba | Radio Astronomy | Study and education of Radio Astronomy and technical research on it |
| Associate Professor | Takahiro Nitta | Biophysics, Polymer physics | Research and education on soft materials and biomaterials |
| Associate Professor | Kouji Yamamuro | The theory of stochastic processes | Education and the study of mathematical theory of additive processes |
| Assistant Professor | Shota Ono | Theoretical condensed matter physics | A theoretical study of ultrafast phenomena in condensed matters, e.g., Nonequilibrium dynamics of elementary excitations, thermalization, etc./ A theoretical study of nanoscale physics, e.g., Nanocarbons, 2D materials, organic solar cells, etc. |
| Assistant Professor | Hiroshi Sudou | Radio astronomy | Astrometry, blackhole astronomy |

エネルギー工学専攻
Department of Energy Engineering

エネルギー変換領域
Energy Conversion Division

2018/4/1現在

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|--------------------|--|--|
| | | 名称 Specialization | 内容 Theme |
| Professor | Yoshinori Itaya | Energy Process Engineering | Education and Research on environmental friend efficient energy process utilizing thermal equilibrium or thermodynamically non-equilibrium states |
| Professor | Shigeki Imao | Turbulent Flow Engineering | Education and research of transition from laminar to turbulent flow and drag reduction of turbulent flow |
| Professor | Shinji Kambara | Energy and Environmental Engineering | R&D of energy and environmental engineering by plasma chemistry and photochemistry. |
| 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 | Masaharu Komiyama | Thermal Engineering | Education and research on development of measuring method of thermal fluid including reactivity and investigation of real phenomena and its application |
| Professor | Shuhei Takahashi | Reacting Thermo-fluid Engineering | Education and research on thermo-fluid phenomena with chemical reaction |
| Professor | Yuichi Matsumura | Vibration Engineering | Education and research on the elucidation and its application of the occurrence mechanism of acoustics and vibration |
| Associate Professor | Satoshi Kikuchi | Fluid Engineering | Education and research of investigations and control of fluid flow phenomena |
| Associate Professor | KOBAYASHI Nobusuke | Energy conversion process | Study and Education on High Efficiency Energy Conversion Process with Solid-Gas Reaction |
| Associate Professor | Yasushi Sobajima | Energy-Conversion Optoelectronic Engineering | Study on new process control technologies for high grade photovoltaic device preparation |
| Associate Professor | Satoshi Nishida | Light Energy Conversion Process Engineering | Analysis of chemical reactions and gas flow in plasma enhanced CVD process |
| Associate Professor | Kohei Furuya | Acoustics and Vibration engineering | Education and research on development of numerical method to predict vibration and acoustic phenomenon and its application. |
| Associate Professor | Norimitsu Yoshida | Energy-Conversion Optoelectronic Engineering | Education and rearch on optical and electronic properties of semiconductors for thin film solar cells |
| Associate Professor | Jun Yoshino | Natural Energy | Estimation, prediction, and control on natural energy and environment based on high-resolution meteorological and oceanographic models |
| Assistant Professor | Kazuhiro Kumabe | Integrated energy-recirculation system engineering | Education and research on developments of highly-efficient and environmentally-friendly energy system and reduction method of environmental pollutant |

電気エネルギー領域
Electrical and Energy System Engineering Division

| 役職 Title | 教員名 Name | 教育・研究分野 Educational and Research Area | |
|---------------------|--------------------|--|---|
| | | 名称 Specialization | 内容 Theme |
| 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 | Daohong Wang | Electric energy engineering | Lightning physics, Lightning protection, Photovoltaic power |
| Professor | Hiroshi Kimura | Information and Communication Technology | Education and research on microwave remote sensing including processing and analysis of radar signals, scattering of EM wave and measurement by EM wave technique |
| 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 | Shigeo Sasaki | High Pressure Materials Science | Education and study of the exploration of novel phenomena for molecular solids and gas hydrate compounds by using high pressure generation technique and the estimation of their physical and electronic properties |
| Professor | Nobuyuki Takagi | High voltage engineering | High voltage testing and measurement, Lightning overvoltage, Protection against lightning |
| Professor | Makoto Nakamura | Integrated Circuit Engineering | Studies on optical-electrical interface circuits for optical communication systems |
| Professor | Chuzo Ninagawa | Smart Grid | Smart grid, Fast automated demand response, Virtual power plant, Building facilities, Machine Learning |
| Professor | Hiroyuki Fujiwara | Semiconductor Device Engineering | Fabrication of solar cells based on new materials and construction of solar cell device simulators |
| Professor | Hiroki Yoshida | Energy Generation and System | Laser engineering, fusion related quantum optics, renewable energy generation and system |
| Associate Professor | Hiroki Ishikawa | Power Electronics | Research and education on power conversion and the related applications. |
| Associate Professor | Hidehiro Ohwa | Dielectric Engineering | Education and research on basic characteristics and applications of electronic materials centering on dielectrics |
| 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 | Hirofuka Takano | Power Engineering | Energy Management Technologies for Electric Power Suppliers and Consumers |
| Associate Professor | Kazuyasu Hamada | System Engineering | System Engineering which investigates common principle among various kinds of real physical systems such as networked or computer controlled systems. |
| Associate Professor | Koji Hayashi | Semiconductor Electronics | Study on novel opto-electronic functional materials: Amorphous semiconductor materials, Nano crystals |
| Associate Professor | Shintaro Hisatake | Terahertz Photonics | Generation, manipulation, and detection of millimeter-wave and terahertz wave based on photonics technology |
| Associate Professor | Kyyoul YUN | Soft magnetic material science | Dissimilar metal bonding and soft magnetic material properties measurement & applications |
| Assistant Professor | Ting Wu | Atmospheric Electricity | Lightning physics, lightning observation technology, lightning protection technology |
| Assistant Professor | Daisuke Ito | Electrical engineering | Circuit designe and functional systems for high-speed optical communications |
| Assistant Professor | Fumitaka Ohashi | Semiconductor engineering | Education and research on characterizations of fundamental properties of novel materials and reliability of photovoltaic modules |
| Assistant Professor | Tatsuo Suzuki | System Theory | Mathematical System Theory which investigates common principles among various kinds of systems including signal/image processing or aerospace systems. |