# 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

As of April 1, 2021

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-hashi	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 in vivo 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		
i rue		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	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	
Professor	Lee Wah Lim	Instrumental and separation chemistry	Education and research on optimization and application of separation and instrumental analytical systems/devices	
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 thier applications	
Associate Professor	Hidekazu Miyaji	Supramolecular Chemistry	Education and research on molecular recognition and artificial construction of biological functions by supramolecules	

#### 環境社会基盤工学専攻

#### Department of Civil and Environmental Engineering

#### 環境領域

Environmental Studies Division

投職 Title	数員名 Name	卷育→研究分野 Educational and Research Area		
		名称 Specialization	内容 Themo	
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 betweem land and atmosphere and atmospheric boundary layer	
Professor	Yoshifumi Demura	Urban History, Landscape Planning	Spatial and Historical Study of Urban and Humanized Landscape, Landscape Design	
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	Yuki Kojima	Environmental Soil Physics	Education and research relevant to coupled heat, water, and chemical transfer in vadose zone	
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	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	

#### 防災領域

Disaster Reduction Studies Division

役職	教員名	教育·研究分野 Educational and Research Area		
Title	Name	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 Satability, Ductility and Maintainance 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	Kazuhiro Miyachi	Steel Structure, Structural Mechanics	Education and research on evaluation of corrosion and fatigue of suspended bridge cable	

# 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

As of April 1, 2021

Materials Chemistry	As of April 1, 2021				
役職 Title	教員名	教育→研究分野 Educational and Research Area			
	Name	名称 Specialization	内容 Theme		
Professor	Shigeyuki Uemiya	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 Ohya	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 Sugiura	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	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 evalution 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 Oumi	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	Structual organic chemistry	Research and education on design of molecules and reactions and their applications for materials		
Associate Professor	Kazuhiro Manseki	Materials science for photoenergy conversion	Development of solar cells and photocatalysts using organic-inorganic hybrid systems		
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	Chika Takai	Design of Functional Inorganic Nanoparticles	Research and Education on Design of Functional Inorganic Nanoparticles and Control of their Dispersibility		
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	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

<b>役職</b> Title	教員名	教育·研究分野 Educational and Research Area		
	Name	名称 Specialization	內容 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	Hiroyuki Kousaka	Functional Surface Manufactureing	Resrach 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	
rofessor	Kisaragi Yashiro	Computational Materials Science	Research and education on various computational approaches for deformation and fracture of solid materials	
rofessor	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 stractural 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 Intelligent Mechanical Engineering Division As of April 1, 2021

Intelligent Mechani	cal Engineering Division		AS OF ADITY 1, 20	
<b>役職</b> Title	数員名 Name	概有·研究分野 Educational and Research Area		
	Name	名等 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	
Associate Professor	Kazuaki Ito	Motion control	Education and research on advanced motion control for mechatronic systems	
Associate Professor	Satoshi Ueki	Intelligent mechatronics	Education and research on Intelligence, measurement, and control of mechatronic system	
Associate Professor	Hirohisa Tamagawa	Polymeric materials	Education and Research on Fabrication of electroactive polymer, Elucidation of electric characteristics of hydrophillic 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	Tetsuya Mouri	Intelligent Machanical Engineering	Education and Research on System Integration of Robotics and Virtual Reality	
Associate Professor	Kojiro Matsushita	Human Assist Robotics	Education and research on motion & bio-signal analysis and autonomous robots for human assist	

# 知能情報学領域 Informatics Division

Informatics Division	<b>教員名</b> Name	教育·研究分野 Educational and Research Area		
Title		名称 Specialization	内管 Theme	
Professor	Kunihito Kato	Computer Vision	lange processing. Image recofnition, Computer Vision	
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	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 Tanaka	Computer Simulation	Education and research on computational methods, numerical techniques, and algorithms in computer simulation	
Professor	Takeshi Hara	Medical Image Analysis and Processing	Quantitative imaging and computerized analysis for medical images	
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.	
Professor	Tadashi Yamaguchi	Numerical Analysis	Education and Research on Coupled Analysis between Recent Finite Element Method and Various Equations	
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	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	
Associate Professor	Yu Suzuki	Data Engineering	Education and research of data analysis based on data centric approach	
Associate Professor	Satoshi Tamura	Multimodal processing	Integration, application and information processing of multiple modalities such as audio and visual ones	
Associate Professor	Kazunori Terada	Intelligent Interaction	Education and research on intelligent interaction between human-human and human-machine	
Associate Professor	Michiko Harayama	Information networks	Computer network architechture of the Internet.	
Associate Professor	Tadahiro Matsumoto	Natural Language Processing	Education and research on computer processing and representations of natural language	
Associate Professor	Masami Mohri	Coding Theory and Network Security	Fundamental theory for improving security and reliability of media communications and its application to communication service	
Assistant Professor	Keigo Imai	Programming Languages and Concurrent/Distributed Systems	Theory and practice of programming languages and their type systems, and formal models for concurrent/distributed computing	
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

<b>役職</b> Title	教員名 Name	執育·研究分野 Educational and Research Area	
Title		名称 Specialization	内容 Themo
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	Takako Kuzumaki Kobayashi	Number theory	Education and the study on classical algebraic number theory and analytic number theory
Professor	Takamichi 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	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	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
Associate Professor	Tomoo Yokoyama	Topology and Dynamical systems	Topology, Dynamical systems, and their applications (Topological flow data analysis)
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	Naoto Kajiwara	Partial Differential Equations	Education and research on mathematical theory of parabolic evolution equations
Assistant Professor	Hiroshi Sudou	Radio astronomy	Astrometry, blackhole astronomy

#### Department of Energy Engineering

#### エネルギー変換領域

教育・研究分野 Educational and Research Area 微異名 Name Ø∰ Title 名称 Specializatio 内容 Theme iroshi Asano system analysis and evaluation of energy systems including distributed energy resources and power systems Yoshinori Itaya Energy Process Engineering Education and Research on environmental friend efficient energy process utilizing thermal equilibrium or thermodynamically non-equilibirum states Shinji Kambara Energy and Environmental Engineering R&D of energy and environmental engineering by plasma chemistry and photochemistry. Tomonao Kobayashi Natural Energy valuation and prediction of electric power generation of photovoltaic systems based on weather forecasting, and prediction of waves and physical processes in the ocean 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 Shuhei Takahashi Reacting Thermo-fluid Engineering Education and research on thermo-fluid phenomena with chemical reaction suguhiko Nakagawa Energy Systems Engineering ducation and research on innovative processes and energy systems integrated with mutual energy conversion of chemical energy, heat and electricity Yuichi Matsumura Vibration Engineering ducation and research on the elucidation and its application of the occurrence mechanism of acoustics and vibration Satoshi Kikuchi Fluid Engineering sociate Professor ucation and research of investigations and control of fluid flow phenomena ssociate Professor Nobusuke Kobayashi Energy conversion process Study and Education on High Efficiency Energy Conversion Process with Solid-Gas Reaction sociate Professor Yasushi Sobajima Energy-Conversion Optoelectronic Engineering tudy on new process control technologies for high grade photovoltaic device preparation sociate Professor Satoshi Nishida Light Energy Conversion Process Engineering nalysis of chemical reactions and gas flow in plasma enhanced CVD process ociate Professor Kohei Furuya oustics and Vibration engineering ducation and research on development of numerical method to predict vibration and acoustic phenomenon and its application. ssociate Professor Norimitsu Yoshida Energy-Conversion Optoelectronic Engineering Education and rearch on optical and electronic properties of semiconductors for thin film solar cells sociate Professor Natural Energy stimation, prediction, and control on natural energy and environment based on high-resolution meteorological and oceanographic models sistant Professor Kazuhiro Kumabe Integrated energy-recirculation system engineering ducation and research on developments of highly-efficient and environmentally-friendly energy system and reduction method of environmental pollutant sistant Professor Aerospace Engineering, Combustion Engineering Education and research on combustion science and application to aerospace propulsion systems Energy and Environmental Engineering Yukio Hayakawa ssistant Professor RMD on environmental load reduction and ammonia fuel utilization technology by atmospheric pressure plasma

#### 電気エネルギー領域

Electrical and Energy System Engineering Division

Electrical and Energy Sys	教員名 Name	章官·研究分野 Educational and Research Area		
Title		名等 Specialization	内書 Thome	
Professor	Hiroki Ishikawa	Power Electronics	Reseach and education on power conversion and the related applications.	
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, Photoroltaic 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	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	Masafumi Sakata	Structural Materials Science under High Pressure	Education and research on structural change of material and novel electronic properties such as superconductivity under extremely high pressure	
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	Hirotaka 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, Namo 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	Yusuke Kimura	High Pressure Materials Science	Education and study on structures and ionic properties of superionic conductors under high pressure	
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.	