

【Department of Mathematical Sciences】

	Title	Name	Education and Research Fields
1	Professor	Kouyemon Iriye	Algebraic Topology
2	Professor	Yoshitsugu Kabeya	Differential Equations
3	Professor	Mitsuru Kawazoe	Cryptography, Algebraic Geometry, Mathematics Education
4	Professor	Tetsuya Takahashi	Cryptography, Number Theory, Mathematics Education at University Level
5	Professor	Minoru Tabata	Mathematical Simulation
6	Professor	Hideaki Matsunaga	Functional Differential Equations, Difference Equations
7	Professor	Tatsuya Maruta	Algebraic Coding Theory, Finite Geometry
8	Professor	Atsushi Yamaguchi	Algebraic Topology, Homotopy Theory
9	Associate Professor	Tetsuya Kazumi	Stochastic Analysis
10	Associate Professor	Masaru Kada	Axiomatic Set Theory, Set-theoretic Topology, Mathematical Logic
11	Associate Professor	Kiriko Kato	Ring Theory
12	Associate Professor	Toru Kan	Partial Differential Equations, Ordinary Differential Equations
13	Associate Professor	Manabu Shirosaki	Value Distribution Theory, Complex Analysis
14	Associate Professor	Hidekazu Tanaka	Mathematical Statistics, Theory of Probability Distribution
15	Associate Professor	Tomoyuki Tanigawa	Qualitative theory of differential equations
16	Associate Professor	Takashi Tamura	Mathematical Finance, Stochastic Control
17	Associate Professor	Masashi Hyodo	High-Dimensional Data Analysis, Mathematical Statistics, Theory of Sampling Distribution, Machine Learning
18	Associate Professor	Yuya Mizuno	Representation Theory of Algebras
19	Associate Professor	Hiroyuki Minamoto	Homological Algebra of Rings
20	Associate Professor	Naoto Yamaoka	Ordinary Differential Equations, Numerical Analysis
21	Associate Professor	Yoko Watamori	Multivariate Analysis, Mathematical Statistics
22	Assistant Professor	Ushio Tanaka	Differential Geometry, Spatio-Temporal Point Process Analysis, Stochastic Geometry, Shape Theory

【Department of Physical Science】

	Title	Name	Education and Research Fields
1	Professor	Naruhiko Aizawa	Mathematical Physics, Algebraic Methods in Quantum Mechanics and Field Theory
2	Professor	Yasuto Itoh	Structural Geology
3	Professor	Toshikazu Onishi	Astrophysics, Radio Astronomy, Star Formation
4	Professor	Yoshiki Kubota	Structural Materials Science, Crystal Structure Analysis, Charge density analysis, X-ray Diffraction
5	Professor	Satoshi Tanaka	Quantum Mechanics, Nonequilibrium Statistical Mechanics, Quantum Optics, Theoretical Physics
6	Professor	Satoru Noguchi	Condensed Matter Physics under Extreme Conditions, Strongly Correlated Electron Systems, Experimental Physics
7	Professor	Yuko Hosokoshi	Magnetism, Molecular Materials, Low Temperature Physics, Micromachining, Electromagnetism, Experimental Physics
8	Professor	Daisuke Miura	Volcano Geology, Volcano-Tectonics
9	Professor	Kohji Mizoguchi	Solid State Physics, Optical Properties of Condensed matter, Ultrafast Phenomena in Semiconductors and Nano-structures, Dynamics of Coherent Phonons and Excitons, THz Science
10	Associate Professor	Takuya Iida	Bio-photophysics, Laser tweezers, Light-induced force, Fluctuation, Electromagnetic analysis, Nanophotonics, Photochemistry, Analytical science, Medical Physics,
11	Associate Professor	Kazuhiko Ishii	Solid Earth Science, Dynamics of Subduction Zones
12	Associate Professor	Goro Oohata	Solid State Physics, Optical Properties of Condensed Matter, Semiconductor Microcavity and Nano-Structure, Quantum Optics and Quantum Information Science, Experimental Physics
13	Associate Professor	Toshio Ono	Magnetism, Low Temperature Physics, Electromagnetism, Mechanics, Micromachining, Experimental Physics
14	Associate Professor	Taketoshi Kawai	Solid State Physics, Optical Properties of Condensed Matter, Development of Phosphor and Scintillator Materials
15	Associate Professor	Kazuki Kanki	Quantum Mechanics, Statistical Mechanics, Nonequilibrium Phenomena, Transport Phenomena, Theoretical Physics
16	Associate Professor	Atsuko Kosuga	Solid State Physics, Material Science, Electrical Transport Properties, Thermal Transport Properties, Thermoelectric Phenomena
17	Associate Professor	Eiichi Sato	Petrology, Volcanology
18	Associate Professor	Hiroyuki Maezawa	Astrophysics, Planetary Science, THz Detector, Superconductivity
19	Associate Professor	Tsuyoshi Mizuguchi	Mathematical Physics of Biological Phenomena, Nonlinear Physics
20	Associate Professor	Kazuyuki Muraoka	Astrophysics, Radio Astronomy, Star Formation in Galaxies
21	Associate Professor	Hironori Yamaguchi	Magnetism, Molecular Materials, Low Temperature Physics, Electromagnetism, Experimental Physics
22	Lecturer	Hiroki Ishibashi	Solid State Physics, Materials Science, Crystallography, X-ray Diffraction, Magnetism
23	Lecturer	Kenichi Noba	Quantum Mechanics, Driven Quantum Systems, Open Quantum Systems, Theoretical Physics
24	Assistant Professor	Savannah Garmon	Quantum Mechanics, Open Quantum Systems, Resonance Phenomena, Theoretical Physics

【Department of Chemistry】

	Title	Name	Education and Research Fields
1	Professor	Toshio Asada	Theoretical and Computational Molecular Science Development and Application of Computer Simulation Methods
2	Professor	Masato Ohashi	Organometallic Chemistry, Organofluorine Chemistry
3	Professor	Ken Kamikawa	Synthetic Organic Chemistry. Organometallic Chemistry, Asymmetric Synthesis
4	Professor	Shiro Koseki	Quantum Chemistry, Theoretical Chemistry, Computational Chemistry
5	Professor	Masahiro Toyota *	Evaluation of AI-Proposed Synthetic Routes Development of Novel One-Pot Reaction and Application to Pharmaceutical Synthesis
6	Professor	Hideki Fujiwara	Physical Chemistry and Functional Material Chemistry Development of Molecular Functional Materials
7	Professor	Hiroyuki Matsuzaka	Inorganic and Organometallic Chemistry Synthesis and Reactivity of Organotransition Metal Clusters
8	Professor	Hiroshi Matsubara	Fluorous Chemistry Computational Investigations into Reaction Mechanism
9	Associate Professor	Hajime Kameo	Inorganic and Organometallic Chemistry Synthesis and Reactivity of Organotransition Metal Complexes
10	Associate Professor	Shin Takemoto	Inorganic Chemistry and Catalysis New Functional Ligands for Transition Metal Catalysis
11	Associate Professor	Takahide Fukuyama	Organic Chemistry. Development of New Catalytic Transformation and Sustainable Chemical Processes
12	Associate Professor	Akimasa Fujihara	Physical Chemistry Analytical Chemistry
13	Lecturer	Kenichi Iwamoto	Physical Chemistry Gas Phase Ion Chemistry, Mass Spectrometry
14	Lecturer	Mitsuhiro Ueda	Organic Chemistry. Development of New Catalytic Reactions Based on the Use of Organometallic Species and Organomolecule
15	Lecturer	Hideo Kojima	Bioorganic Chemistry Organic Synthesis by Biocatalyst
16	Lecturer	Yasushi Makino	Bioorganic Chemistry Structural and Functional Analysis of Biomolecules
17	Assistant Professor	Daisuke Sakamaki	Physical Organic Chemistry Development and Application of Open-shell π -Conjugated Systems
18	Assistant Professor	Akihiro Tsurusaki	Organic and Organometallic Chemistry Catalytic Reaction and Synthesis of π -Conjugated Molecules

* Prof. Toyota will retire in March of 2021.

【Department of Biological Science】

	Title	Name	Education and Research Fields
1	Professor	Hideshi Ihara	Cell biology, Molecular biology, Biochemistry, Neurochemistry, Chemical biology, Redox biology
2	Professor	Mikio Kato	Molecular phylogenetics and evolution of aquatic insects, Studies on unusual DNA structures
3	Professor	Takayoshi Kinoshita	Structural biology, Structure-based drug discovery, Molecular mechanism for signal transduction, Protein kinases
4	Professor	Seiji Kodama	Radiation biology, Chromosome instability, Radiation effect on embryos, Biology of neural stem cells
5	Professor	Takaya Satoh	Cell biology, Intracellular signal transduction mediated by small GTPases, Molecular mechanisms for diabetes
6	Professor	Takeshi Tsumuraya	Bioorganic chemistry, Chemical biology, Antibody engineering
7	Professor	Masayuki Hara	Biotechnology, Tissue engineering, Biomaterials, Biopolymers, Neuroscience, Developmental biology, Cell biology, Stem cell
8	Professor	Ikuo Fujii	Chemical biology, Biochemistry, Bioorganic chemistry, Protein & peptide engineering, Medicinal chemistry
9	Professor	Kensuke Miyamoto	Plant physiology, Mode of action of phytohormones, Gravidresponses in plants, Naturally-occurring plant growth substances
10	Associate Professor	Michihiro Ishihara	Ecology and evolution, Life history evolution of insects, insect-plant interactions
11	Associate Professor	Maki Onda	Protein folding, Structural biology, Conformational diseases, Neurodegeneration, Biophysical chemistry
12	Associate Professor	Masanobu Kawanishi	Environmental toxicology, Environmental mutagenesis, Biotechnology, Molecular biology
13	Associate Professor	Koichi Kobayashi	Plant physiology, Photosynthesis, Chloroplast biogenesis
14	Associate Professor	Satomi Takeda	Plant physiology, Plant cell culture, Photosynthesis
15	Associate Professor	Nobuyuki Takenaka	Molecular and cell biology, Intracellular signal transduction mediated by small GTPases, Analysis of mouse phenotype
16	Associate Professor	Ikuhiko Nakase	Pharmaceutical sciences, biofunctional-design chemistry, cell engineering
17	Associate Professor	Hideki Mori	Biotechnology, Stem cell biology, Bioprocess engineering, Tissue engineering, Biomaterials, Neuroscience
18	Lecturer	Hideo Ezoe	Mathematical ecology, Population dynamics, Evolutionary game theory, Evolution of mutualism
19	Lecturer	Hayato Tokumoto	Applied microbiology, Bioremediation, Analysis of intestinal bacterial community, Plant physiology
20	Lecturer	Daisuke Fujiwara	Chemical biology, Peptide science, Directed evolution
21	Assistant Professor	Shingo Kasamatsu	Cell biology, Molecular biology, Biochemistry, Neurochemistry, Chemical biology, Redox biology
22	Assistant Professor	Kazunori Shiraishi	Radiation biology, Radio-adaptive response in vivo, Biology of neural stem cells
23	Assistant Professor	Takako Nishino	Plant speciation, Plant molecular taxonomy, Plant ecology and evolution, Conservation botany
24	Assistant Professor	Masataka Michigami	Chemical biology, Biochemistry, Molecular biology, Peptide engineering
25	Assistant Professor	Shizue Yoshihara	Photobiology of plants, Biochemistry, Biophysical chemistry