List of Faculties
Tokyo Institute of Technology International Graduate Program (C)
Commencing in April 2023

School of Materials and Chemical Technology

Dept. of Chemical Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	OHTOMO, Akira	Inorganic Solid State Chemistry, Thin Film, Surface and Interface, Device Physics		Chemical Science and Engineering
Professor	TANAKA, Katsunori	Synthetic Organic Chemistry, Bioorganic Chemistry, Chemical Biology		Human Centered Science and Biomedical Engineering Chemical Science and Engineering
Professor	TANAKA, Ken	Synthetic Organic Chemistry, Asymmetric Synthesis, Organometallic Chemistry		Chemical Science and Engineering
Professor	TSUKAHARA, Takehiko	Analytical Chemistry, Radiation Chemistry, Environmental Science, Radioactive Waste Management, Micro-Nano Chemistry, Functional Polymer, Nuclear Fuel Cycle, Decommissioning		Nuclear Engineering
Professor	NAKAMURA, Ryuhei	Origin of life, Earth-life science, Electrocatalysis		Earth-Life Science ★ Chemical Science and Engineering
Professor	MURAHASHI, Tetsuro	Synthetic Inorganic and Organometallic Chemistry, Coordination Chemistry		Chemical Science and Engineering
Professor	YAMANAKA, Ichiro	Catalysis, Electrocatalysis, Oxidation	Retirement at Mar. 2026	Chemical Science and Engineering Energy Science and Engineering
Associate Professor	ITO, Shigekazu	Physical Organic Chemistry, Organic Synthesis, Main Group Chemistry, Muon Science		Chemical Science and Engineering
Associate Professor	SHIMIZU, Ryota	Inorganic Solid State Physics and Chemistry, Thin films, Materials Informatics		Energy Science and Engineering Chemical Science and Engineering
Associate Professor	TAKAO, Toshiro	Organometallic Chemistry, Inorganic Chemistry		Chemical Science and Engineering
Associate Professor	TANAKA, Hiroshi	Synthetic Organic Chemistry, Chemical Biology, Natural Product Chemistry		Chemical Science and Engineering
Associate Professor	TAKAO, Koichiro	Actinide Chemistry, Coordination Chemistry, Nuclear Fuel Cycle, Fuel Reprocessing, Radioactive Wastes, Decontamination		Nuclear Engineering Chemical Science and Engineering
Visiting Professor	TATEYAMA, Yoshitaka	Quantum chemistry calculations, Electrochemistry	Doctoral program only	Chemical Science and Engineering
Professor	IHARA, Manabu	Energy Conversion on Chemical Engineering, Electrochemistry, Fuel Cells, Solar Cells, Energy system		Energy Science and Engineering Chemical Science and Engineering
Professor	OKOCHI, Mina	Biochemical Engineering, Peptide Engineering, Biosensing, Biotechnology, Medical and Biological Engineering		Chemical Science and Engineering Human Centered Science and Biomedical Engineering Earth-Life Science ★
Professor	KATO, Yukitaka	Zero-Carbon Energy Systems, Energy Storage & Conversion, Carbon Recycling Energy Systems, Chemical Heat Pump, Hydrogen Energy		Nuclear Engineering Chemical Science and Engineering
Professor	KUBOUCHI, Masatoshi	Polymeric Materials for Chemical Plant, Epoxy Recycle, Green Composite, Smart Structure, Maintenance Engineering		Chemical Science and Engineering
Professor	SHIMOYAMA, Yusuke	Molecular crystal & assembly, Pharmaceutical・cosmetic formulation, CO2 utlization, Machine-learning, Information & data technology		Chemical Science and Engineering Energy Science and Engineering
Professor	SEKIGUCHI, Hidetoshi	Reactions in High Energy Density Media, Plasma Processing, Energy & Environmental Chemical Engineering		Chemical Science and Engineering Energy Science and Engineering
Professor	TAGO, Teruoki	Chemical Reaction Engineering, Catalytic Reaction Engineering, Catalyst & Environmental Chemical Process, Porous Catalyst		Chemical Science and Engineering Energy Science and Engineering
Specially Appointed Professor	OOKAWARA, Shinichi	Microfluidic Transport Phenomena, CFD (Computational Fluid Dynamics), Microreactor		Chemical Science and Engineering
Associate Professor	AOKI, Saiko	Tribology, Lubricating oil and additives, Surface Engineering, Affective Engineering		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	TANIGUCHI, Izumi	Aerosol Science and Technology, Powder Technology,Functional Material Processing, Energy Materials		Chemical Science and Engineering Energy Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	HARADA, Takuya	Carbon Capture & Utilization, Inorganic Materials, Chemical Pprocess Engineering, Low-carbon Energy System, Nuclear Energy		Nuclear Engineering Chemical Science and Engineering
Associate Professor	FUCHINO, Tetsuo	Process Systems Engineering, Product Management		Chemical Science and Engineering
Associate Professor	MATSUMOTO, Hideyuki	Process Systems Engineering, Process Intensification, Nitrogen Cycle, Process Information, Renewable Energy		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	MANZHOS, Sergei	Materials modeling, machine learning, energy conversion and storage		Energy Science and Engineering Chemical Science and Engineering
Associate Professor	MORI, Shinsuke	Plasma Processing, Heat Transfer		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	YOSHIKAWA, Shiro	Fluid Dynamics, Transport Phenomena		Chemical Science and Engineering
Professor	ANDO, Shinji	Structure and Physical Properties of Functional Polymers in Solids, Polymer Spectroscopy and Characterization, Computational Polymer Chemistry	Retirement at Mar. 2026	Chemical Science and Engineering
Professor	ISHIZONE, Takashi	Polymer Synthesis, Living Polymerization		Chemical Science and Engineering
Professor	OTSUKA, Hideyuki	Polymer Reactions, Smart Polymeric Materials, Polymer Synthesis		Chemical Science and Engineering
Professor	SATOH, Kotaro	Polymer Synthesis,Precision Polymerization, Bio-Based Monomer		Chemical Science and Engineering Energy Science and Engineering
Professor	SERIZAWA, Takeshi	Biomacromolecular Chemistry, Biomaterials Science and Engineering, Molecular Assembly		Chemical Science and Engineering
Professor	TOKITA, Masatoshi	Polymer Structures and Properties, Liquid Crystals, Polymer Brushes		Chemical Science and Engineering
Professor	NAKAJIMA, Ken	Polymer Physics, Rubber Industry, Atomic Force Microscopy		Chemical Science and Engineering
Associate Professor	ISHIGE, Ryohei	Structural analysis of polymers, thin film, synchrotron X-ray, vibrational spectroscopy, liquid crystal		Chemical Science and Engineering
Associate Professor	KONISHI, Gen-ichi	Polymer Synthesis, Photochemistry, Fluorescent Dye, Liquid Crystal, Organic Chemistry		Chemical Science and Engineering
Associate Professor	SAITO, Reiko	Polymer Synthesis, Template Polymerization	Retirement at Mar. 2026	Energy Science and Engineering Chemical Science and Engineering
Associate Professor	SAWADA, Toshiki	Biomacromoleculer Science, Bioorganic Chemisgtry, Biotechnology, Biofunctional Materials		Chemical Science and Engineering
Associate Professor	FURUYA, Hidemine	Structures and Physical Properties of Polymers	Retirement at Mar. 2025	Chemical Science and Engineering
Professor	ARAI, Hajime	Secondary battery, Metal-air battery, Electrochemistry, Operando (In situ) analysis		Energy Science and Engineering Chemical Science and Engineering
Professor	INAGI, Shinsuke	Organic Electrochemistry, Polymer Chemistry		Energy Science and Engineering Chemical Science and Engineering
Professor	SHISHIDO, Atsushi	Polymer Physical Chemistry, Liquid Crystals, Optical Function, Mechanical Function		Chemical Science and Engineering Energy Science and Engineering
Professor	TOMITA, Ikuyoshi	Polymer Synthetic Chemistry		Chemical Science and Engineering Energy Science and Engineering
Professor	HIRAYAMA, Masaaki	Energy Conversion Materials, Inorganic and Solid State Chemistry, Electrochemical Interface		Energy Science and Engineering Chemical Science and Engineering
Professor	FUKUSHIMA, Takanori	Organic Functional Materials, Nanomaterials, π-Electronic Systems, Molecular Assembly		Chemical Science and Engineering
Professor	YAMAGUCHI, Takeo	Fuel Cell Engineering, Bio-inspired Materials, Membrane Science		Chemical Science and Engineering Energy Science and Engineering
Professor	YAMAMOTO, Kimihisa	Nano-materials Chemistry, Metallochemistry, Macromolecular Science		Chemical Science and Engineering
Professor	YOSHIZAWA, Michito	Supramolecular Chemistry, Synthetic Chemistry, Nanospace, Water, Photofunction, Biosensor		Chemical Science and Engineering
Associate Professor	IMAOKA, Takane	π-Conjugating Molecular Chemistry, Electron Transfer Chemistry, Nanomaterial Science		Chemical Science and Engineering
Associate Professor	KITAMURA, Fusao	Electrochemistry, Spectroscopy, In-situ Spectroelectrochemistry		Energy Science and Engineering

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Associate Professor	KUBO, Shoichi	Polymer Chemistry, Materials Chemistcy		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	SAWADA, Tomohisa	Supramolecular Chemistry, Organic Chemistry, Coordination Chemistry, Self-Assembly, Peptide, Topology		Chemical Science and Engineering
Associate Professor	SHOJI, Yoshiaki	Functional π-Conjugated Molecules and Polymers, Highly Reactive Main-Group Species		Chemical Science and Engineering
Associate Professor	TANAKA, Masayoshi	Biomolecular Chemistry, Protein Engineering, Applied Microbiology, Multi-Omics Science, Medical and Biological Engineering	New faculty member (Apr. 2022)	Human Centered Science and Biomedical Engineering Chemical Science and Engineering
Associate Professor	TOYODA, Sakae	Environmental Chemistry, Material Cycle Analysis		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	YAMADA, Keita	Organic Geochemistry, Isotope Chemistry		Chemical Science and Engineering Energy Science and Engineering
Associate Professor	YOKOI, Toshiyuki	Catalytic Chemistry, Nanospace Catalysts, Zeolite Science, Green Chemistry		Chemical Science and Engineering
Associate Professor	WADA, Hiroyuki	Optical Materials, Nanoparticles, Solar cell, Optical thin film		Energy Science and Engineering Human Centered Science and Biomedical Engineering Chemical Science and Engineering
Associate Professor	NAKAZONO, Kazuko	Polymer synthesis, Supramolecular Chemistry		Energy Science and Engineering Chemical Science and Engineering
Associate Professor	SUZUKI, Kota	Solid State Chemistry, Energy Convertion Materials, Novel Energy Storage Device, and Material Seaerch by Machiene Learning		Energy Science and Engineering Chemical Science and Engineering

★ The Earth-Life Science Graduate Major is an Integrated Doctoral Educational Program (master's and doctoral level).