

List of Faculties

Tokyo Institute of Technology International Graduate Program (B) for applicants seeking scholarships from their home governments Commencing in September 2022

School of Materials and Chemical Technology

Dept. of Chemical Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	ANDO, Shinji	Structure and Physical Properties of Functional Polymers in Solids, Polymer Spectroscopy and Characterization, Computational Polymer Chemistry		• 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	FUKUSHIMA, Takanori	Organic Functional Materials, Nanomaterials, π -Electronic Systems, Molecular Assembly		• Chemical 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	HITOSUGI, Taro	Nanoscience, Solid-state chemistry, Solid-state electrochemistry		• 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	ISHIZONE, Takashi	Polymer Synthesis, Living Polymerization		• Chemical Science and Engineering
Professor	KATO, Yukitaka	Energy Storage/Conversion, Energy Saving, Carbon Zero Emission/Carbon Recycling Energy System, Chemical Heat Pump, Hydrogen Energy, Nuclear Energy System		• 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	MURAHASHI, Tetsuro	Synthetic Inorganic and Organometallic Chemistry, Coordination Chemistry		• Chemical Science and Engineering
Professor	NAKAJIMA, Ken	Polymer Physics, Rubber Industry, Atomic Force Microscopy		• Chemical Science and Engineering
Professor	NAKAMURA, Ryuhei	Origin of life, Earth-life science, Electrocatalysis		• Chemical Science and Engineering
Professor	OHTOMO, Akira	Inorganic Solid State Chemistry, Thin Film, Surface and Interface, Device Physics		• Chemical Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	OKOCHI, Mina	Biochemical Engineering, Peptide Engineering, Biosensing, Biotechnology, Medical and Biological Engineering		• 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		• Energy Science and Engineering • Chemical 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	SERIZAWA, Takeshi	Biomacromolecular Chemistry, Biomaterials Science and Engineering, Molecular Assembly		• Chemical Science and Engineering
Professor	SHIMOYAMA, Yusuke	Molecular crystal & assembly, Pharmaceutical · cosmetic formulation, CO2 utilization, Machine-learning, Information & data technology		• Chemical Science and Engineering • Energy Science and Engineering
Professor	SHISHIDO, Atsushi	Polymer Physical Chemistry, Liquid Crystals, Optical Function, Mechanical Function		• 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
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	TOKITA, Masatoshi	Polymer Structures and Properties, Liquid Crystals, Polymer Brushes		• Chemical Science and Engineering
Professor	TOMITA, Ikuyoshi	Polymer Synthetic Chemistry		• Energy Science and Engineering • 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	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	YAMANAKA, Ichiro	Catalysis, Electrocatalysis, Oxidation		• Chemical Science and Engineering • Energy Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	YOSHIZAWA, Michito	Supramolecular Chemistry, Synthetic Chemistry, Nanospace, Water, Photofunction, Biosensor		• Chemical Science and Engineering
Specially Appointed Professor	OOKAWARA, Shinichi	Microfluidic Transport Phenomena, CFD (Computational Fluid Dynamics), Microreactor		• Chemical Science and Engineering
Visiting Professor	TATEYAMA, Yoshitaka	Quantum chemistry calculations, Electrochemistry	Doctoral program only	• 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	FUCHINO, Tetsuo	Process Systems Engineering, Product Management		• Chemical Science and Engineering
Associate Professor	HARADA, Takuya	Carbon Capture & Utilization, Inorganic Materials, Chemical Process Engineering, Low-carbon Energy System, Nuclear Energy		• Nuclear Engineering • Chemical Science and Engineering
Associate Professor	IMAOKA, Takane	π -Conjugating Molecular Chemistry, Electron Transfer Chemistry, Nanomaterial Science		• Chemical Science and Engineering
Associate Professor	INAGI, Shinsuke	Organic Electrochemistry, Polymer Chemistry		• Energy Science and Engineering • 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	ITO, Shigekazu	Physical Organic Chemistry, Organic Synthesis, Main Group Chemistry, Muon Science		• Chemical Science and Engineering
Associate Professor	KITAMURA, Fusao	Electrochemistry, Spectroscopy, In-situ Spectroelectrochemistry		• Energy Science and Engineering
Associate Professor	KONISHI, Gen-ichi	Polymer Synthesis, Photochemistry, Fluorescent Dye, Liquid Crystal, Organic Chemistry		• Chemical Science and Engineering
Associate Professor	KUBO, Shoichi	Polymer Chemistry, Materials Chemistry		• Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	KUWATA, Shigeki	Coordination Chemistry, Organometallic Chemistry		• 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	MATSUMOTO, Hideyuki	Process Systems Engineering, Process Intensification, Nitrogen Cycle, Process Information, Renewable Energy		• Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	MORI, Shinsuke	Plasma Processing, Heat Transfer		• Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	NAKAZONO, Kazuko	Polymer synthesis, Supramolecular Chemistry		• Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	SAITO, Reiko	Polymer Synthesis, Template Polymerization		• Energy Science and Engineering • Chemical Science and Engineering

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Associate Professor	SAWADA, Toshiki	Biomacromolecular Science, Bioorganic Chemistry, Biotechnology, Biofunctional Materials		<ul style="list-style-type: none"> • Chemical Science and Engineering
Associate Professor	SHIMIZU, Ryota	Inorganic Solid State Physics and Chemistry, Thin films, Materials Informatics		<ul style="list-style-type: none"> • Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	SHOJI, Yoshiaki	Functional π -Conjugated Molecules and Polymers, Highly Reactive Main-Group Species		<ul style="list-style-type: none"> • Chemical Science and Engineering
Associate Professor	SUZUKI, Kota	Solid State Chemistry, Energy Conversion Materials, Novel Energy Storage Device, and Material Search by Machine Learning		<ul style="list-style-type: none"> • Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	TAKAO, Koichiro	Actinide Chemistry, Coordination Chemistry, Nuclear Fuel Cycle, Fuel Reprocessing, Radioactive Wastes, Decontamination		<ul style="list-style-type: none"> • Nuclear Engineering • Chemical Science and Engineering
Associate Professor	TAKAO, Toshiro	Organometallic Chemistry, Inorganic Chemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering
Associate Professor	TAMAKI, Takanori	Energy Materials, Biomaterials, Bioelectrochemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	TANAKA, Hiroshi	Synthetic Organic Chemistry, Chemical Biology, Natural Product Chemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering
Associate Professor	TANIGUCHI, Izumi	Aerosol Science and Technology, Powder Technology, Functional Material Processing, Energy Materials		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	TOYODA, Sakae	Environmental Chemistry, Material Cycle Analysis		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	WADA, Hiroyuki	Optical Materials, Nanoparticles		<ul style="list-style-type: none"> • Energy Science and Engineering • Human Centered Science and Biomedical Engineering • Chemical Science and Engineering
Associate Professor	YAMADA, Keita	Organic Geochemistry, Isotope Chemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	YOKOI, Toshiyuki	Catalytic Chemistry, Nanospace Catalysts, Zeolite Science, Green Chemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering
Associate Professor	YOSHIKAWA, Shiro	Fluid Dynamics, Transport Phenomena		<ul style="list-style-type: none"> • Chemical Science and Engineering