

List of Faculties
Tokyo Institute of Technology International Graduate Program (A)
Commencing in September 2019 Overseas Application

A-3 Program for Highly-skilled Professionals for a Smart Society Supported by Advanced Materials and Chemical Technology : SSMCT

(1) Dept. of Materials Science and Engineering

ACADEMIC SUPERVISOR		RESEARCH FIELD	REMARKS	GRADUATE MAJOR
Professor	AZUMA, Masaki	Solid State Chemistry		Materials Science and Engineering
Professor	FUJII, Toshiyuki	Crystallography of Microstructures		Materials Science and Engineering
Professor	FUNAKUBO, Hiroshi	Materials Science, Thin Film Devices		Materials Science and Engineering
Professor	HARA, Michikazu	Catalysis, Surface Science		• Materials Science and Engineering • Energy Science and Engineering
Professor	HAYAKAWA, Teruaki	Polymer Synthesis, Self-Organizing Polymeric Materials		Materials Science and Engineering
Professor	HOSODA, Hideki	Materials Design, Shape Memory Alloys, Intermetallic Compounds		• Materials Science and Engineering • Human Centered Science and Biomedical Engineering • Energy Science and Engineering
Professor	INAMURA, Tomonari	Shape Memory Alloy, Crystallography of Phase Transformation		• Materials Science and Engineering • Energy Science and Engineering
Professor	KAMIYA, Toshio	Semiconductors, Optoelectronic Devices, Computer simulation		Materials Science and Engineering
Professor	KAWAJI, Hitoshi	Physical Chemistry of Materials, Phase Transition		Materials Science and Engineering
Professor	KIMURA, Yoshisato	Heat Resistant Alloys and Thermoelectric Materials Design based on Phase Equilibria and Microstructure		• Energy Science and Engineering • Materials Science and Engineering
Professor	KITAMOTO, Yoshitaka	Nanoparticles, Magnetic Materials and Devices, Biomedical Devices, Biosensors		• Human Centered Science and Biomedical Engineering • Materials Science and Engineering
Professor	KOBAYASHI, Yoshinao	Metal Refining and Recycling, Safety Metallurgy for Nuclear Reactors, Phase Stability, Degradation of Materials in Reactors, Waste Management		• Nuclear Engineering • Materials Science and Engineering
Professor	MAJIMA, Yutaka	Nanoscale Electronic Materials, Molecular Devices, Scanning Probe Microscopy		Materials Science and Engineering
Professor	MATSUSHITA, Nobuhiro	Novel Processes for Electronic, Energy and Biomedical Materials		Materials Science and Engineering
Professor	MIYAUCHI, Masahiro	Photo-electrochemistry, Photocatalysis, Chemical Synthesis of Nanoparticles		• Energy Science and Engineering • Materials Science and Engineering
Professor	MORIKAWA, Junko	Polymer Processing, Thermal Properties of Polymers		• Human Centered Science and Biomedical Engineering • Materials Science and Engineering
Professor	NAKAJIMA, Akira	Environmental Ceramics, Surface Functional Materials		Materials Science and Engineering
Professor	OBA, Fumiyasu	Computational Design of Electronic and Energy Materials		Materials Science and Engineering
Professor	ONAKA, Susumu	Mechanical Properties of Materials		Materials Science and Engineering
Professor	OUCHI, Yukio	Physical Chemistry of Organic Materials		Materials Science and Engineering

Professor	OUGIZAWA, Toshiaki	Physical Chemistry of Polymeric Materials		Materials Science and Engineering
Professor	SHI, Ji	Physical Properties of Metals, Magnetic Thin Films		• Energy Science and Engineering • Materials Science and Engineering
Professor	SONE, Masato	Material Fabrication and Evaluation for IC & MEMS		• Human Centered Science and Biomedical Engineering • Materials Science and Engineering
Professor	VACHA, Martin	Optical Properties of Organic Materials		• Materials Science and Engineering • Energy Science and Engineering
Professor	YANO, Tetsuji	Inorganic Glasses, Ion-Dynamics and Optical Properties		Materials Science and Engineering
Professor	YOSHIMOTO, Mamoru	Oxide Nano-Engineering, Device, Solar cell		• Energy Science and Engineering • Materials Science and Engineering
Associate Professor	ASAI, Shigeo	Physical Properties of Organic Materials, Polymer Composites		Materials Science and Engineering
Associate Professor	AZUMA, Yasuo	Nanofabrication, Nano Device, Single-Electron Transistor		Materials Science and Engineering
Associate Professor	GOHDA, Yoshihiro	Surface and Interface Physics (Theoretical Calculations)		Materials Science and Engineering
Associate Professor	HAYAMIZU, Yuhei	Bio-interface, Nano Materials		Materials Science and Engineering
Associate Professor	HAYASHI, Miyuki	Thermophysical Properties of Materials, High Temperature Process Control		• Energy Science and Engineering • Materials Science and Engineering
Associate Professor	HAYASHI, Tomohiro	Nanoscience & Nanotechnology, Surface & Interface Science, Scanning Probe Microscopy, Nanophotonics		• Human Centered Science and Biomedical Engineering • Materials Science and Engineering
Associate Professor	HIRAMATSU, Hidenori	Superconducting Materials and Devices		Materials Science and Engineering
Associate Professor	IKOMA, Toshiyuki	Bioceramics, Biosensing, Nanomedicine, Tissue Engineering		• Materials Science and Engineering • Human Centered Science and Biomedical Engineering
Associate Professor	ISHIKAWA, Ken	Optical and Electrical Properties of Organic Materials		• Materials Science and Engineering • Energy Science and Engineering
Associate Professor	KAMATA, Keigo	Catalytic Chemistry, Environment-Friendly Chemical Process		• Materials Science and Engineering • Energy Science and Engineering
Associate Professor	KATASE, Takayoshi	Oxide electronics, Energy materials, Thin film device		Materials Science and Engineering
Associate Professor	KAWAMURA, Kenichi	High Temperature Physical Chemistry, Solid State Ionics		Materials Science and Engineering
Associate Professor	KITANO, Masaaki	Heterogeneous Catalyst, Ammonia Synthesis, Acid Base Catalyst		Materials Science and Engineering
Associate Professor	KOBAYASHI, Equo	Physical Metallurgy of Non-ferrous Metals and Intermetallics, Design and Evaluation of Biomedical Materials		• Materials Science and Engineering • Human Centered Science and Biomedical Engineering
Associate Professor	KOBAYASHI, Satoru	Phase diagrams and phase transformations in alloys, Physical metallurgy of ferrous alloys, Heat resistant steels and alloys		Materials Science and Engineering
Associate Professor	MATSUDA, Akifumi	Atomic-scale Materials Engineering, Materials for Electronics and Energy Applications		• Energy Science and Engineering • Materials Science and Engineering
Associate Professor	MATSUISHI, Satoru	Synthesis and Characterization of Superconducting and Electro-Active Materials		Materials Science and Engineering
Associate Professor	MATSUMOTO, Hidetoshi	Nano-micro Fabrication, Energy Conversion Materials		• Energy Science and Engineering • Materials Science and Engineering
Associate Professor	MATSUSHITA, Sachiko	Thermoelectronics, Plasmonics, Fabrication of Nanostructures		• Materials Science and Engineering • Energy Science and Engineering

Associate Professor	MICHINOBU, Tsuyoshi	Polymer Synthesis, Semiconducting Polymers		Materials Science and Engineering
Associate Professor	MURAISHI, Shinji	Micromechanics, Nanostructured Material, Crystal Defects		Materials Science and Engineering
Associate Professor	NAKADA, Nobuo	Microstructure and Mechanical Properties of Iron and Steels		Materials Science and Engineering
Associate Professor	NAKAMURA, Kazutaka	Laser Spectroscopy		Materials Science and Engineering
Associate Professor	NAKATSUJI, Kan	Surface and Interface Physics		Materials Science and Engineering
Associate Professor	SANNOMIYA, Takumi	Plasmonic Materials, Electron Microscopy		• Materials Science and Engineering • Human Centered Science and Biomedical Engineering
Associate Professor	SASAGAWA, Takao	Strongly Correlated Electron Systems		• Materials Science and Engineering • Energy Science and Engineering
Associate Professor	SHIOYA, Masatoshi	Polymer Composites, Mechanical Properties, Carbon Materials		Materials Science and Engineering
Associate Professor	TADA, Eiji	Corrosion and Environmental Degradation of Materials		Materials Science and Engineering
Associate Professor	TADA, Tomofumi	Quantum Chemistry for Device Modeling		Materials Science and Engineering
Associate Professor	TAKEDA, Hiroaki	Electroceramics, Crystal Growth of Functional materials		• Materials Science and Engineering • Human Centered Science and Biomedical Engineering
Associate Professor	TERADA, Yoshihiro	Microstructure Control, Mechanical Properties, Heat-Resistant Materials		Materials Science and Engineering
Associate Professor	TSUGE, Takeharu	Biodegradable Plastics		• Human Centered Science and Biomedical Engineering • Materials Science and Engineering
Associate Professor	UEDA, Mitsutoshi	High Temperature Oxidation of Metals, Defect Chemistry in Oxides, Physical Chemistry at High Temperature		• Energy Science and Engineering • Materials Science and Engineering
Associate Professor	YASUDA, Kouichi	Engineering Ceramics and Composites, Micromechanics, Fracture Statistics		• Materials Science and Engineering • Energy Science and Engineering
Associate Professor	YOSHIDA, Katsumi	Severe environment resistant materials, Materials for nuclear and fusion applications, Ceramic-based composites, High performance porous ceramics		• Nuclear Engineering, Materials Science and Engineering

(2) Dept. of Chemical Science and Engineering

ACADEMIC SUPERVISOR		RESEARCH FIELD	REMARKS	GRADUATE MAJOR
Professor	ANDO, Shinji	Structure and Physical Properties of Polymeric Functional Materials in Solids		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	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 Conversion, Energy Storage, Chemical Heat Pump, Carbon Recycling Energy System, Hydrogen Energy, Nuclear Energy Utilization System		Nuclear Engineering
Professor	KUBOUCHI, Masatoshi	Polymeric Materials for Chemical Plant, Composite Materials, Material Science, Graphene		Chemical Science and Engineering

Professor	NAKAJIMA, Ken	Polymer Physics, Rubber Industry, Atomic Force Microscopy		Chemical Science and Engineering
Professor	OKOCHI, Mina	Biotechnology, Biochemical Engineering, Peptide Engineering		Chemical Science and Engineering
Professor	OTSUKA, Hideyuki	Polymer Reactions, Smart Polymeric Materials, Polymer Synthesis		Chemical Science and Engineering
Professor	SEKIGUCHI, Hidetoshi	Plasma Processing, Thermo-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	SHISHIDO, Atsushi	Polymer Chemistry, Materials Chemistry		• Energy Science and Engineering • Chemical Science and Engineering
Professor	SHIMOYAMA, Yusuke	Separation Engineering, Supercritical Fluids, Material Process, Separation Process		• Chemical Science and Engineering • Energy Science and Engineering
Professor	TAGO, Teruoki	Chemical Reaction Engineering, Catalytic Reaction Engineering, Catalyst & Environmental Chemical Process		• Chemical Science and Engineering • Energy Science and Engineering
Professor	TOMITA, Ikuyoshi	Polymer Synthetic Chemistry		• Energy Science and Engineering • 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	Macromolecular chemistry, Inorganic chemistry, Nanoscience, Material Science		Chemical Science and Engineering
Professor	YAMANAKA, Ichiro	Electrochemistry, Oxidation Chemistry		• Chemical Science and Engineering • Energy Science and Engineering
Professor	TANAKA, Ken	Synthetic Organic Chemistry, Asymmetric Synthesis, Organometallic Chemistry		Chemical Science and Engineering
Professor	OHTOMO, Akira	Inorganic Solid State Chemistry, Thin Film, Surface and Interface, Device Physics		• Chemical Science and Engineering
Professor	MURAHASHI, Tetsuro	Synthetic Inorganic and Organometallic Chemistry, Coordination Chemistry		Chemical Science and Engineering
Professor	HITOSUGI, Taro	Nanoscience, Solid-state chemistry, Solid-state electrochemistry, Surfaces and Interfaces		• Chemical Science and Engineering
Associate Professor	AOKI, Saiko	Tribology, Surface Engineering		• Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	FUCHINO, Tetsuo	Process Systems Engineering, Product Management		Chemical Science and Engineering
Associate Professor	FURUYA, Hidemine	Structures and Physical Properties of Polymers		Chemical Science and Engineering
Associate Professor	HIRAYAMA, Masaaki	Energy Conversion Materials, Inorganic and Solid State Chemistry, Electrochemical Interface		• Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	IMAOKA, Takane	Physical chemistry, Coordination chemistry, Advanced material chemistry, Nanoparticle, Cluster science		Chemical Science and Engineering
Associate Professor	INAGI, Shinsuke	Organic Electrochemistry, Polymer Chemistry		• Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	KITAMURA, Fusao	Electrochemistry, Spectroscopy, In-situ Spectroelectrochemistry		Energy Science and Engineering
Associate Professor	KOIZUMI, Take-aki	Organometallic Chemistry, Electrocoordination Chemistry		Chemical Science and Engineering
Associate Professor	KONISHI, Gen-ichi	Polymer Synthesis, Photochemistry		Chemical Science and Engineering

Associate Professor	MATSUMOTO, Hideyuki	Process Systems Engineering, Process Intensification, Intelligent Systems		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	MANAKA, Yuichi	Hydrogen Carrier, Homogeneous catalyst		<ul style="list-style-type: none"> • Human Centered Science and Biomedical Engineering • Chemical Science and Engineering
Associate Professor	MORI, Shinsuke	Plasma Processing, Heat Transfer		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	MOTOKURA, Ken	Heterogeneous Catalysis, Organic Chemistry		<ul style="list-style-type: none"> • Human Centered Science and Biomedical Engineering • Chemical Science and Engineering
Associate Professor	NAGAI, Keiji	Photoenergy Conversion Materials and Engineering, Organophotocatalyst, High Energy Density States		<ul style="list-style-type: none"> • Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	NOMURA, Junko	Catalytic Chemistry, Inorganic Synthesis		Chemical Science and Engineering
Specially Appointed Professor	OOKAWARA, Shinichi	Microfluidic Transport Phenomena, CFD (Computational Fluid Dynamics), Microreactor		Chemical Science and Engineering
Associate Professor	SAITO, Reiko	Polymer Synthesis, Template Polymerization, Organic-inorganic Composites		<ul style="list-style-type: none"> • Energy Science and Engineering • Chemical Science and Engineering
Associate Professor	SHOJI, Yoshiaki	Organic Functional Materials, Organic Synthesis, π -Electronic Systems, Molecular Assembly		Chemical Science and Engineering
Associate Professor	TAKAO, Koichiro	Actinide Chemistry, Coordination Chemistry, Nuclear Fuel Cycle, Fuel Reprocessing, Radioactive Wastes, Decontamination		Nuclear 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	TANIGUCHI, Izumi	Nanostructure material processing, Energy storage device, Aerosol technology, Powder engineering, Chemical engineering		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	TOKITA, Masatoshi	Polymer Structures and Properties, Liquid Crystals, Polymer Brushes		Chemical 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	TSUKAHARA, Takehiko	Analytical Chemistry, Radiochemistry, Micro-Nano Chemistry, Functional Nanomaterials, Radioactive Waste Management, Nuclear Fuel Cycle		Nuclear Engineering
Associate Professor	WADA, Hiroyuki	Optical Materials, Nanoparticles		<ul style="list-style-type: none"> • Energy Science and Engineering • Chemical Science and Engineering • Human Centered Science and Biomedical Engineering
Associate Professor	WAKI, Keiko	Fuel Cell, Lithium battery, Solar Cell		Energy 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		Chemical Science and Engineering
Associate Professor	YOSHIKAWA, Shiro	Fluid Dynamics, Transport Phenomena		Chemical Science and Engineering
Associate Professor	YOSHIKAWA, Michito	Supramolecular Chemistry, Nanospace Chemistry		Chemical Science and Engineering
Associate Professor	TANAKA, Hiroshi	Synthetic Organic Chemistry, Chemical Biology, Carbohydrates, Natural Product Chemistry		Chemical Science and Engineering
Associate Professor	OKAMOTO, Masaki	Heterogeneous Catalysis, Porous materials		Chemical Science and Engineering
Associate Professor	KUWATA, Shigeki	Coordination Chemistry, Organometallic Chemistry		<ul style="list-style-type: none"> • Chemical Science and Engineering • Energy Science and Engineering
Associate Professor	ITO, Shigekazu	Physical Organic Chemistry, Organic Synthesis		Chemical Science and Engineering

Associate Professor	TAKAO, Toshiro	Organometallic Chemistry, Inorganic Chemistry		Chemical Science and Engineering
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