

National Taiwan University (NTU) College of Engineering



Professor Cheng-Liang Liu (劉振良)

Organic Polymer Materials and Devices Lab,
Dept. of Materials Science and Engineering

Research Keywords: Electronic and optoelectronic polymer, organic thermoelectric, organic electronics, solution-processing, field effect transistor, solar cell



Professor Yi-Chia Chou (周苡嘉)

Nano Science and Microstructure Group,
Dept of Materials Science & Engineering

Research Keywords: microstructure, low dimensional materials, crystal growth, compound semiconductors, electron microscopy



Professor Chu-Chen Chueh (闕居振)

Optoelectronic Materials & Devices Lab,
Dept. of Chemical Engineering

Research Keywords: Organic and perovskite semiconductors & optoelectronic devices (transistors, solar cells, and light-emitting diodes)



Associate Professor Wen-Yueh YU (游文岳)

Catalysis and Surface Chemistry Lab,
Dept of Chemical Engineering

Research Keywords: heterogeneous catalysis, surface science, functional nanomaterial, sustainable process, electrocatalysis, photocatalysis



Associate Professor Chia-Ching Chou (周佳靚)

Computational Mechanics and Intelligence Lab,
Institute of Applied Mechanics

Research Keywords: multiscale modeling, computational mechanics, biological materials, hydrogel, bio-inspired materials, machine learning, clinical decision support



Associate Professor I-Chung Cheng (鄭憶中)

IC nano-engineering Lab,
Dept of Mechanical Engineering

Research Keywords: dealloying kinetic, metal foams, energy absorption, machine learning-genetic algorithm, CO₂ reduction, SERS



Associate Professor Chien-Hao Liu (劉建豪)

Wave Propagation Lab,
Dept of Mechanical Engineering

Research Keywords: Microwave circuit and frequency selective surfaces, simulations of quasi-2D heterojunction oxide transistor, bone-guided electronic cochlear



Professor Jiashing Yu (游佳欣)

Biomaterials and Tissue Engineering Lab,
Department of Chemical Engineering

Research Keywords: biopolymer: hydrogel, bioink synthesis, stem cells and tissue engineering, nanomedicine, extracellular vesicles, 3D cell culture



Professor Hung-Wei (Homer) YEN (顏鴻威)

Microstructure & Defect Physics Group,
Dept of Materials Science & Engineering

Research Keywords: microstructure, crystal defect, mechanical property, steel, light metal, high-entropy alloy, electron microscopy, atom probe tomography



Assistant Professor Dian-Ru Li (李典儒)

Smart and Advanced Manufacturing Lab,
Dept of Mechanical Engineering

Research Keywords: Additive Manufacturing, Process Control, Smart Manufacturing, Biomanufacturing, Biomedical Engineering, Medical Device Development



Research Center for Materials Nanoarchitectonics (MANA)



Research Center for Macromolecules and Biomaterials



Yu Yamashita (山下 侑)

Senior Researcher,
Supermolecules Group,
Research Center for Materials Nanoarchitectonics (MANA)

Research Keywords: organic semiconductor, redox reaction, doping, diodes



Junko Aimi (相見 順子)

Senior Researcher,
Molecular Mechatronics Group,
Research Center for Macromolecules and Biomaterials

Research Keywords: Precision polymer synthesis, supramolecular chemistry, organic field effect transistor memory



Ryoma Hayakawa (早川 竜馬)

Principal Researcher,
Quantum Device Engineering Group,
Research Center for Materials Nanoarchitectonics (MANA)

Research Keywords: Antiambipolar transistors, Heterojunction transistors, Multivalued logic-in-memory



Ryota Tamate (玉手 亮多)

Independent Scientist,
Research Center for Macromolecules and Biomaterials

Research Keywords: Functional polymer, polymer gel, ionic liquid, gel electrolyte, self-healing, lithium secondary battery



Takaaki Taniguchi (谷口 貴章)

Principal Researcher,
Functional Nanomaterials Group,
Research Center for Materials Nanoarchitectonics (MANA)

Research Keywords: 2D nanomaterials, soft-chemistry, nanosheets, graphene oxide, functional coatings, catalysts



Koichiro Uto (宇都 甲一郎)

Principal Researcher,
Smart Polymers Group,
Research Center for Macromolecules and Biomaterials

Research Keywords: Shape memory polymer, 4D printing, Materiobiology, Biomedical application



Yusuke Ide (井出 裕介)

Group Leader,
Layered Nanochemistry Group,
Research Center for Materials Nanoarchitectonics (MANA)

Research Keywords: Layered silicate, layered titanate, iron oxo-oligomer, UV shielding, (photo)catalysis, adsorption



Takeshi Ueki (上木 岳士)

Senior Researcher,
Mechanobiology Group,
Research Center for Macromolecules and Biomaterials

Research Keywords: Ionic liquids, gels, stimuli-responsive polymer, block copolymers, radical polymerization, mechanobiology