# 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 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 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 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



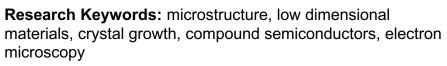
## Professor Hung-Wei (Homer) YEN (顏鴻威)

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



## Professor Yi-Chia Chou (周苡嘉)

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



## 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



IC nano-engineering Lab, Dept of Mechanical Engineering

**Research Keywords:** dealloying kinetic, metal foams, energy absorption, machine learning-genetic algorithm, CO<sub>2</sub> reduction, SERS

## 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



## 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











# National Institute for Materials Science (NIMS)





## Yu Yamashita (山下 侑)

Nanoarchitectonics (MANA)

**Research Center for Materials** 

Senior Researcher, Supermolecules Group, Research Center for Materials Nanoarchitectonics (MANA) **Research Keywords:** organic semiconductor, redox reaction, doping, diodes



## 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



## 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

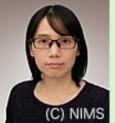


## Yusuke Ide (井出 裕介)

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

Research Center for Macromolecules and Biomaterials



### 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



## 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







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