# Suggested XJTU supervisors for summer school 2025

Prof Kai CHEN, School of Materials Science and Engineering

Materials Science and Engineering; Metallurgy; Mechanical Engineering

Prof Zhifen ZHANG School of Engineering

- In-Situ Monitoring of Additive Manufacturing (DED, SLM, WAAM)
- Data Driven Metal Additive Manufacturing Processing Optimization
- Metal Additive Manufacturing Equipment and Applications.

Prof Junyi CAO, School of Mechanical Engineering

• Mechanical Engineering; Biomedical Engineering; Computer Engineering

Prof Xin CHEN, School of Electrical Engineering

- Renewable energy and Energy Storage
- Al in Power System

Prof Yu CHEN, School of Chemical Engineering

- Development and application of ultraviolet photoelectron spectroscopy system
- Development and application of Inverse photoemission spectroscopy system.

Prof Chengxin LI, School of Materials Science and Engineering

Fundamentals of SOFC/SOEC and Advanced Modeling

Prof Xiangdong DING, School of Materials Science and Engineering

Applications of machine learning in materials science

Prof Jinhua DU, School of Electrical Engineering

Motor control in electric vehicle drive systems with a structured training program

Prof Feng LIU, School of Chemistry

Elucidation of soft condensed system

Prof Jun LIU, School of Electrical Engineering

LDM: A Generic Large Distribution Network Operation Al Model

# Prof Zhiyuan LIU, School of Electrical Engineering

• Simulation Experimental Plan for Targeted Focusing of Magnetic Drugs

#### Prof Yu LUO

- Micro-nano
- Manufacturing/Additive Manufacturing Research Centre
- Electrohydrodynamic micro-nano 3D printing

# Prof Le SHI, School of Electrical Engineering

Flow field design for proton exchange membrane fuel cell (PEMFC)

# Prof Meng SHI

Heat transfer and fluids on micro/nano structures

# Prof Han YAN, School of Materials Science and Engineering

• Stretchable Organic Solar Cells

# Prof Chao ZHANG, School of Information and Communication Engineering

Reconfigurable Intelligent Surface (RIS) Enabled Superior Communications

#### Prof Hongyu SHI

Metasurfaces, RIS, phased array antennas

#### Prof Jiancun FAN, School of Information and Communication Engineering

- Wireless multipath-based simultaneous localization and mapping
- Integration of communication and sensing
- Semantic communications

# Prof Qinghe DU

New physical-layer technologies for wireless communications

### Prof Chaobo YAN

- Modeling, Analysis, and Optimization of Manufacturing and Logistics Systems
- Motion Planning and Collaborative Control of Multi-Robot Systems

Prof Stephen BUSH, School of Electronic Science and Engineering

• Computational biology, bioinformatics, and "big data" genomics

# Prof Fei WANG, School of Software

• Human sensing with IoT devices and LLMs.