

## Workshop IV: TPS & Complementary Methods for Emerging Materials

Chair: Prof. E-Wen Huang (黃爾文)

Name	Topic
Yuan-Wei Chang (張元蔚) Karlsruhe Institute of Technology, Germany	Study of Discrete Voids Formation in Flip-Chip Solder Joints due to Electromigration Using In-Situ 3D Laminography and Finite-Element Modeling
Wei-Ren Chen (陳威仁) Oak Ridge National Laboratory, USA	Role of the Inter-particle Potential on the Nonlinear Rheology of Highly Cooperative Colloids
Andrew Chuang Argonne National Laboratory, USA	Non-destructive Characterization of Residual Stress in Engineering Materials Using Energy-dispersive X-ray Diffraction
Hiroshi Daimon NAIST, Japan	Imaging 3D Atomic Structure Around Specific Atoms Using Atomic-resolution Holography
Hsin-Yun Hsu (許馨云) National Chiao Tung Univ. (國立交通大學)	Smart Nanoplatforms for Bioanalytics and Disease Theranostics
Yung-Jung Hsu (徐雍鎣) National Chiao Tung Univ. (國立交通大學)	Semiconductor Nanoheterostructures for Photoconversion Applications
Wen-Jay Lee (李玟頡) National Center for High-performance Computing (國家高速網路與計算中心)	Development of Material Virtual Screening: High-throughput Framework and Machine Learning
Keng S. Liang (梁耕三) Academia Sinica (中央研究院)	Imaging Individual Drug-carrying Liposome Particles by Free-electron-laser Coherent Diffraction

Name	Topic
Yu-Chieh Lo (羅友杰) National Chiao Tung Univ. (國立交通大學)	Local Heating Effects on the Development of Shear Bands in Metallic Glass
Ming-Chang Lu (呂明璋) National Chiao Tung Univ. (國立交通大學)	Micro/Nanostructures for Enhanced Condensation and Anti-icing
Yuya Shinohara Univ. of Tennessee, USA	Use of Coherent X-rays for Observing Materials' Dynamics: Prospects and Issues
Nien-Ti Tsou (鄒年棣) National Chiao Tung Univ. (國立交通大學)	A Tool of Microstructure Analysis for Shape Memory Alloys
An-Chou Yeh (葉安洲) National Tsing Hua Univ. (國立清華大學)	An Introduction of a New Project to Develop Advanced High Entropy Superalloys and the Potential Future Ultilization of Neutron Scattering Analysis