

2021 USAF/Taiwan MOST
Nanostructured Materials for Sensing and Sustainment
 2021 臺美奈米材料基礎科學研發共同合作研究計畫
Final Program Review

Virtual
 15-16 July, 2021

* Times listed are Eastern Daylight Time (EDT)
 0730 EDT = 1930 TST = 2030 JST

Thursday, 15 July

0715-0730	Connect to virtual meeting
0730-0735	Administration/announcements
0735-0745	Opening Remarks (AFOSR)
0745-0800	Historical Overview of Program (M.K. Wu, MOST)
	Session 1: Novel and/or Flexible Functional Materials Chair: Dr. Todd Rushing, AOARD
0800-0830 Last 5 minutes for questions	Taiwan Joint Project 1: Materials Development of Periodical Nitride Structures – Growth, Doping, and Applications 電子與光電應用的高導電率與高遷移率摻雜氮化鋁鎵 Taiwan PI: 楊志忠 (Chih-Chung Yang), National Taiwan University US PI: Shin Mou/Kent Averett, AFRL/Materials & Manufacturing Directorate
0830-0900	Taiwan Joint Project 2: Higher-Performance Flexible Organic Photovoltaics Based on Polymer Donor/Non-Fullerene Acceptor/2D Nanosheets 基於聚合物給體/非富勒烯受體/二維奈米材料的高性能柔性有機太陽能電池 Taiwan PI: 韋光華 (Kung-Hwa Wei), National Chiao Tung University US PI: Yang Yang, University of California – Los Angeles
	Session 2: Bio-inspired Materials for Sensing Chair: Dr. Tien-Ming Chuang, Institute of Physics, Academia Sinica
0900-0930	Taiwan Joint Project 3: Development of Biocompatible X-ray Scintillating Nanoparticles for Biomedical Applications 發展高生物相容性 X 光奈米閃爍晶體及其生醫應用 Taiwan PI: 胡宇光 (Yeu-Kuang Hwu), Academia Sinica US PI: John Boeckl, AFRL/Materials & Manufacturing Directorate
0930-0945	Break
0945-1015	Taiwan Joint Project 4: Nano-Confined Screening of Bio-Recognition Elements for Enhanced Detection of Biomarkers 奈米流體平台用於篩選生物識別分子和多工檢測 Taiwan PI: 周家復 (Chia-Fu Chou), Academia Sinica US PI: Nathan Swami, University of Virginia
	Session 3: Novel and/or Flexible Functional Materials Chair: Prof. Yu-Ming Chang, National Taiwan University
1015-1045	Taiwan Joint Project 5: Adhesion Mechanics of Van der Waals Interfaces: Fundamental Nanoscale Experiments and Simulations to Enable Flexible Functional Systems 凡德瓦爾材料之界面吸附力學機制:由奈米力學實驗與計算模擬建立可撓性功能系統之關鍵技術 Taiwan PI: 鄭友仁 (Yeau-Ren Jeng), National Chung Cheng University US PI: Robert Carpick, University of Pennsylvania
1045-1100	Day 1 Wrap-up

Friday, 16 July

0715-0730	Connect to virtual meeting
0730-0735	Administration/announcements
	Session 3 (continued): Novel and/or Flexible Functional Materials Chair: Prof. Yu-Ming Chang, National Taiwan University
0735-0805	Taiwan Joint Project 6: Gate-Tunable & Multifunctional Metal Nitride Zero-Index & Plasmonic Heterostructures for Advanced Optical Sensing & Energy Harvesting 可供光學感測和能源元件應用之可調控多功能金屬氮化物電漿 Taiwan PI: 果尚志 (Shangjr Gwo), National Tsing Hua University US PI: Howard Lee, University of California – Irvine/Zhenrong Zhang, Baylor University
0805-0835	Taiwan Joint Project 7: Mesochiral Assembly with Controlled Chirality in Chiral Block Copolymers 由掌性分子建構掌性層級結構及其掌性光學之應用 Taiwan PI: 何榮銘 (Rong-Ming Ho), National Tsing Hua University US PI: Gregory Grason, University of Massachusetts - Amherst
0835-0845	Break
	Session 4: Predictive Functional Materials and Materials for Quantum Phenomenon Chair: Dr. Adam Neal, AFRL/RX
0845-0915	Taiwan Joint Project 8: Nanophotonic Architectures for Quantum Control of Light Emission 基於奈米光子技術之量子輻射操控 Taiwan PI: 吳品韻 (Pin-Chieh Wu), National Cheng Kung University US PI: Harry Atwater, California Institute of Technology
0915-0945	Taiwan Joint Project 9: Scalable Single Photon Source Using CVD-Grown 2D TMDs on Nano-rod Lattices 結合奈米柱陣列與化學氣相沉積法生長之二維過渡金屬硫族屬化物製備大面積單光子源 Taiwan PI: 李奕賢 (Yi-Hsien Lee), National Tsing Hua University US PI: Hui Deng, University of Michigan
0945-1015	Taiwan Joint Project 10: Artificially Engineered Exction Quantum Dot Arrays for Quantum Information Science Applications 供量子資訊應用之人造激子量子點陣列研究 Taiwan PI: 安惠榮 (Hyeyoung Ahn)/張文豪 (Wen-Hao Chang), National Chiao Tung University US PI: Chih-Kang Shih, University of Texas - Austin
1015-1030	Concluding remarks