

TACT 2025 Student Oral Presentation Competition

No.	Topic	Presenter	Total
A-O-9	Silicon/recycled carbon composites derived from CO ₂ capture as anode material for lithium-ion batteries	Kishore Babu Sompalli	
A-O-172	Enhancing Vanadium Redox Flow Battery Performance with Molybdenum-Doped Nickel Cobalt Oxide Modified Graphite Felt Electrodes	Zih-Jhong Huang	
A-O-381	Hydrothermally Synthesized Spinel CoCr ₂ O ₄ for Photodegradation of Organic Dyes	YuHao Chen	Bronze
B-O-176	Understanding the Sensing Mechanism of a ZnMoO ₄ integrated on GO Nanocomposite Towards electrochemical detection of Nitrofurantoin in environmental and biological matrices	Amulya Garadi	
B-O-228	Tunable Nanostructured Stainless-Steel Coatings for High-Performance Oil/Water Separation Membranes	Fanhua Kong	Bronze
C-O-268	Super hydrophobic ZnO/PVDF-HFP Nanofiber film for Triboelectric Nanogenerator Applications	Jun Jie Zhang	
C-O-355	Diamond synthesis from a solid carbon source by chemical transport using narrow gap microwave plasma	Rurii Higuchi	Bronze
D-O-68	Impact Fatigue and Mechanical Properties of TiSiN Multilayer Coatings under Different Bias Voltages with Compositional Design	Tsung-Yuan Li	Silver
D-O-273	Integration of a blue energy harvesting module with seawater electrolysis for sustainable hydrogen production	Chieh-Jui Li	
D-O-366	Influence of Second Phases on MAO Coating Behavior and Corrosion Resistance of ZE51/ZE53 Mg Alloys: Strategies for Discharge Uniformity	Po Han Wu	
E-O-185	A Portable Sensor for the Simultaneous Detection of Catechol and Vanillin in Food and Water Samples Using Ag ₂ Se@f-CB Composite.	k Naveenkumar	
E-O-258	Electrodeposition of Cu/Polyaniline Composite Electrode for Non-Enzymatic Electrochemical Glucose Sensors	Runze Huang	Silver

F-O-47	Impact of Al, Ti and Nb Composition on the Thermal Stability & Oxidation Resistance of AlTiNbSiCrN High-Entropy Nitride Coatings	Manh Nguyen Duc	
F-O-386	Evaluation of Mechanical & Electrocatalytic Properties of AlCoCrFeNiTiN High Entropy Alloy Thin Films	Gao Zheng Dai	
G-O-123	Nanoscale electrochemistry of WSe ₂ -coated NbS ₂ metal–semiconductor heterostructures	Septia Kholimatussadiah	Gold
G-O-291	Investigation of Surface Reconstruction Mechanisms Across Semiconductors, Metals, and Metal Oxides: a review	Cheng Hsi Yeh	

Bronze x 3, Silver x 2, Gold x 1