

Category: Materials Characterization

Poster Number	Student name	Poster Title	Student Affiliation	Award
1	Behafarid, Farzad	ELECTRONIC PROPERTIES AND MOBILITY OF METAL NANOPARTICLES SUPPORTED ON TiO ₂	UCF	Grand Prize
7	Gomez, Humberto	SYNTHESIS OF NANOCRYSTALLINE DIAMOND FILMS FOR ELECTRONIC APPLICATIONS	USF	Honorable Mention
8	Harrinauth, Reshma	SEDIMENTATION BEHAVIOR OF INORGANIC-ORGANIC COMPOSITE PARTICLES	UF	Honorable Mention
10	Nukala, Haritha	QUANTITATIVE ANALYSIS WITH ATOMIC NUMBER CONTRAST TRANSMISSION ELECTRON MICROSCOPY	UCF	Honorable Mention
11	Rhoden, Stephen	X-RAY PHOTOELECTRON INVESTIGATION OF PHOSPHOTUNGSTIC ACID AS A PROTON-CONDUCTING MEDIUM IN POLYMER ELECTROLYTES	UCF	Third Place
12	Sadik, Patrick	CHARACTERIZATION OF CuCrO ₂ /CuSc _{1-x} Mg _x O ₂ HETEROSTRUCTURES GROWN BY PULSED LASER	UF	Honorable Mention
17	Xu, Peng	INVESTIGATION ON THE INVERSE SPINEL Mg ₂ SnO ₄ FOR INERT MATRIX FUEL IN LIGHT WATER REACTORS	UF	Second Place

Category: Materials Science

Poster Number	Student name	Poster Title	Student Affiliation	Award
19	Behera, Rakesh	AN ATOMISTIC STUDY OF SURFACE STABILITY IN PbTiO ₃ THIN FILMS BY MOLECULAR DYNAMICS SIMULATION	UF	Honorable Mention
22	Davenport Jasmine	LATTICE SIMULATIONS OF MICROTUBULE "NANOSPOOL" FORMATION DYNAMICS	UF	Honorable Mention
24	Hawkins, Jefferey M.	FIRST-PRINCIPLES STUDIES OF THE OXIDATION AND CHEMICAL REDUCTION OF TRANSITION METAL SURFACES	UF	Second Place
28	Lee, Donghwa	THE EFFECT OF DOMAIN WALLS ON THE FERROELECTRIC PROPERTIES OF LiNbO ₃ BY MOLECULAR DYNAMICS SIMULATION	UF	Honorable Mention
30	Nerikar, Pankaj	INVESTIGATION OF POINT DEFECT FORMATION AND MIGRATION IN URANIUM OXIDE	UF	Grand Prize
31	Oh Hyun Kim	A QUANTUM CHEMICAL STUDY OF THE ATOMIC LAYER DEPOSITION OF GaN USING GaCl ₃ and NH ₃	UF	Honorable Mention
32	Ono, Luis K.	IN-SITU GAS-PHASE CATALYTIC PROPERTIES OF GOLD NANOPARTICLES : OXIDATION STATE AND SHAPE EFFECTS	UCF	Third Place
34	Tamhane, karan	SELF-ASSEMBLED STEROID TUBES	UCF	Honorable Mention
35	Wohlwend, Jennifer	MORPHOLOGY AND GROWTH MODES OF DEPOSITED SrTiO ₃	UF	Honorable Mention

Category: Undergraduate

Poster Number	Student name	Poster Title	Student Affiliation	Award
36	Boswell, Cosima	SrTiO ₃ THIN FILM DEPOSITION: A MOLECULAR DYNAMICS STUDY	UF	Honorable Mention
37	Diaz, Rene	PLASMA SPRAYED CHROMIUM CARBIDE REINFORCED WITH CARBON NANOTUBES	UCF	Honorable Mention
38	King, Jessica	MORPHOLOGICAL EVOLUTION AND PREFERENTIAL ORIENTATION OF PLANES IN HYDROTHERMAL PROCESSED NANOCERIA RODS AND CUBES	UCF	Third Place
39	Mendoza, Michael	DESIGN AND DEVELOPMENT OF AUTOMATED MECHANICAL SCRIBER FOR SCRIBING OF THIN FILM CIGSeS PV COUPONS	UCF	Honorable Mention
40	Mixson, Kara	CHARACTERIZATION OF NANOCRYSTALLINE THIN DIAMOND FILMS	UF	Honorable Mention
41	Mostafa, Simon	CATALYTIC DECOMPOSITION OF ALCOHOLS OVER SUPPORTED Pt NANOPARTICLES: A STUDY OF ACTIVITY, SELECTIVITY, AND STABILITY	UCF	Second Place
43	Siegfried, Jeremy	CHARACTERIZATION OF BULK METALLIC GLASS MICROCOMPONENTS	UF	Honorable Mention
45	Tupper, Catherine	STRUCTURE AND TEXTURE ANALYSES OF NiTiPd HIGH TEMPERATURE SHAPE MEMORY ALLOYS FROM IN SITU LOAD BIASED NEUTRON DIFFRACTION MEASUREMENTS	UCF	Grand Prize

Category: Materials Processing

Poster Number	Student name	Poster Title	Student Affiliation	Award
48	Barry, Peter	EFFECT OF TEMPERATURE AND SLIDING ORIENTATION ON FRICTION IN PTFE	UF	Honorable Mention
50	Eom, Sang Hyun	VERY HIGH EFFICIENCY DEEP-BLUE PHOSPHORESCENT ORGANIC LIGHT-EMITTING DEVICES	UF	Honorable Mention
52	Fanord, Fedena	NOVEL NANOMATERIALS BASED ON GOLD NANORODS AND A THERMALLY-RESPONSIVE POLYMER	USF	Grand Prize
53	Foertter, Fernanda	LOW ENERGY ION-BEAM MODIFICATION OF ATACTIC AND ISOTACTIC POLYSTYRENE	UF	Honorable Mention
54	Fox, Dawn	REMOVAL OF ARSENIC FROM DRINKING WATER USING CACTUS MUCILAGE	USF	Honorable Mention
56	Jurczyk, Michael Ulrich	INVESTIGATION OF COMPLEX HYDRIDES (LiBH ₄ / LiNH ₂) FOR HYDROGEN STORAGE APPLICATIONS	USF	Honorable Mention
60	Prewit, Anderson	EFFECTS OF FIELD & TEMPERATURE DURING POLING ON THE FERROELECTRIC PROPERTIES OF LEAD ZIRCONATE TITANATE (PZT)	UF	Third Place
62	Walker, David	FABRICATION OF END-FUNCTIONALIZED GOLD NANORODS	USF	Second Place
64	Hadagali, Vinay	EFFECTS OF SODIUM ON THE Cu(In,Ga)Se ₂ ABSORBER MORPHOLOGY AND STRUCTURE	UCF	Honorable Mention