Wednesday, November 19 - Research Posters				
Submission Code	**Poster Number**	**Submission Name**	**First Name**	**Last Name**
163704	R1	Prediction of the Landing Gear Performance Considering Uncertainty in Servicing Conditions	Tae-uk	Kim
163800	R2	Understanding Electrohydrodynamic Flow Using Particle Image Velocimetry (Piv) in Ac Corona Discharge Systems	Priscilla	Aprepary
164839	R3	Fabrication of Bagasse/vitrimer Composites With Self-Healing, Shape Memory, and Flame Retardant Properties	Stephen	Dobreh
164982	R4	Elvis - Electric Vehicles in Safety Analysis	Marian	Bulla
165056	R5	Ai-Assisted 3d Modeling and Defect Classification in Welds Using Phased Array Ultrasonic C-Scan Data	Elsie	Lappin
165069	R6	Autonomous Discovery: Tailored Near-Zero Poisson’s Ratio Metamaterials in Nonlinear Soft Gripper for Improved Interface for Interface Force Enhancer	BaekGyu	Kim
165123	R7	Enhancing Undergraduate System Dynamics Education Through Simulation Software: A Study on Matlab Simulink and Working Model 2d	masoud	olia
165240	R8	Magnetorheological Actuator Based on Carbonyl Iron Particles for Mechanical Characterization of Hydrogels	Solomon	Apuu
165478	R9	Graphene Screen-Printed Electrodes for Wound Biosensing	Chanyapat	Sriviroch
165584	R10	Design and Operation of a Drone Embedded Capsular Vehicle and Launching Mechanism for Long and Proximate Range Operations	Bruce	Jo
165739	R11	Ammonia Synthesis via Synergistic Plasma-Electrochemical Nitrogen Reduction	Snigdha	Rashinkar
165801	R12	Path Planning for Drilling Large and Medium-Sized Workpieces Based on a Greedy Algorithm	Ryoga	Ota
165986	R13	Automated Design of Topological Elastic Metamaterials via Band Morphology-Driven Optimization	Pegah	Azizi
166086	R14	Topologically Protected Majorana Zero Modes in Acoustic Metamaterials	JACKSON	SAUNDERS
166117	R15	Axing Social Impact and Carbon Footprint: Holistic Product Design Towards Sustainability Enabled by Simulation	Hesam	Moghaddam
166125	R16	Miniature Multi-Phase Electrical Generator for Energy Harvesting	Edwar	Romero-Ramirez
166131	R17	Computational Modeling of Grain Structures With Boundary Serrations	James	Burns
166298	R18	Energy Harvesting Based on Aluminum-Ecoflex 00-30/zntio3 /Mwcnt Triboelectric Nanogenerator	Md Arafat	Hossain
166380	R19	Investigation into the reliability of Real-Time Defect Detection in DED Process Using CNN-Based Deep Learning with Infrared Image	Ho-Jin	Lee
166424	R20	Surrogate Modeling for Rapid Thermal Analysis of ISS Payload	Jayson	Johnson
166522	R21	Effect of Nanopatterning on Thermal Conductivity of Single-Wall Carbon Nanotube Thin Films	Saeed	Siahtiri
166566	R22	Data-Driven Modeling of Collision Dynamics in Trapezoidal Electrode Mems Energy Harvesters	Matthew	Galarza
166626	R23	Physics Based Gas Turbine Model for the Analysis of Low Carbon Fuels Aboard Ships	Tyler	Wyka
166639	R24	Dependence of the Coefficient of Restitution on the Shape of an Impacting Body	Sukanta	Patra
166685	R25	Prolonged Exposure to Microgravity Increases Susceptibility to Traumatic Brain Injury	Yooyeon	Jung
166712	R26	Multifunctional Support Anchoring System for Automated Soil Sampling System	Jun Han	Bae
166740	R27	Modulating Optical Properties of 2d Transition Metal Dichalcogenides via Photochromic Molecules: A Computational Approach	John	Audi
166825	R28	3d-Printed Adjustable Angle Mount for Wind Tunnel Testing	Bruce	Jo
166828	R29	Experimental and Numerical Investigation of a Latent Heat Thermal Energy Storage (Lhtes) System	Mohammad	Shahabadifarahani
167145	R30	Delineating the Effects of Various Internal and External Paraments of Homogeneous and Composite Nonlinear Viscoelastic Materials Using Experimental	Arka	Chattopadhyay
167194	R31	Long-Term Radiation Durability of High-Strength Polyethylene for Space Missions	Seunghyun	Moon
167243	R32	Scalable Double-Etching Fabrication of Flexible Glassy Carbon Microsensors for Neurotransmitter Detection	Elisa	Castagnola
167269	R33	Strategies in Educating Undergraduate Students in Theory and Practice of Additive Manufacturing	Devdas	Shetty
167271	R34	Large Scale 3d Printing of 316l Stainless Steel via Robotic Wire Arc Additive Manufacturing and Comsol Multiphysics Simulation	Sen	Liu
167667	R35	"Energy and Exergy Experimental Analysis for Innovative Finned Plate Solar Air Heater"	Abdullah	Alrashidi
167852	R36	Characterization of Snow Accretion on Superhydrophobic Surfaces Using High-Speed Imaging for Ice Prevention Strategies	Ehsan	Khoshbakhtnejad
170586	R37	Ultrasonic Simulation and Experimental Total Focusing Method Inspection Method for Precision Crack Characterization in Aws D 1.5- Compliant Weldme	Chowdhury	Irtiza
171240	R38	User-Tuned Mechanical Intelligence: A Passive Ankle-Foot Orthosis With Interchangeable Reconfigurable Compliant Joints	Vanessa	Young
171322	R39	An Investigation of Lift Boosting Structure Design on Unmanned Aerial Vehicles’ Thrust Production	Trevor	Dady
171996	R40	Vascular Bioreactor for Endothelial Mechanobiology and Cardiovascular Dynamics	Manuel	Salinas
172100	R41	Machine Learning-Augmented Finite Volume Modeling and Inverse Optimization of Velocity and Pressure Distribution of Bentonite Slurry in Slurry Shield	Somnath	Somadder
172183	R42	Regimes of a Decelerating Wall-Bounded Multiphase Jet Inside Ejectors	Sreetam	Bhaduri
172283	R43	Evaluating Film Cooling Effectiveness With Vortex Generators	ilyes	belouddane
172425	R44	Factorial Analysis of Small Air Blower Acoustics and Vibration Spectra at Varying Temperatures and Air Flow Velocities	Trisha	Campanaro

172495	R45	Impact of Hemoglobin-Ion Interaction on the Electrical Properties of Hemoglobin Solutions	Adeleh	Kazemi Alamouti
172551	R46	Parametric Optimization and Comparative Performance Analysis of Shell-and-Tube and Tubular Heat Exchangers for Enhanced Thermal Effectiveness	Yogendra	Panta
172564	R47	Thermal Behavior of Magnetic Moments in Anisotropic Magnetic Particles: Landau-Lifshitz-Gilbert Simulations	Kazuya	Okada
172707	R48	Development of a Zero-Dimensional Numerical Model for a Porous Radiant Burner	Umar Ikhwan	Mohd Rozaiddin
172794	R49	A Review of Safety Standards for Propulsion Batteries in Battery Electric Vehicles	Kelly	Richardson
172819	R50	Establishment of Crystalline Structures in Monodispersed Foam Utilizing Acoustic Manipulation	Blake	Acree
172821	R51	Transition Control in Subcritical Channel Flow via External Forces	Cesar	Leos
172834	R52	Engineering Scalable Quantum Technologies Using Nanophotonic Synthetic Dimensions	Avik	Dutt
172858	R53	Compressive Response and Material Characterization of Chitin Biocomposite Foam: Structure-Properties Relationship	april	bonner
172897	R54	Pemphigus Antibodies Induce Keratinocyte Cell-Cell Junction Stiffening and Early Rupture Under Large Strain	Timothy	Goldsmith
172900	R55	A Dynamic Model for Activity Rhythms in Ant Colonies	Michael	Napoli
172902	R56	The Study of the Effect of Pre-Trained and Unbalanced Datasets for Brain Tumor Classification	Syed Azfar	Rahman
172920	R57	Perception of Social Robots: Storytelling for Public Library Patrons	Nicholas	Tessitore
172941	R58	Mechanical Testing and Analysis of Spoolable Pcl Microfibers	Mohammad	Hossan
172945	R59	Frequency-Tuned Drop Motion Control on Architected Phononic Substrates	Sergio	Britto
172983	R60	Infrastructure Integrity Assessment of Floating Cage Oyster Farms in the Northern Gulf of Mexico	Arash	Pashazadeh
172989	R61	Non-Destructive Characterization of Lithium-Ion Battery Health via Vibration Response Analysis and Principal Component Projection	Arefeh	Salimi Beni
173001	R62	Multiscale Characterization of Epsomite Powder-Bed Thermal-Convective Dehydration: Metamorphoses and Kinetics Modeling	Fan	Lu
173012	R63	Ai-Supported Multi-Objective Optimization of Microfluidic Channel Design for Saliva-Based Point-of-Care Diagnostic Devices	Yunjian	Qiu
173017	R64	Layerless 3d Printing of Metal and Multi-Metal Structures via Continuous Liquid Interface Production (Clip)	Dylan	Joralmon
173051	R65	Electrodeposition-Based Additive Manufacturing: Process Optimization for Sustainable and High-Resolution Metal Printing	ah Md Ashiquzzam	Nipu
173082	R66	Image Classification for Rotating Detonation Engine Wave Behavior: A Comparative Study of Advanced Models	Sophia	Georgieva
173099	R67	Effects of Mechanical Tension on Fibrin Network Structure and Enzymatic Degradation	Eva	Iungbliudt
173123	R68	Onset of Laminar-Turbulent Transition in Viscoelastic Channel Flow	Alexia	Martinez Ibarra
173178	R69	Rubbery Optoelectronics and Optoelectronic Biohybrid Ink for Cardiac Stimulation and Tissue Engineering	Zhoulyu	Rao
173207	R70	Tipping the Balance: A Dynamic Systems Approach for Post-Hazard Community Recovery	Ines	Figueira
173219	R71	Experimental Cluster Space Control of Four Unmanned Aerial Systems	Caleb	Sparks
173241	R72	Acoustic Characterization of L-Pbf Process Interruptions Using Rus and Ultrasonic Testing	Poojith	Chigurupati
173314	R73	A Protein Synthesis Platform for Biomanufacturing of Non-Natural Proteins	Kasra	Alizadeh
173315	R74	A Model-Based Approach for Computing Cardiac Deformation From Dense Mri With Minimal User Input	Uditha	Weerasinghage
173398	R75	Evaluation of Targeted Cooling Effects on Surface Integrity and Fatigue Performance of Additively Manufactured Alloys	Safia Alam	Sumaiya
173427	R76	Influence of Micro-Scale Recycled Plastic Texture and Size on the Rheological Performance of Ldpe-Modified Asphalt Binders	Abeeb	Oyelere
173470	R77	Detecting the Undetectable: Methods to Detect Bvid in Wind Turbine Blade Samples	Hannah	Jones
173474	R78	Finnet: A High-Fidelity, Multi-Scale and Light-Weight Deep Learning Neural Network for Predicting Phonon Energy and Thermal Distribution in Finfets Tra	Jasmine	Liang
173489	R79	Effects of Shot Peening and Laser Peening on the Microstructural, Mechanical, and Tribological Properties of Inconel 625 Superalloy	Md Shaheen	Mahmood
173519	R80	A Lightweight Tendon-Driven Upper Limb Exoskeleton for Daily Assistance in Stroke Rehabilitation	Connor	Talley
173547	R81	Hole Quality Improvement in Complex Cfrp Geometries via Robotic Posture Control	Hyung Wook	Park
173553	R82	Rail Guard Ai: A Hybrid Deep Learning Architecture for Real-Time Railway Defect Classification	Taha	HOUDA
173574	R83	Image-Processing-Informed 3d Finite Element Modeling to Characterize Aging-Induced Neurodegeneration and Atrophy in Brain White Matter	Assimina	Pelegri
173662	R84	Pressure-Enhanced Lattice Thermal Transport in Graphite: Insights From Deep Neural Network Molecular Dynamics	Haoran	Cui
173688	R85	Layer-Wise Phase Field Modeling : Revolutionizing Damage Prediction in Laminated Composite Structures	shubham	rai
173741	R86	Analyzing the Impact of Infill Percentage on Mechanical Properties of 3d Printed Dog Bone Samples Made From Pla and Petg	Mohammadhosein	Ghasemi Baboly
173822	R87	Molecular Dynamics Study of Self-Healing and Thermomechanical Response in Epoxy-Amine Vitrimer Networks	Praneel	Singla
173831	R88	Simulation of Electrodeposition With a Peridynamic Model	Diego	Salazar
173893	R89	Scalable Manufacturing of Biodegradable Capacitors and Resistors for Sustainable Electronics	Jacob	Farrell
173900	R90	Ai-Supported Optimization and Validation of Upper Limb Exoskeleton Design for Pediatric Rehabilitation	Yunjian	Qiu
173937	R91	Multiphysics Simulation of Scg Signals Using a Digital Twin of the Human Heart: Toward Virtual Diagnostics of Cardiovascular Diseases	Mohammadali	Monfared
173959	R92	Measurement of Pressure Losses in Elbows of Cpvc, Pex, and Copper	Lingnan	Lin

173961	R93	Ionic Transport Properties and Phase Stability of Solid Electrolyte Material Li7la3zr2o12: A Deep-Neural-Network Molecular Dynamics Investigation	Chunxu	Wang
173979	R94	Laser Technology for Sustainable Industrial Drying in Energy Intensive Industry Sectors	Itamar	Harris
173996	R95	Development and Evaluation of Novel Eutectic Pcms for Thermal Management Applications	Muhammad	Ghufran
174253	R96	Investigating the Time-Dependent Interaction Between Mil-Lx Compliant Element and Tibial Loading Under Vertical Impact	Thanyani Abson	pandelani
174338	R97	Physicochemical, Thermal, and Tribological Properties of Pyrolysis Oil Derived From Plastic Waste	Abdullah	Alazemi