

Poster #	Last Name	First Name	Judging Affiliation	Title of Poster:	Scheduled Time
1	Bako	Christian	CEE	Biodegradation of PCBs by Burkholderia xenovorans LB400	11:00-12:00
2	Bittle	Maeve	CEE	Evidence of Construction and Environmental Sources in Air of Rrban Homes Near PCB-contaminated Waterway Pre- and Post-Dredging	10:00-11:00
3	Brouman	Max	CEE	An Economic Analysis of a Multijurisdictional Approach to Flood Prevention	9:00-10:00
4	Ewald	Jessica	CEE	Growth of Dehalococcoides spp. And Increased Abundance of Reductive Dehalogenase Genes in Anaerobic PCB-contaminated Sediment Microcosms	2:00-3:00
5	Jahnke	Jacob	CEE	PCB Emissions from Paint Colorants	2:00-3:00
6	Lindmark	Megan	CEE	Investigating the Potential for Disinfection By-Product Formation in Drinking Water Systems Using a Unique Chlorine-Based Disinfection Agent, Trichloroisocyanuric Acid	11:00-12:00
7	Matzen	Kalley	CEE	Constructing and Evaluating a Semi-Autonomous Inline Chlorination System for Disinfection in Rural Resource-Constrained Communities	9:00-10:00
8	Molitor	Hannah	CEE	Maximum CO2 Utilization by Nutritious Microalgae	10:00-11:00
9	Zhang	Duo	CEE	Development of a Broadly Applicable Method for Identification and Analysis of Polychlorinated Biphenyl Sulfates in Human Serum	2:00-3:00
10	Allen	Brittany	BME	Generation and Immortalization of Retinal Progenitor Cells	12:00-1:00
11	Burand	Anthony	BME	3D Aggregation of Human MSCs Alters their Immunomodulatory Potency	10:00-11:00
12	Dobroski	Hannah	BME	Umbilical Cord Mesenchymal Stromal Cells Show Enhanced Resiliency to Palmitate Exposure Under Xenogeneic-free Culture Conditions	12:00-1:00
13	Haugen	Allie	BME	Optimizing the Quantification of Mouse Brain Proteins Using the Western Blot Technique and Stain-Free Total-Protein Normalization	12:00-1:00
15	Moghram	Waddah	BME	Integration of Magnetic Tweezers and Deformation Tracking/Traction Force Microscopy for the Exploration of Keratinocyte Mechanobiology	9:00-10:00
16	Mueller	Marissa	BME	Comparing Actimetry Methods of Quantifying Physical Activity in ActiGraph	2:00-3:00
17	Remy	Matthew	BME	3D-Printed Bio-Scaffolds for Bone Regeneration	1:00-2:00
18	Rowe	Allison	BME	Optimization of Fluid Shear Parameters for Emerging Cancer Diagnostic Technology	1:00-2:00
19	Sarathy	Srivats	BME	Electrochemical Approach to Cardiac Output Monitoring	2:00-3:00
20	Schrodt	Michael	BME	Apoptotic Mesenchymal Stem Cells Polarize Macrophage Subsets to an Immunosuppressive State	2:00-3:00

21	Shrestha	Arwin	BME	Two Photon Polymerization of Poly(caprolactone) Scaffolds for Retinal Tissue Engineering	1:00-2:00
22	Stewart	Carley	BME	Modeling Mucociliary Transport in Porcine Airways	3:00-4:00
23	Thompson	Jacob	BME	Fabrication Techniques of Chitosan Hydrogels for Retinal Tissue Engineering	9:00-10:00
24	Uthoff	Johanna	BME	How You Slice It Matters: Calibrating Lung Cancer Risk Models for Better Decision Making After Pulmonary Nodule Detection	3:00-4:00
25	Wendland	Rion	BME	Design and Testing of a CRISPR-Cas9 Construct to Tag Endogenous CLN3	10:00-11:00
26	Aljaafari	Haydar	CBE	Mitigation of Bacterial Biofilms Using Combined Application of Antibiotics and Thermal Shock	1:00-2:00
27	Alsaedi	Abdulattar Hashim Ghanim	CBE	Hierarchical Structures for Supercapacitor Application	1:00-2:00
28	Buck	Rachel	CBE	Fabricating Conductive Polymer Systems with Graphene Oxide for Medical and Energy Applications	12:00-1:00
29	Fang	Huayang	CBE	Directed network Structure Through Radical Controlled Photopolymerization	10:00-11:00
30	Hasa	Erion	CBE	Kinetically-Controlled Photo-Induced Phase Separation for Hybrid Radical/Cationic Systems	2:00-3:00
31	Leyden	Michael	CBE	Toxicity of Citrate-Stabilized Gold Nanoparticles on Lung Epithelial Cells	11:00-12:00
32	McKee	Austin	CBE	Three-Phase Electrochemistry on High-Entropy, Chemically-Treated Silver Surfaces	12:00-1:00
33	McKee	Austin	CBE	Introduction to Plasmonically-Mediated Electrochemistry	1:00-2:00
34	Parnian	Parham	CBE	Thermal Shock Dynamics on Biofilm Viability	12:00-1:00
35	Rassoolkhani	Alan	CBE	Photoelectrochemical Systems for the Production of Value-Added Products	1:00-2:00
36	Roozitalab	Behrooz	CBE	Evaluating WRF-Chem Model Simulated Cloud Properties over Lake Michigan	11:00-12:00
37	Thiher	Nicole	CBE	Predicting Dose Rate Effects of EB-Initiated Polymers Using Monomer Chemistry	10:00-11:00
40	Ayers	Jessica	IIHR	The Effects of Climate and Land Use on Baseflow in the U.S. Midwest	11:00-12:00
41	Bappy	Mehedi Hasan	IIHR	Probabilistic Modeling of Cavitation Inception in the Subgrid Computational Cell	2:00-3:00
42	Di Napoli	Isaac	IIHR	Design and Validation of a Robust 3-D Shape Sensing System	9:00-10:00
43	Griffith	Nichole	IIHR	SaferTrek: System Development and Deployment for Farm Vehicle Road Safety Study	9:00-10:00
45	Huo	Bingchun	IIHR	Automated Detection of Bats in IR Video Recorded at Wind Turbines	9:00-10:00
46	Kim	Dongyoung	IIHR	Assessment of Boundary Layer Transition Models for Naval Hydrodynamics Applications	10:00-11:00

47	Krebill	Austin	IIHR	Ship Airwake Flow Field and Spectral characteristics with Wave-induced Motions	1:00-2:00
48	Li	Yanlin	IIHR	Hydroxylated Metabolites of 4'-Methoxy-4-Monochlorobiphenyl in Whole Poplar Plants	1:00-2:00
49	Mosqueda	Kyle	IIHR	Experimental and Computational Comparison of a Bluff and Streamlined Submersible Object	1:00-2:00
50	Prakash	Shivendra	IIHR	Experimental Investigation of Aerodynamic Characteristics of Bat Carcasses.	10:00-11:00
51	Saktrakulkla	Panithi	IIHR	A Statistical Model for Predicting the Relative Responses of Unidentified OH-PCBs	11:00-12:00
52	Teng	Jian	IIHR	Developing Technologies for Detecting and Understanding Bats Emergence within a Wind Farm	2:00-3:00
53	Wang	Lianzhou	IIHR	Experiments and CFD for DARPA Suboff Appended with Propeller E1658 Operating Near the Surface	10:00-11:00
54	Wu	David	IIHR	Bat Recording Interface for Analyzing Wind Turbine Interaction	3:00-4:00
55	Yildirim	Enes	IIHR	Web-Based Framework for Flood Mitigation Practices	11:00-12:00
56	Yuan	Ben	IIHR	Modeling Bubble Entrainment and Transport using Hybrid RANS/LES Methods	10:00-11:00
57	Duan	Wenqi	ECE	High Sensitivity Silicon Nanowire Biosensor for Estrogen Detection	11:00-12:00
58	Finley	Matthew G.	ECE	Holo Reality: Live 3D Video Streaming for Mobile Devices and Augmented Reality	3:00-4:00
59	Gao	Bingtao	ECE	Localized Surface Plasmonic Resonance of Silver Nanoparticles on Silicon Solar Cells	2:00-3:00
60	Guha	Indranil	ECE	A New Algorithm for Local Blur-Scale Computation and Edge Detection	10:00-11:00
61	Larson	Eric	ECE	Experimental Analysis of Cancerous and Healthy Cell Lines Utilizing Mid-infrared Interband Cascade Lasers	12:00-1:00
62	McCarthy	Ryan	ECE	Support-Constrained Mixed Norm Optimization Techniques for Interpreting Multipath Activity in Shallow Water Acoustic Channels	1:00-2:00
63	McCarthy	Ryan	ECE	Interpreting Different Features of Shallow Water Acoustic Channels Using Braid Manifolds	12:00-1:00
64	Mishra	Kumar Digvijay	ECE	Electromagnetic Simulation of Biphasic Pulse Excitation for Transcranial Magnetic Stimulation	3:00-4:00
65	Nadeem	Syed Ahmed	ECE	A fully Automated Airway Tree Segmentation Algorithm Using Deep Learning and Iterative Topological Leakage Correction Approaches	9:00-10:00
66	Powers	Alexander	ECE	Data Augmentation for Deep Learning Image Segmentation	9:00-10:00
67	Salino-Hugg	Michael	ECE	Adaptive Multi-coil Resonant Wireless Power Transfer Systems using Receiver Feedback	1:00-2:00
68	Sermet	Yusuf	ECE	Virtual Stage Sensors: Alternative Approaches for Smartphone-Based Crowdsourced Water Level Measurements	12:00-1:00

69	Shay	Keegan	ECE	Evaluating the Use of Neighborhood Influenced Predictions for Query-Dependent Survival Prognosis Prediction in Oropharyngeal Cancer Patients	11:00-12:00
71	Walhof	Alex	ECE	InAs and InAs/GaSb Core-Shell Nanowires for Tunable Infrared Optics	1:00-2:00
72	Yi	Jirong	ECE	An Information-Theoretic Explanation for the Adversarial Fragility of AI Classifiers	10:00-11:00
73	Becklinger	Nicole	ISE	Development of an Online Self-Report System for Agricultural Injuries and Near-Misses	9:00-10:00
74	Chen	Guanchu	ME	Hierarchical FE-DE Multiscale Modeling Approach for Off-Road Vehicle Mobility Prediction	12:00-1:00
75	Hu	Jianwei	ME	Characterization of Surface Nanostructure on Metal Alloy for Superhydrophobicity Using Image Processing	9:00-10:00
76	Kim	Yagin	ME	CFD Simulation of Submarine Operating Near Free Surface	11:00-12:00
77	Kotak	Parth	ME	Mechanical Characterization of Carbon Fiber Artificial Muscles for the Design of Orthotic Devices	11:00-12:00
78	Samanta	Avik	ME	Co-existence of Superhydrophilicity and Superoleophobicity on Laser Textured Metal Surface by Controlling Surface Chemistry	11:00-12:00
79	Wabick	Kevin	ME	Vorticity Transport and the Role of Spanwise Convective Flux on a Rolling Wing	12:00-1:00
80	Wang	Huixin	ME	Experimental Investigation of Cutting Force and Temperature during Shear Cutting of Sheet Metal using a Novel Bionic Cutting Tool	2:00-3:00
81	Wang	Qinghua	ME	A Novel Laser-based Metasurface Fabrication Method for Tunable THz Bandpass Optics	9:00-10:00
82	You	Haoxuan	ME	Innovative Laser Surface Patterning for Fabrication of Flexible and Transparent Conducting Heaters	2:00-3:00
83	Beaver	Greg	Creative Kick-Start	Car Turbo Jet Engine	12:00-1:00
84	Chelsvig	Libby	Creative Kick-Start	Body Betty	12:00-1:00
85	Hoffman	Adam	Creative Kick-Start	Asonus Tech	10:00-11:00
86	Laux	Olivia	Creative Kick-Start	Air Chair	3:00-4:00
87	Mathews	Ashley	Creative Kick-Start	The Kineta Safety Device	10:00-11:00
88	Slater	Ethan	Creative Kick-Start	Root Canal Pal	3:00-4:00
89	Waite	Jayme	Creative Kick-Start	Optimus Prone: Improved Shoulder Rehabilitation	3:00-4:00
90	Blaylock	Casey	Engineering Honors	Correcting Flat Feet by Reconstructing the Spring Ligament Using Fiber	3:00-4:00
91	Chen	Jingwen	Engineering Honors	LCA analysis of Ultra HVDC Charging and Detachable Battery Packs	12:00-1:00

92	Coghlan	Jesslyn	Engineering Honors	TRACERS Spacecraft: ACE Structural Analysis	3:00-4:00
93	Czarnecki	Christine	Engineering Honors	Development and Analysis of Viable Impaction Method of Dry Powder Antibiotic Aerosols on Pseudomonas aeruginosa Bacteria	12:00-1:00
94	Golec	John	Engineering Honors	Quantifying and Validating Computer Vision Algorithms for Ergonomic Analysis	10:00-11:00
95	Jin	Qitong	Engineering Honors	Terahertz Rabi Oscillations in 2D Graphene-like Materials	12:00-1:00
96	Kapo	Mirela	Engineering Honors	Autonomous Detection of Martian Ion Trails Using Geometric Computational Techniques	11:00-12:00
97	Moore	Emily	Engineering Honors	Microalgae-Yeast Co-Cultures to Improve Separability of Microalgae from Solution	3:00-4:00
98	O'Rourke	Katie	Engineering Honors	Photopolymerization Induced Phase Separation	10:00-11:00
98.6	Ho	Michael	Engineering Honors	3D joint space width measures from weight bearing CT detect early joint changes	2:00-3:00
99	Vaske	Allison	Engineering Honors	Role of CDK8 Activity in Cardiovascular Disease	11:00-12:00
100	Fei	Fan	CCAD (NADS)	Additive Manufacturing of Ceramics Based on Hydrothermal-assisted Powder Bed Fusion	11:00-12:00
101	Cai	Mingyu	CCAD (NADS)	Linear Temporal Logic Path Planning for Mobile Robot	11:00-12:00
102	Wang	Wenbo	CCAD (NADS)	Multi-scale-material 3D Printing of Biodegradable Microneedles as Drug Delivery Devices	11:00-12:00
103	Brown	Bartley	CBCB	A Pipeline for RNAseq-Based Differential Expression Analysis of Neuroendocrine Tumors	2:00-3:00
104	Corrigan	Rae	CBCB	Comparative Analysis of Computational Folding Methods for Nucleic Acids in Fixed Charge and Polarizable Force Fields	2:00-3:00
105	Nwakama	Chibuzo	CBCB	A Mobile App to Collect Expert Inherited Deafness Diagnosis Data to Support Personalized Genomic Medicine	9:00-10:00
106	Rendleman	Michael	CBCB	Machine Learning with the TCGA-HNSC Dataset: Improving Usability by Addressing Inconsistency, Sparsity, and High-Dimensionality	9:00-10:00
107	Guo	Zhihui	IIBI	Volumetric Quantification of Calf Muscle Shape and Morphology from 3D MR Images: Fully Automated Deep LOGISMOS Approach	11:00-12:00
108	Pan	Amanda	IIBI	Current and Varifold-Based Diffeomorphic Registration of Pulmonary CT	1:00-2:00
109	Shao	Wei	IIBI	Geodesic Regression for Artifact Correction in 4DCT	1:00-2:00
110	Uthoff	Johanna	IIBI	Clustering the Risk: Quantitative Imaging Features of Chronic Obstructive Pulmonary Disease Associated with Lung Cancer	9:00-10:00
111	Wilhelm	Patrick	IIBI	A Deep Learning Approach for Detecting Dysphagia in Video Fluoroscopic Swallowing Exams	11:00-12:00
112	Xiong	Xiaofan	IIBI	Volumetric Segmentation of PET-CT Scans using Deep Convolutional Neural Networks to Facilitate Radiation Treatment	9:00-10:00

113	Christiansen	Megan	CGRER	Size-resolved Aerosol Measurements During the Lake Michigan Ozone Study (LMOS 2017)	10:00-11:00
114	Doak	Austin	CGRER	Local Source Characterization using Positive Matrix Factorization	10:00-11:00
115	Tang	Beiming	CGRER	Seasonal Variations of South Korean NO ₂ from the TROPOMI Satellite	10:00-11:00
116	A'Hearn	Joe	CBE:5405	Environmental Impact Review of Dairy, Soy, and Almond Milks	9:00-10:00
117	Canby	Benjamin	CBE:5405	Life Cycle Analysis of a Styrene Production Process	10:00-11:00
118	Contreras	Marisol	CBE:5405	End-of-Life of Photovoltaic Solar Cells: An Environmental Assessment	9:00-10:00
119	Contreras	Marisol	CBE:5405	A Technoeconomic Analysis of Hydrogen Production using Seawater Brine from a Desalination Plant	10:00-11:00
120	Gavin	Noah	CBE:5405	Iowa City's EV Future	1:00-2:00
121	Jarvey	Nathan	CBE:5405	Fuel Cell vs. Electric Automobiles and Factors Impacting Market Size	2:00-3:00
122	Kaffka	Alexander	CBE:5405	Environmental Impact of Solar & Wind Energy	3:00-4:00
123	Keegan	Caleb	CBE:5405	Reduction of Iowa City's CO ₂ emissions through the use of electric vehicles	3:00-4:00
124	Kerr	Sydney	CBE:5405	Key Factors in Environmental Friendliness of Alcoholic Beverages	1:00-2:00
125	Koe	Yi Ching	CBE:5405	Life Cycle Analysis of Lead-Acid Batteries with a Focus on Recycling	1:00-2:00
126	Marks	Jonah	CBE:5405	Environmental Comparison of Disposal Methods for Standard Polyethylene and Biodegradable Plastic Bags	2:00-3:00
127	Nzau Tsasa	Eugene	CBE:5405	The Life Cycle Analysis of Consumer Product Waste Streams to Landfill vs. Incineration	2:00-3:00
128	Solsma	Jackson	CBE:5405	Envisioning a Biofuel Transportation Economy for Iowa	3:00-4:00
129	Wang	Jing	CBE:5405	Is Traveling by Air Greener than Traveling by Car?	3:00-4:00
130	Zepeda	Michael	CBE:5405	The GREET Model of a Li-Ion Battery	2:00-3:00