AME/FCAAP Research Experiences for Undergraduates
NSF REU, NSF ENBP-AE, NASA BP-AE, DOE HI-POWER

AME/FCAAP Research Experiences for Undergraduates

2024 REU Annual Symposium

Agenda

August 1 (Thursday):
8:45 am - 5:00 pm

Oral Presentation (hybrid)

Student Feedback Session

Advisory Council Forum

August 2: (Friday):
10 am - 1 pm

Poster Session (In-person)

Farewell Lunch

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Please join us in the REU Symposium, students will present their summer research and project-based learning outcomes.

Thursday, August 1, 8:45 am—3:30 pm
In-Person: AME 106
Virtual: https://fsu.zoom.us/j/95329269936

Friday, August 2, 10 a.m. to 11:30 a.m.
Poster Session: AME Lobby

Acknowledgement: REU program is supported by NASA MUREP INCLUDES, NSF REU, NSF INCLUDES, and DOE RENEW programs

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Annual Symposium Agenda
Thursday, August 1, 2024, 8:45 am – 5:30 pm (EST)
Virtual ZOOM Link: https://fsu.zoom.us/j/95329269936
Poster Session, Friday, August 2, 10 - 11:30 am (EST)

Thursday, Morning Agenda

Symposium Overview: 8:45 – 9:00 am

Oral Presentation (hybrid): 9:00 am – 12:30 pm

Lunch Break: 12:30 – 13:15 pm

Thursday, Afternoon Agenda

Oral Presentation: 13:15 pm – 15:30 pm

Feedback Session for BP-AE students (faculty and Advisory Council members) 16:00 – 16:45 pm (hybrid, room 106+Zoom)

Advisory Council and PIs Meeting: 16:45 – 17:30 pm (Zoom)

Friday Agenda

Poster Session: 10 – 11:30 am (AME Lobby)

Farewell Luncheon: 12 pm

Annual Symposium Oral Presentation Timetable

AME/FCAAP Annual Symposium Oral Presentation, Thursday, August 1, 2024

Students/Group	Topics	Time
Bryan Chavez-Kelly	Wall Vortex Signature Characterization	9:00 – 9:12
Madison Carter	Surface Mounted Micro-Riblets for Turbulence and Drag Reduction	9:12 – 9:24
Mikaya Parente	Aero-acoustic Properties of Free and Impinging Supersonic Jets	9:24 – 9:36
Luke Aagaard	Flow diagnostic techniques for a Transition Length Experiment in the PSWT	9:36 – 9:48
Camren Watkins	Particle Image Velocimetry on Cavity Flow	9:48 – 10:00
Break, 10:00 - 10:15		
Garrison Gay	Design Study on Non-Gear-Based Rotation Transmission Mechanisms for Skew Shafts	10:15 – 11:27
Matthew Luebke	ONR Deep Sea Robot	10:27 – 10:39
Sarah Nugyen	Modular Robotic Fin Design	10:39 – 10:51
Andria Joseph	Most Proximate Line Segment Calculation for Shape Based Remote Manipulation	10:51 – 11:03
Jacob Hernandez	Design Study on the Functionality of a Miniaturized Finger-Based Haptic Device Subsystem	11:03 – 11:15
Break, 11:15 - 11:30		
Asael Reyes	Actively Cooled Shielding Heat Transfer and Calorimetry of Supercritical Fluid Regime/ Electrolytic Decomposition	11:30 – 11:42
Valeria Jimenez	Electrical Conductivity Testing of ASCENT Green Propellent	11:42 – 11:54
Shahani Farmer	KSC Technical Instruction Record	11:54 – 12:06
Ameen Babbs	KSC Neutral Grounding Resistor Design Compared to Impedance Ground Systems Requirements of NEC Code	12:06 – 12:18
Aliya Hutley	Development of Noise Calculator to assess sound levels generated by pressure safety devices in Ground Based Systems	12:18 – 12:30
Lunch Break, 12:30 - 13:15 pm		

Laila Kaira	**Characterizing Mechanical and Tribological Properties of Coatings in Extreme Environments for Hydrogen Energy Applications**	**1:15 – 1:27**
Kari Johnson	**Experiments and Microscopy to Connect Composition, Structure, and Properties of Materials in Hydrogen Environments**	**1:27 – 1:39**
Mikayla Sharrieff	**Connecting Experiments with Models to Evaluate Fracture Toughness with Scratch-Based Methods**	**1:39 – 1:51**
Brianna Phillips	**Depositing and Characterizing Mechanical and Tribological Alloys in Extreme Environments for Hydrogen Energy Applications**	**1:51 – 2:03**
Connor Zakin	**Advancement of Tribometers for Aerospace Materials Testing**	**2:03 – 2:15**
Break, 2:15 - 3:30 pm		
Michael Henry	**Using Video Games to Study Motor Learning**	**2:30 – 2:42**
Wesley Jean-Pierre	**Vortex Dynamics of Compressible Pitching Airfoils**	**2:42 – 2:54**
Jake Burns	**Design and Construction of Active Flow Control System for Reinforcement Learning**	**2:54 – 3:06**
Vondarious Faulkner	**Enhancing Adaptive Structures: Integration and Augmentation of Intelligence**	**3:06 – 3:18**
Adrienne Boynes	**Mean and unsteady characteristics of axisymmetric shock/boundary layer interactions**	**3:18 – 3:30**