

**POWERING**  
the **BLUE ECONOMY™**

# Marine Energy Collegiate Competition

U.S. DEPARTMENT OF ENERGY

## **RUTGERS UNIVERSITY DOE MECC TEAM**

Paul Alves, Christopher Cafiero, Krista Chempiel, Kaetana Degiovanni, Rylie Gantz, Katherine Moreira, Parie Patel, and Zachary Soricelli

New Jersey Academic Alliance for Offshore Wind Energy Symposium  
January 12, 2024



# THE TEAM



**KATHERINE MOREIRA**  
Team Captain  
Electrical Engineering '24



**KRISTA CHEMPIEL**  
Secretary  
Civil Engineering '24



**KAETANA DEGIOVANNI**  
Engineering Lead  
Mechanical Engineering '24



**ZACHARY SORICELLI**  
Marine Science Lead  
Mechanical Engineering '25



**RYLIE GANTZ**  
Business & Marketing Lead  
Mechanical Engineering '25



**PAUL ALVES**  
Team Member  
Animal Science '24



**PARIE PATEL**  
Team Member  
Environmental Engineering '27



**CHRISTOPHER CAFIERO**  
Team Member  
Mechanical Engineering '25

# THE ADVISORS



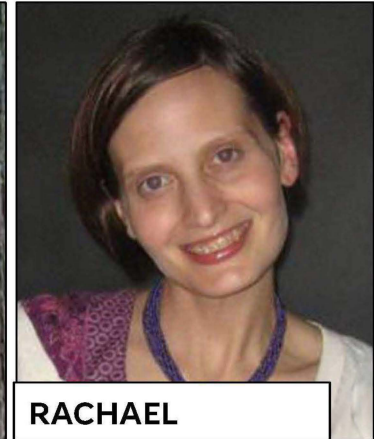
**ONUR BILGEN**



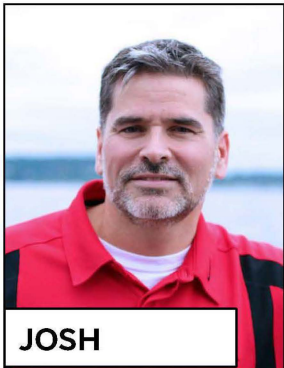
**ALEX LOPEZ**



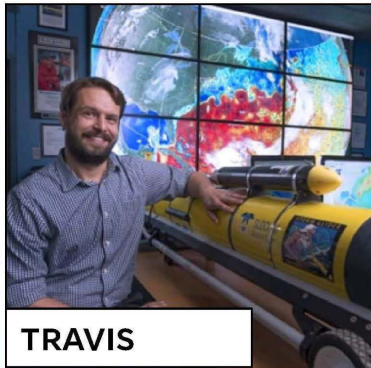
**HESAM  
SHARGHI**



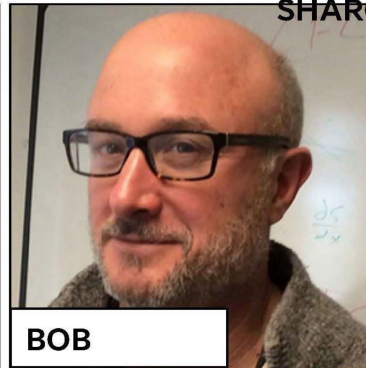
**RACHAEL  
SHWOM**



**JOSH  
KOHUT**



**TRAVIS  
MILES**



**BOB  
CHANT**



**KEVIN LYONS**



**GREGORY METHON**

# COMPETITION OVERVIEW

## Technical Design Challenge

- Develop a design of marine-energy powered device

## Build & Test Challenge

- Scale a prototype of concept and perform various laboratory tests

## Business Plan Challenge

- Identify a blue economy market and cater a device to align with market goals

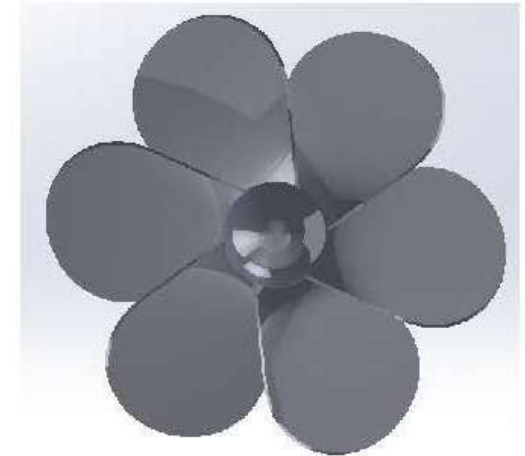
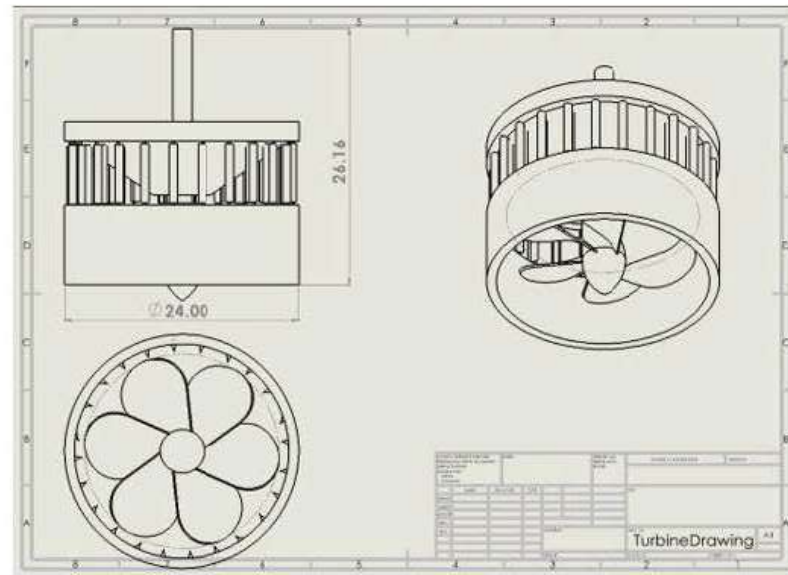
## Community Connections Challenge

- Create connections among the marine energy industry, students, and local communities

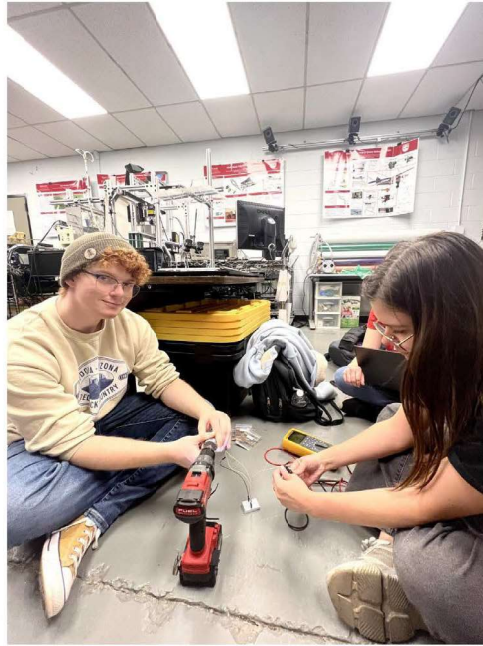
## Final Competition

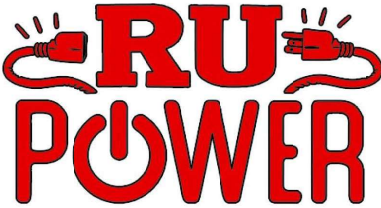


# TURBINE DESIGN



# IN THE LAB





# THANK YOU

Contact Us: [rupower@soe.rutgers.edu](mailto:rupower@soe.rutgers.edu)



Instagram:  
[rupower\\_](https://www.instagram.com/rupower_)



## SPECIAL THANK YOU TO:

