



# Spring 2021 Recognition of Graduates April 21, 2021



Dr. Robert A. Frederick, Jr. PRC Director Professor of Mechanical and Aerospace Engineering From Home, April 22, 2020







## Spring 2021 PRC Graduate Recognition Program

#### Welcome

Dr. Robert Frederick, PRC Director

#### **Recognition of Graduates**

Ph.D. Students

Master's Students

Undergraduate Students

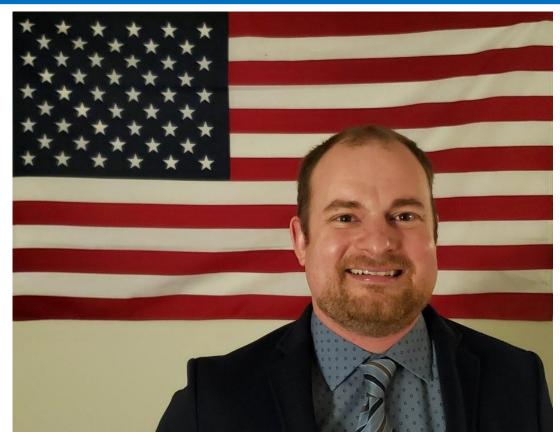
#### Virtual Reception

Introduction of Special Friends and Family Members



## **Doctoral Graduates**





Dr. Joseph Robert Kennedy Buckley La Crosse, WI

Advisor: Dr. George Nelson

Joe plans to work in the aerospace industry in applied propulsion research.



## **Doctoral Graduates**





Dr. Joseph Indeck

Advisor: Dr. Kavan Hazeli

Joseph plans to continue his research career after graduation.



## **Doctoral Graduates**





Dr. Althea Wilson

Advisor: Dr. Babak Shortban







## Prathmesh Anantwar Pune, India

Advisor: Dr. Kavan Hazeli

Prathmesh plans to pursue a career specializing in materials and manufacturing.







## William Hankins Lexington, AL

#### Advisor: Dr. Robert Frederick and Mentor Dr. David Lineberry

William plans to pursue a position in modeling and simulation related to propulsion.







#### Margarita Hockensmith Lexington, KY

Maggie pursued the Non-Thesis Option while working full-time for Dynamic Concepts, Inc. Her degree focused on propulsion, as she took Rocket Propulsion I, Rocket Propulsion II, Adv. Solid Rocket Propulsion, and Airbreathing Propulsion. She plans on working full-time in the future - hopefully for a small engineering company. I'd like to be given the opportunity to help NASA with the Space Launch







## **Erik Korzon**

**Plan II – Masters Degree** 

During his Master's Degree he worked at Blue Origin. His focused on fluids and advanced propulsion. He is currently finishing CFD II, intro to electric prop, and intro to nuclear prop.







## Ward Manneschmidt Knoxville, TN

Advisor: Dr. Phil Ligrani

Ward is planning to continue graduate studies at the University of Alabama in Huntsville in pursuit of a Ph.D. degree







## Evan Unruh Eagle Creek, OR

Advisor: Dr. Robert Frederick

Evan has started a position at Aerojet Rocketdyne.







#### Wesley Viall (Wesley, Strider, and Mary Kate) Madison, Alabama

Mentors: Dr. Robert Frederick, Dr. David Lineberry, and Dr. Keith Hollingsworth

Wesley plans to continue a PhD program at UAH while continuing to work for the government.







Melissa Costa Decatur, AL

Mentor: Dr. David Lineberry

Melissa plans on pursuing a position that will further refine the skills she gained at the PRC.







Matthew Cox Tullahoma, TN

Mentor: Dr. Phil Ligrani

Matthew is planning to continue graduate studies at the University of Alabama in Huntsville in pursuit of a Master of Science degree.







#### Kyle Goethals Tullahoma, TN

Mentor: Dr. Phil Ligrani

Kyle is planning to continue graduate studies at the University of Alabama in Huntsville in pursuit of a Master of Science degree.







#### Benjamin Knox Trussville, AL

Mentor: Dr. Phil Ligrani





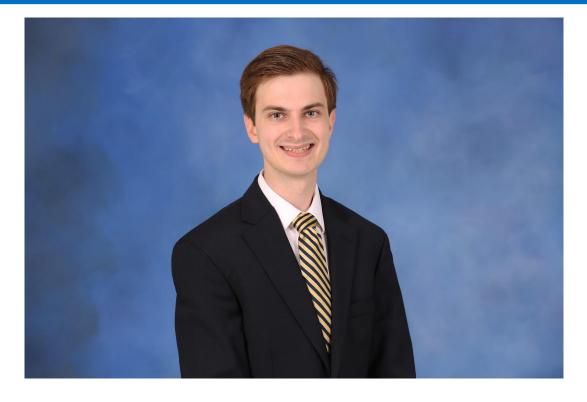


#### John McDonough Tuscaloosa, AL

Mentor: Dr. Phil Ligrani







## Christopher Smith Charlotte, NC

Mentor: Dr. Phil Ligrani







**Nathan Ulmer** 

Mentor: Dr. Gang Wang





# Michaela Hemming has her choice of three national graduate engineering scholarships

APR 12, 2021 | Jim Steele



Michaela Hemming has qualified for the U.S. Department of Defense (DoD) National Defense Science and Engineering Graduate (NDSEG) fellowship and DoD's Science, Mathematics and Research for Transformation (SMART) scholarship, as well as the NASA Space Technology Graduate Research Opportunities (NSTGRO).

"Michaela is currently working on her MSASE degree studying the effect of plasma discharges on detonation waves using a linear detonation tube experiment," Dr. Xu says. "She should be done this summer and will progress to her PhD project in rotating detonation engines. For her PhD, she will be studying the effect of injector designs on propellant mixing, atomization, detonation wave propagation and engine performance."





#### Thoughts for the Future

The UAH PRC stands poised to build upon a rich legacy of research advances in propulsion. One of our original strategies was to pursue funding support for projects that would support students. The faculty associated with the PRC have followed that vision and we are on the verge of assisting 300 graduates with advanced degrees on propulsion topics and total expenditures at \$60 million in our first 30 years. That averages to about \$200,000 of external investment per degree. Our strategy forward will focus on continuing a legacy of excellence in student education in the propulsion arena, equipping the future workforce for success in their careers. *- Dr. Robert Frederick, Director, UAH Propulsion Research Center* 

#### A few of our Values:

- Opportunity: "I have an Opportunity for you."
- Courage: Aerospace is not for the faint of heart."
- Relationships: "Keep your relationships more important than tasks or problems."







- PRC Staff and Associated Faculty
- MAE Department, Keith Hollingsworth
- UAH Leadership
- Parents, Grandparents of Graduates
- Brothers and Sisters of Graduates
- Spouses of Graduates
- Friends of Graduates
- Guests

## **Blast From The Past - December 2019**

