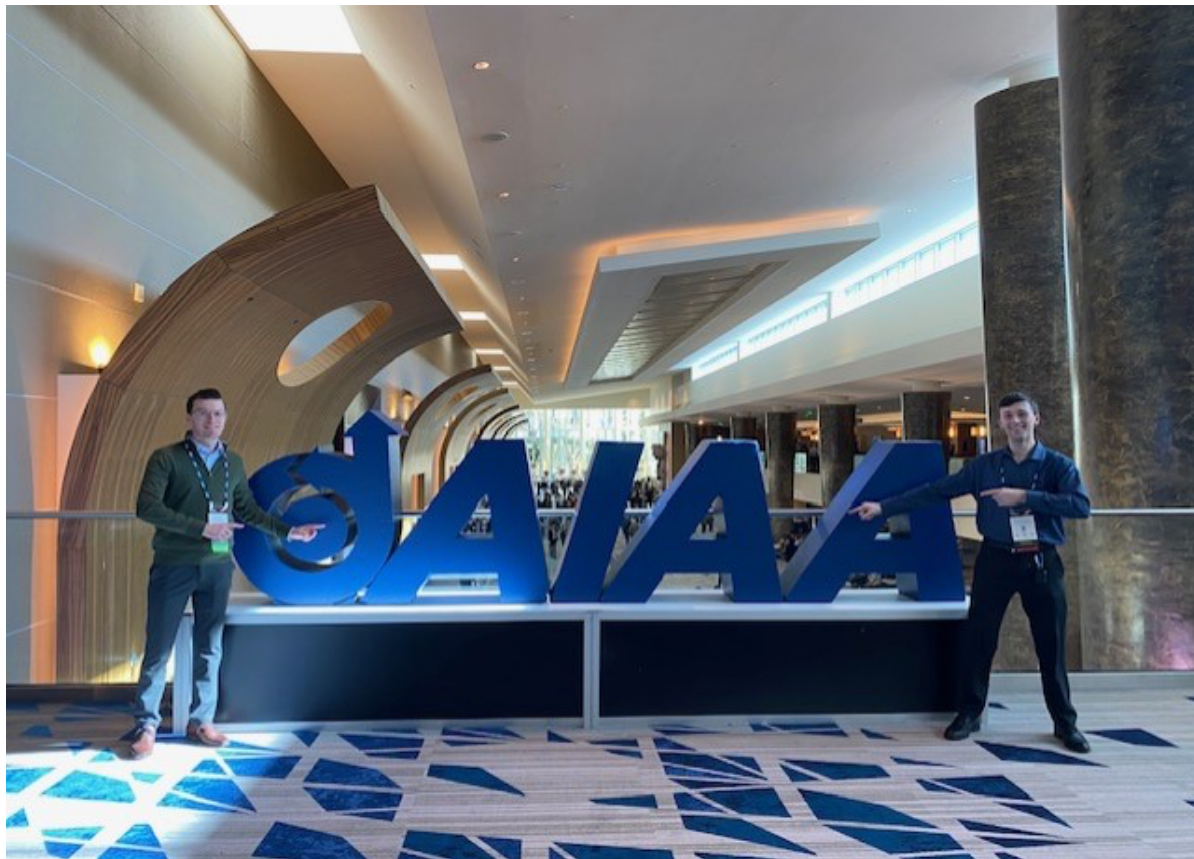


The Faculty-Student Research Project Presented at the 2024 AIAA Science and Technology International Forum

The advanced senior capstone design project performed within the ME498 in the 2022-23 academic year became the foundation for the high quality research paper presented at the top world aerospace 2023 conference - the American Institute of Aeronautics and Astronautics (AIAA) Science and Technology International Forum and Exposition held in Orlando, FL on January 8-12, 2023.

The CCSU Engineering Professor, Dr. Viatcheslav Naoumov and two former mechanical engineering students Andrew Santopietro and Nicholas Combs presented the co-authored research paper titled “Long-Term Research Project for Mechanical and Aerospace Students: New Accomplishments in the Study of Combustion of Bio-Derived Fuels in Hybrid Propellant Rocket Engine”.

The paper compiled novel experimental and theoretical results of the study of combustion of paraffin and bee’s wax within the longitudinal research of combustion of advanced paraffin-based fuels in the hybrid propellant rocket motors. The rare experiments with non-traditional fuels attracted serious attention of scholars and practitioners worldwide.



From left to right: Nicholas Combs and Andrew Santopietro.



From left to right: Dr. Viatcheslav Naumov, Nicholas Combs and Andrew Santopietro.