

SEMINAR SERIES

Supported by The Department of Biomechanics and
The Center for Research in Human Movement Variability (MOVCENTR)

OVERVIEW OF NASA'S IN-SPACE MANUFACTURING PROJECT INCLUDING OUR COLLABORATION WITH UNO ON THE DEVELOPMENT AND TESTING OF RECYCLABLE AND ANTIMICROBIAL FILAMENTS



Featuring Alexander Blanchard

National Aeronautics and Space Administration

Friday, Nov 19th | 12:00 - 1:15 pm | Via Zoom

<https://unomaha.zoom.us/j/92012305734>

PRESENTATION ABSTRACT

Continual resupply missions from Earth to the International Space Station (ISS) is unsustainable for long duration space missions. In-situ resource utilization has the potential to reduce mass, increase mission flexibility, provide a path towards sustainable manufacturing, and produce on-demand spares. NASA's In-Space Manufacturing project works with academic and commercial partners to develop and mature manufacturing and materials technologies that will provide on-demand manufacturing and recycling capabilities. Notably, work done at the University of Nebraska at Omaha regarding biocidal filament for 3D printing will be featured. Other work to be highlighted will include developing ISS demonstrations, recyclable materials for launch packaging, and in-process monitoring approaches for on-orbit quality control.

ABOUT MR. BLANCHARD

Mr. Blanchard received a bachelor's degree in Biology and Chemistry in 2013 from the University of Southern Maine and his master's in chemistry in 2017 from Florida State University. During his time at Florida State University, he was a principal investigator for a flight experiment to study the effects of inorganic precipitation structures colloquially known as 'chemical gardens' in microgravity. Afterwards, Mr. Blanchard joined the National Aeronautics and Space Administration at Marshall Space Flight Center in Huntsville Alabama in March of 2020. There he manages a portfolio of projects in his current role as technical lead for recycling and reuse.

more info at cobre.unomaha.edu

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