Paper ID: 25408 oral

## SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT (D3)

Novel Concepts and Technologies to Enable Future Building Blocks in Space Exploration and Development (3)

Author: Dr. Frank Little Texas A&M University, United States, f-little@tamu.edu

Dr. Richard Kurwitz Texas A&M University, United States, Kurwitz@tamu.edu

## LIQUID-VAPOR SEPARATION APPLICATIONS FOR LIFE SUPPORT

## Abstract

Liquid-vapor separation has application in many aspects of life support for human space missions. Examples include humidity control, separation of gases from chemical or biological reaction streams, and advanced two-phase thermal control systems. Liquid-vapor separation in life support systems is reviewed and the application of vortex separators to life support systems is examined.