

Technologies for Space Exploration

Session co-chairs: Roger Foerstner, Institute of Space Technology and Space Applications, and Shana Diez, Space Exploration Technologies

As long as people have been exploring space, there has been a strong link between technology development and applications on Earth. Many technologies developed for space applications have led to improvements in people's everyday lives. Things like microprocessors, LEDs, flame retardant clothing, and solar power all had major technological improvements that can be traced to space applications. As technology becomes a bigger part of our lives here on Earth, there are more and more places where technology crossovers exist between systems designed for use on Earth and use in space (or on a planet other than Earth).

Additionally, as more commercial companies enter into the Aerospace industry, space exploration and technology for space exploration is moving faster and in exciting directions. This is enabling private companies to work on technology development that would previously only have been possible with government funding.

This session will look at how the technologies that are being discussed in this symposium (artificial intelligence, optics, and electro-mobility) can be applied to exploring space, and how public and private organizations are all working to solve the challenges that exist in this industry. The goal of this session is for participants to walk away with a concept of how the technologies each participant is working on might be able to be applied to the exciting field of space exploration.