

IAF BUSINESSES AND INNOVATION SYMPOSIUM (E6)
Space Entrepreneurship and Investment: The Practitioners' Perspectives (1)

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SIGMA FIT TECH-WEAR FOR SUSTAINABLE COLONIES ON MARS

Abstract

There is a growing interest from international agencies to get back to the Moon and beyond not only to visit but to settle. With this new perspective, a new kind of astronaut garment is necessary to consider issues including reusability, comfort, and protection in space. Crew clothing can be divided into two categories; the space suit system for outside activities and the cabin clothes for work, exercise, sleep and special occasions such as public appearances. The current cabin clothes market needs huge innovation to ensure the wearer's safety and stylish appearance especially in deep space missions.

That's why Sigma Fit is a high-tech textile company that is at the forefront of designing textiles for future Martian generations. With deep space exploration becoming increasingly prevalent, we are focused on developing a variety of tech solutions for space travel, with a particular emphasis on protective clothing. Sigma Fit is creating textiles that are both stylish and afford the harsh environment of Mars such as temperature and radiation.

The high-tech textile is a multi-million dollar market and it has many applications in various sectors. Since 2017, Sigma-Fit has been expanding in many industries including sports, tactile, medical and space industries. This paper will discuss the existing space textile market, and analyse the industry gaps and the innovation needed in the space garments market. It will discuss Sigma-Fit breaking technologies that can be used in future Martian missions. In addition to other space applications such as space tourism and commercial spaceflight. Through a combination of cutting-edge materials technology and advanced manufacturing techniques, Sigma Fit is poised to revolutionize the way we think about clothing for space travel, and make it possible for humans to safely explore and colonize new worlds.