

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)
Life Support, habitats and EVA Systems (7)

Author: Ms. Bernarda Loretto Sanjines
Universidad Privada Boliviana (UPB), Bolivia

Dr. Jorge Soliz
Universidad Privada Boliviana (UPB), Bolivia

Mr. Alejandro Herrera
Bolivia

STRUCTURAL AND ARCHITECTURAL DESIGN OF THE PHAXSI LUNAR ANALOGUE HABITAT
IN SALAR DE UYUNI, OVER ENVIROMMENTS SIMILAR TO THE MOON**Abstract**

Being the Moon essential for space exploration, the natural satellite most studied by scientists, considered as a possible place to create human settlements due to its proximity to Earth, analog missions play a very important role for exploration outside of Earth to be successful. There are currently some habitats that offer the experience of an analog mission outside of Latin America, but they are very inaccessible for many People, added to distance and high cost, are one of the main barriers that prevent access to these opportunities. The Lunar Phaxsi research module, whose location will be in the Salar de Uyuni, a place where a terrain analysis was carried out, because this place has characteristics such as high radiation, extreme temperatures, a special altitude and pressure, which will make from this more real experience, Phaxsi seeks to make analog missions accessible to young people and space enthusiasts, thus expanding science and experience to Latin American and Bolivian youth. A project where a meticulous analysis of the characteristics of the area is carried out taking into account the following parameters: location, materials, construction techniques, supplies, self-sufficiency and habitability, based on the parameters set forth above, a proposed architectural design was developed, both in virtual reality simulators, whose structures are usable to make a safer, more sustainable and rigorous settlement