

MAREEKH DYNAMICS

Monthly Newsletter

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New Partnership Announcement

A Shared Vision for the Future

Mr. Fang, CEO of Beijing Jinhaiyang, shares our vision of CraterHab Technology as a transformative step toward human settlement on Mars and beyond. He believes that the journey to other worlds begins here on Earth, by addressing altitude sickness and human adaptation challenges in the Himalayas.

We extend our sincere gratitude to Mr. Fang and his team for their visionary leadership and for recognizing our technology as a gateway to humanity's future among the stars, through its applications here on Earth—in the high-altitude regions that bring us closest to space.



We are pleased to announce our agreement with Beijing Jinhaiyang International Culture and Tourism Co. Ltd., China.

This agreement enables sub-licensing and technology sharing of our patented Craterhab™ Technology by the Beijing group with other entities across China – spanning sectors from tourism and healthcare to space technology – for the development of pressurized habitats in high-altitude regions of Tibet. These habitats will promote high-altitude tourism and serve as training environments for future astronauts.

Journey from Vision to Agreement

The Beijing Jinhaiyang team first expressed strong interest in CraterHab Technology during our presentation at the 2023 Mars Society Convention at Arizona State University, Phoenix. After two years of productive

dialogue, we are proud to have reached a mutually beneficial agreement that ensures shared progress while protecting the interests of both parties within and beyond the People's Republic of China.

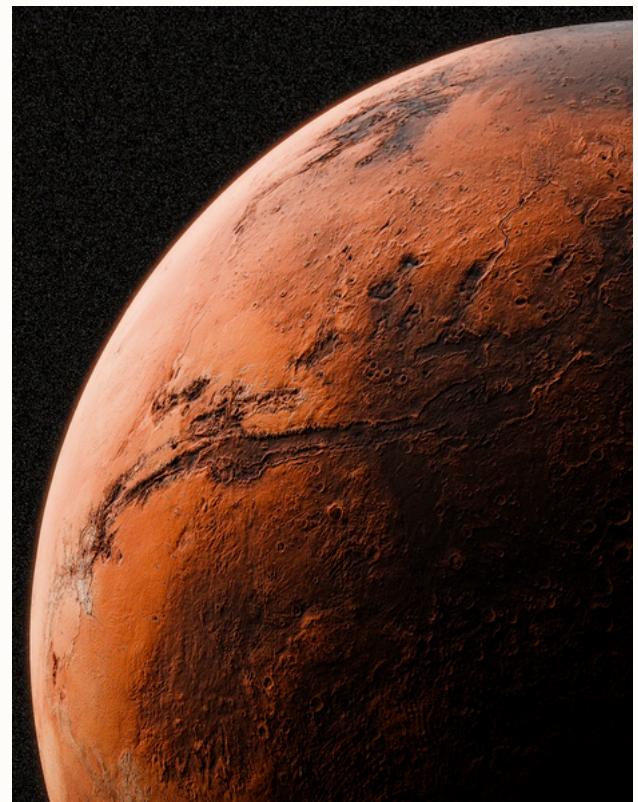


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2023 Mars Society Convention
Arizona State University
Oct 2023



From across continents, visionaries came together at the 2023 Mars Society Convention at Arizona State University, united by a shared dream of building humanity's future on Mars.

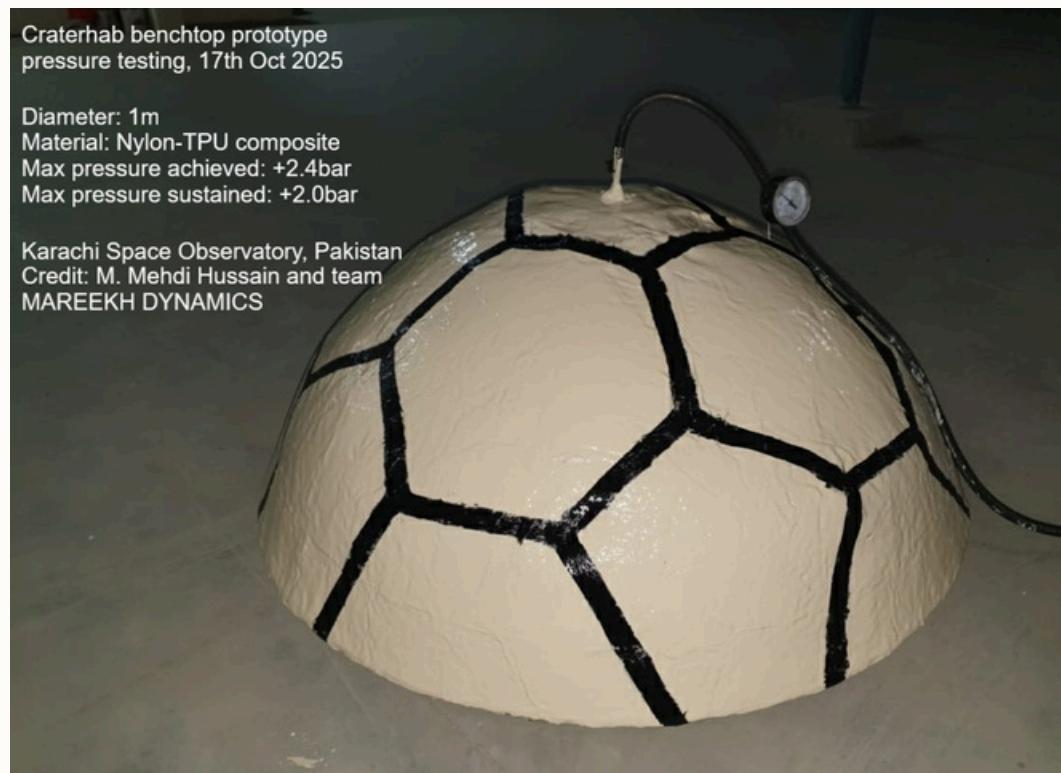


Interior of a CraterHab
pressurized habitat
Diameter: 100 - 150m
Location: Lhasa, Tibet



The CraterHab interior offers a glimpse of that future, lush courtyards, breathable air, and spaces designed for both science and serenity. Built for the Himalayas, inspired by Mars, this habitat redefines what it means to live beyond limits.

First proof of concept pressure testing of a Cratehab benchtop prototype at Karachi Space Observatory, Pakistan (17 Oct 2025). This is a major milestone in our technology development for Martian habitats and for high-altitude terrestrial environments. This is a 1m-diameter Nylon-TPU fabric composite dome, made up of adjoining composite polygons for optimal stress distribution on the structure.



Kevlar could be more ideal as the dome fabric, but due to the difficulty in procuring aramids in Pakistan, Nylon-TPU composite was chosen. The maximum inflation pressure achieved in this first testing was +2.4 bar, with a sustained pressure of +2.0 bar, which is at least 3x - 4x safety factor for the Martian habitats with +0.6 bar inflation pressure.

So, how much is +2.4 bar pressure? To put it into perspective, it is equivalent of the weight of 12 large SUVs over the dome surface area of 1.5 sqm trying to blow it apart from inside.

Big hand to Muhammad Mehdi Hussain (CTO, Mareekh Dynamics) and his team of engineers for this remarkable feat of engineering. This successful demonstration will pave our way for the construction of larger Cratehab MVPs such as the 10 m diameter prototype project in Australia, and our pilot project at high-altitude sites in Chile.