

Presentation title

Vertical Farming in Lunar Palace 1

Biography

Dr Hong Liu – Professor, School Biological Science and Medical Engineering, Beihang University, Beijing, China



Dr Liu Hong is Professor of School of Biological Science and Medical Engineering of Beihang University, Full member of International Academy of Astronautics, General Designer & principal scientist of Lunar Palace 1.

Since 2004, Professor Liu Hong has focused on the future space survival needs of human beings. She led the research team established the bioregenerative life support system (BLSS) after more than ten years of efforts. In 2013, she constructed Chinese first ground-based large-scale integrated experimental system of BLSS with a four-unit biological loop - the Lunar Palace 1. The longest and highest-closed experiment in the world - "Lunar Palace 365" was further completed in 2018. A picture of "Lunar Palace 365" experiment was elected as one of the best science images of 2017 by *Nature*. The research results will provide theoretical supports and basic techniques for the life support system during manned deep-space exploration missions such as the Moon/Mars base. In the past five years, Professor Liu Hong has published more than 50 papers in international journals in related disciplines as the correspondence author and has been awarded the national patents on 32 inventions as the first inventor.