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Is Space R&D Truly Fostering A Better World For Our Future? (2)

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INNOVATIONS IN BIO-SPACE ARCHITECTURE FOR CLIMATE CHANGE RELIEF

Abstract

Every government stresses the importance of using technologies to reduce carbon footprints. To make it facilitate we endeavor to create new tools which will be adapted to new changes in the environment, here on Earth and in Space. Thus, extreme microorganisms which can be used in new systems determine a new approach to developing the inner loop. The most important aspect of a closed-loop system will definitely be the purification of air, and water and producing additional oxygen.

Microalgae from volcanic grounds reflect the accuracy of early Earth's surroundings, including the greenhouse effect with high levels of CO2 at that time. It makes them one of the most resistant organisms in a changing world. Extreme microorganisms and substances which they produce are used successfully in the innovative design of closed-loop systems.The red microalgae are the link between primary cyanobacteria and the first primitive eukaryotic cells that were subjected to the harsh conditions that prevailed on Earth during the formation of its atmosphere. They occur in various extreme volcanic environments. The majority of the research on red microalgae is focused on their photosynthesis due to their occurrence in extreme environmental conditions. It is distinguished from other eukaryotic organisms with numerous adaptive features to the changing environmental conditions in which they occur.

Implementation of new technologies and convince to improvements for everyday life is not easy but pivotal in climate change actions. To create an innovative product, designed by an interdisciplinary team by a human-center design method that is easy to use, handy, maintenance-free, and designed neatly in an aesthetic, minimalistic way. Moreover allows for the production of oxygen and purifies the air inside interiors but is also a part of the interior design elements. That connects scientific innovations and an empathetic way of thinking based on human needs and perception. The closed-loop systems will definitely be a purification of air, water and producing additional oxygen. Climate change has influence on vast amounts of materials used in architecture and construction, with requisite improvements. Likewise, systems adapted to changeable conditions. Thus, extreme microorganisms which can be used in new systems determine a new approach to develop the inner loop. We propose innovation which is based on extreme microalgae and materials, both resistant to fast changes in different environments.