Silk Leaf Could Make Oxygen

Source: tealcheese.com

Published: July 29, 2014



In order for humans to live, they must have a steady supply of oxygen they can depend on. Plants make our life bearable. They inhale the carbon dioxide we breathe out and exhale oxygen. But in space there are no plants and growing them on distant planets or moons may be a difficult if not impossible. Now, instead of relying on plants that may not survive...as in space or even on the side of a skyscraper, they can use an artificial biological leaf designed by a London graduate student.

It was designed by Royal College of Art Julian Melchiorri, who was looking for a way to convert unbreathable carbon dioxide exhaled by astronauts into the stuff made for our lungs. Think of the Silk Leaf as a lightweight, low-power oxygen factory for space. Like a real plant, all this one needs is light and some water to function. Melchiorri says that his synthetic leaf has purpose on Earth, too. Large sheets of it could be used on buildings facades or as wallpaper to create more fresh air both indoors and out.

Click here to watch "The "first man-made biological leaf" could enable humans to colonise space": https://vimeo.com/101734446

The space agency is the designer's ideal target, in fact.

"Plants don't grow in zero gravity," Melchiorri explained. "NASA is researching different ways to produce oxygen for long-distance space journeys to let us live in space. This material could allow us to explore space much further than we can now."