

The Innovation & Collaboration Centre (ICC) is the University of South Australia's startup incubator.

The ICC engages with the community through the delivery of community events, workshops and programs which draw on the research and professional expertise of UniSA and our partners, to support the generation of new startups and the growth of existing companies.

The ICC is headquartered in Adelaide and has a regional centre in Whyalla, South Australia.

icc.unisa.edu.au

# VENTURE CATALYST SPACE

In 2021, SPACELIS was one of 10 startup companies chosen to participate in the third cohort of the country's first space incubator program delivered by the ICC, Venture Catalyst Space.

## FURTHER INFORMATION

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# Solar energy solutions for space manufacturing



#### BENEFITS

- Ultra-light weight solar cells for space applications
- Low-cost clean energy resources
- Flexible and wearable solar cell
  technologies
- Small- and large-scale applications.

# BACKGROUND

SPACELIS was formed in 2020 by Founder and CEO Guler Kocak aiming to design solar cells that can be used in future space missions such as Artemis and Lunar Ascent as these plastic solar cells will be fabricated to be highly stable in harsh environments having ultra-light weight architecture, radiation and heat resistance, and printability.

Organic photovoltaic (OPV) solar cells are the future energy resource due to their versatile state-of-the-art production methods, eco-friendliness and low fabrication cost. They can be used in a number of industries including renewable energy and space.





#### SPACELIS



**Guler Kocak** Founder & Chief Executive Officer



**Ismail Topcam** Web Developer and Software Engineer

#### TECHNOLOGY

Solar energy harvesting for space and in space are still in the very early stages for future Moon and Mars missions. Solar energy development and storage will be the most crucial technology to be developed for new operations and spacecrafts.

SPACELIS solar cells will be the world's first ultra lightweight and radiation stable plastic solar cells that can operate and be produced in space for future Moon and Mars missions, for the space tourism industry and innovations, and they can be modified easily to operate in other harsh environments on Earth, as well.

The global future technology development for space exploration and innovations will also be inspired by the space nano-solar cells, and many entrepreneurs will fund the ideas for the best future clean energy resources for space and Earth.

#### **POTENTIAL MARKETS**

Space manufacturing, renewable energy, naval and defence Industries.

## PARTNERING OPPORTUNITIES

SPACELIS aims to sell the space solar cells to space agencies globally and contribute to current and future space missions. Companies with space manufacturing and renewable energy technologies will be teamed up for the installation of light-weight solar cells into spacesuits and spacecrafts. Research institutions are to be partnered with during every step of the design, fabrication and testing of the solar devices.



spacelis.com



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