



## Attention all entrepreneurs, researchers, patent holders, and technology enthusiasts!

Do you have a business innovation idea for space exploration to Low-Earth Orbit and beyond?

Do you have an idea that can connect space with non-space areas with new approaches, solutions and services related to space exploration?

Then the [SPACE EXPLORATION MASTERS](#) is for you! Submit your idea by the 8<sup>th</sup> of September and be eligible for prizes worth over €500,000. These include access to leaders of various fields and the opportunity to collaborate with partners in the international space industry. Participants from all backgrounds are welcome to apply.

Winners will also have the opportunity to access some of ESA's finest facilities, including the upcoming ICE-CUBE initiative. With [ICE-CUBES](#), you can now apply to have your very own payload flown in microgravity. This is expected to have significant impact in the scientific community, due to its continuous interface, long lifetime, and easy access to the microgravity environment. Furthermore, selected ideas will be supported with the intention of creating new markets, and establishing leadership for our innovators.

This year AZO has launched the Space Exploration Masters on behalf of the European Space Agency (ESA) and in line with the goals of the ESA Space Exploration Strategy, in cooperation with strong world-class partners. The Space Exploration Masters is an international competition to identify best technology transfer business successes, as well as to empower and foster business innovation around space exploration activities in Low Earth Orbit (LEO), on Moon, Mars, or beyond – for the benefit of society and Earth. For more information, see [here](#).

### *New Business Innovation Challenges*

#### **1) Astrosat & Huntsville/Madison County Chamber**

Together, Astrosat and the Chamber are seeking proposals to use the Sierra Nevada Dream Chaser in a commercial, for-profit venture. Competitors should consider how existing infrastructure and expertise in Huntsville could be combined and Astrosat's "Space as a Service" approach used to enable and enhance proposed missions with relevance for joint European-US space exploration activities. The target groups for this competition are international start-ups, SMEs, entrepreneurs, researchers, engineers, designers, universities and student teams. The winner will receive €10,000, a VIP tour, and the chance to join an international business promotion team. For more information see [here](#).



## **2) Airbus Defence and Space & Merck KGaA, Darmstadt, Germany**

Sustainability in space is the key to survival in space and to realizing new business ideas. Spacefarers need to act responsibly to preserve the space environment for the future. As on Earth today, chemical and biological processes are the key to closing the cycles of materials. Plenty of joint challenges are out there: How, for example, will organic photovoltaic change energy supply on Earth and in space? When thinking about business models for future space sustainability, they can be relevant already today for Earth applications. Technologies developed to establish sustainable concepts in space will find their terrestrial applications and markets. Airbus Defence and Space and Merck KGaA, Darmstadt, Germany are looking for technological and business ideas from research spin-offs, startups, and young companies to close this loop, enabling a sustainable space environment and human life in space. The three (3) finalists will receive a unique support package tailored by Airbus Defence and Space and Merck KGaA, Darmstadt, Germany. For more information see [here](#).

## **3) the Grand Duchy of Luxembourg - Space Resources.lu**

The “Luxembourg Prize” aims to discover innovative ideas and business cases complementing the Grand Duchy’s growing portfolio of activities in space resources utilization. The challenge addresses enterprises, universities, non-university scientific institutions, startup-teams, consortia, and individuals of legal adult age from across the world willing to set-up a sustainable business and to create economic substance in Luxembourg by establishing and registering a Luxembourg-based company. The Grand Duchy will offer two awards. The first is designed to support a phase 0 / phase A study under the Luxembourg national space program which will be implemented through an ESA contract with the winner who will establish and register a Luxembourg-based company (maximum value of EUR 400,000). The other award will offer a crowdfunding campaign with SpaceStarters worth EUR 30,000 of services to prepare the campaign for launch. The Ministry of the Economy will support both award winners with incubating their companies in one of Luxembourg’s incubators. For more information see [here](#).

## **4) ESA Business Innovation Prize**

The European Space Agency (ESA) is looking for the best business innovation idea to advance the goals of the ESA Space Exploration Strategy. ESA is looking for an innovative and disruptive case with a tangible business performance in matching one or more of the UN Sustainable Development Goals. The proposed ideas and solutions would be related to areas such as health & exomedicine, biomedicine & biotechnology, nutrition and (space) farming, energy production and management, pharmaceuticals & chemistry, and colloidal engineering in areas



such as detergents, cosmetics, pharmaceuticals, food and coatings. ESA is looking for compelling ideas that could benefit from the International Commercial Experiment Cubes Service (ICE Cubes) infrastructure, which address an identified problem with a clear business case. The ICE Cubes is a facility to be installed on board of the European module, Columbus, of the International Space Station. This research and technology platform with experimental cubes establishes a frequent and fast-track service in low Earth orbit. ICE Cubes allows to make the unique environment of microgravity more accessible to all. The launch of the first five experimental cubes will take place in December 2017. For more information, see [here](#).

### *Best Business Case from Space Technology Transfer*

The Space Exploration Masters offers the Technology Transfer Success prize, including a 10,000 EUR Cash Prize, a business case promotion to an international audience & markets, and the winner will be on stage with ESA. This Award will identify the best Non-Space application from the ESA Technology portfolio for Space Exploration. Space technology requires high investment and certifications before flight and in efforts of maximizing these investments' benefits, ESA hopes to find new uses for these technologies to address European economic and societal challenges. Space exploration contains large potential for the creation of innovative applications, products and services, also benefitting Earth. With new topics and application areas arise countless possibilities for technology transfer and novel ideas for space-based technologies and their application in non-space industries, as well as new targets and opportunities for business. For more information, see [here](#).