

IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM (A2)
Microgravity Sciences on board ISS and beyond (6)

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THE 'RAKIA' MISSION -PRIVATE-PUBLIC PARTNERSHIPS IN PRIVATE HUMAN SPACEFLIGHT
SCIENTIFIC AND TECHNOLOGICAL MISSION

Abstract

At the end of March 2022, the Rakia mission on behalf the Ramon Foundation and the Israel Space Agency in the Ministry of Innovation Science and Technology is anticipated to leave for the International Space Station; an historic mission in which Israel will have a significant presence by the private astronaut, Eytan Stibbe, capable of contributing much to development of the space industry and to improving life on earth. The main purpose of the 'Rakia' mission is to advance space research by the access to the International Space Station, which includes a variety of infrastructures for conducting a wide range of experiments while expanding the Israel space ecosystem.

AX1, an enterprise initiated and led by the Axion Space company, the first mission to the International Space Station – subject to approval by NASA, is to be manned entirely by private astronauts. As such, it brings tidings of a revolution in manned flights to space, a revolution that will facilitate generating substantial progress in the field. This is an extraordinary opportunity for Israeli researchers and entrepreneurs to examine the feasibility and viability of initiatives. A national call for proposals was published by the Ramon Foundation, and the selection of the successful experiments and technology demonstrations has been completed by a nationally representative Scientific Committee comprise of experts in dedicated fields selected the potentially breakthrough research and technological demonstrations designated to be conducted in microgravity environment in diverse fields – astrophysics, earth observation, optics, communication, propulsion, agritech, biology, medical devices, and even clinical trials. These technologies and studies will contribute to a profound understanding of technological processes, advancing science and improving the quality of life on earth and beyond.

The 'rakia' mission serves as an example of extraordinary collaboration between diverse factors and entities, and it manifests values of science, innovation, and breakthrough. The mission is enabling Israeli entrepreneurs and researchers to advance innovative ideas and will provide a rare opportunity of lowering the barriers of implementing microgravity research by time and resources onboard, which promote their enterprises in a unique study environment, thereby contributing to international and Israeli research industries.