

33rd IAA SYMPOSIUM ON SPACE AND SOCIETY (E5)  
Space Architecture: Habitats, Habitability, and Bases (1)

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**Abstract**

My talk will share my dreams and passions for underwater and space research related to bio-inspired architecture and my conviction: "It is from the ocean and from space that the destiny of future civilizations will be born".

Space and ocean exploration are two great human adventures from which we are witnessing the emergence of a new civilization. They produce new scientific and technological knowledge and open new perspectives on earth with a direct and increasingly visible impact on our current lifestyles: communication, mobility, urbanism, architecture, thus shaping the future of our societies... My bio-inspired architecture work led for example to an underwater village off the Virgin Islands for the training of astronauts under the sea in order to study the similarities of life in extreme space and ocean environments. SeaOrbiter is my ultimate project, a synthesis of more than 30 years of work and experiments under the sea, an oceanic research station drifting in the heart of the oceans like ISS does in space. It will include a permanent underwater station to study the similarities of life in the two extreme environments.

I will mention some of my experiences living in extreme environments such as my participation in underwater habitats (Aquarius of NOAA/NASA and The Chalupa in Florida) together with astronauts and cosmonauts. I would also like to share artistic and cultural activities, which are inseparable from the great explorations and human adventures such as the musical creation of the abysses, in Tokyo Bay, which I imagined to listen to the heartbeat of the earth.

The presentation will address several other projects: the solar sail race to the moon (visible to the naked eye from the earth); the lunar village that can accommodate up to 250 international multidisciplinary astronauts for scientific and human research; the prototype lunar module "Eurohab" awarded by my Foundation.

The Jacques Rougerie Foundation is dedicated to supporting the momentum of the young generation to make the necessary breaks, to give support to international young architects, engineers, international designers who wish to build future new worlds and to the artists who accompany them. It encourages at the international level the audacity and the architectural innovation as well as the artistic creation related to the world of the Sea and Space in order to discover the new visionaries. I will present the Foundation's International Awards for Architecture and Art in the Sea and in Space whose winners' projects are promoted in major international conferences and exhibitions as well as through publications in the media around the world.