



COSPAR initiates new programme: Building SmallSat capacity in developing countries

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The Committee on Space Research (COSPAR) is pleased to announce the launch of a new Capacity Building programme through collaboration in the field of small satellites (Small Sats). Institutes and universities in developing countries which are interested in developing small satellites by setting up or expanding a local laboratory are invited to join the project.

The COSPAR Small Sats Programme

The programme is expected to include a one-week workshop at a relevant centre leading or having a relevant position within a Small Sats project to which a selected institute sends a team of students in engineering, physics, computer science or related sciences for initial training. After returning to their home institute, the students will carry out collaborative work with that centre linked to a satellite being developed within this collaboration, in a mentor-mentee relationship. This collaboration will include the establishment or expansion of a local laboratory at the students' institute.

An initial agreement with INSPIRE network centres (<https://lasp.colorado.edu/inspire/>) will serve as a launching pad, but the Panel is open to other leading institutions interested in acting as mentors under this programme and in finding useful long-term collaborations this way. All costs related to the students' stay at the initial workshop, including a grant for travel costs, will be covered by COSPAR. Full details on how to apply to set up or develop a local laboratory in the programme can be found [here](#).

COSPAR's Capacity Building Program

The new Small Sats initiative will complement the well-established programme of COSPAR Capacity Building Workshops (CBW), launched in 2001, of which there are roughly three per year. The main objective of this programme is to encourage the scientific use of the extensive freely available space data archives and associated analysis software by scientists in developing countries.

A typical two-week workshop aims to provide highly practical "hands-on" training in the use of one or more of these data archives, to enable participants to improve the quality of their research after they return to their home institutes. The team of lecturers are encouraged to provide at least minimal technical advice to participants when they have returned home and perhaps also to set up collaborative research projects. In this way, the workshops also play an important role in fostering professional links and collaborations between participants and international scientists, and are enhanced by the [COSPAR Fellowship Program](#).

So far more than 1,200 researchers and students from 70 countries have benefited from the COSPAR CBW. A list of past and future approved workshops can be found at <https://cosparhq.cnes.fr/events/cospar-capacity-building-workshops/>.

PRESS RELEASE

The COSPAR President, Professor Pascale Ehrenfreund said: *“I am pleased to welcome this initiative, as it fulfils several of COSPAR’s founding principles of promoting scientific space research at an international level, open to all scientists; promoting diversity and gender equality in all of its activities; and encouraging meaningful roles for younger scientists, who are the real future of international space research.”*

The Executive Director of COSPAR, Dr Jean-Claude Worms, stated: *“Enabling the next generation of space researchers to reap the benefits of the heavy investment and effort in the space sector is vital to continue supporting an ethical and sustainable exploration of space and celestial bodies. In particular, it is critical that countries accessing the space field can benefit from the assets and knowledge derived through more than six decades of space exploration. COSPAR has been steadily supporting capacity building with this goal in mind during the past twenty years, bringing in experienced lecturers and scientists to many countries in Africa, Latin America and Asia, to train this next generation of scientists and engineers. As Small Satellites are becoming commonplace and easy to implement at the laboratory and university level, this makes them unique tools in supporting such training and capacity building activities.”*

Chair of COSPAR’s Panel on Capacity Building, Dr Carlos Gabriel, said: *“COSPAR will not miss the extraordinary multidisciplinary opportunity that the field of small satellites offers for capacity building. This programme involves students in small satellite design, construction, testing, operations and science exploitation and complements perfectly our efforts over the past two decades to strengthen the advancement of science in developing countries.”*

Background

[The Panel on Capacity Building](#) is ably headed by Dr Carlos Gabriel, and supported by a team of eight Vice-Chairs from India, Italy, the Netherlands, South Africa, the UK and the USA. The Panel meets regularly during the year and also at capacity building-targeted sessions at COSPAR Scientific Assemblies and Symposia. It works with several of the COSPAR Scientific Commissions and other Panels to ensure that the scientific fields covered by COSPAR are complemented by relevant Capacity Building Workshops.

In addition, the Panel relies on a wide network of volunteer scientists working to support its activities and events, all of whom have extensive experience in their field and enthusiasm for developing capacity building in developing countries.

A short video presenting the work of the COSPAR Panel on Capacity Building can be seen on the COSPAR YouTube channel [here](#).

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Note to Editors

COSPAR, the Committee on Space Research, was created in 1958, at the dawn of the space age, under the aegis of the International Council of Scientific Unions, now the [International Science Council \(ISC\)](#). COSPAR’s objectives are to promote on an international level scientific research in space, with emphasis on the exchange of results, information and opinions, and to provide a forum, open to all scientists, for the discussion of problems affecting space research. In its first years of existence as an entity that ignores political considerations and views all questions solely from the scientific standpoint, COSPAR played an important role as an open bridge between East and West for cooperation in space. When this role became less prominent with the end of the Cold War, COSPAR focused its objectives on the progress of all kinds of research carried out with the use of space means.

COSPAR has played a central role in the development of new space disciplines such as life sciences and fundamental physics in space, by facilitating the interaction between scientists in emerging space fields and senior space researchers.

A recent emphasis is the development of tighter bonds between science and industry, through the establishment of the Committee on Industry Relations, grouping 18 major aerospace companies worldwide, and advising COSPAR on how best to integrate the capabilities of industry into COSPAR's activities and by doing so, to best serve the interests of industry and science in a synergistic way.

COSPAR strives to promote the use of space science for the benefit of humanity and for its adoption by developing countries and new space-faring nations, in particular through a series of Capacity Building Workshops which teach very practical skills enabling researchers to participate in international space research programmes.

COSPAR advises, as required, the United Nations and other intergovernmental organizations on space research matters and on the assessment of scientific issues in which space can play a role, for example the Group on Earth Observations (GEO), in which COSPAR is a Participating Organization.

Finally, COSPAR is the key entity worldwide in terms of developing, maintaining and promulgating clearly delineated policies and requirements as to the standards that must be achieved to protect against the harmful effects of biological interchange in the conduct of solar system exploration and use.



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