Dear Colleagues,

On behalf of the organizing committee, we would like to draw your attention to **the TGCSS.1 session “Small Spacecraft - Big Science”** at the 45th COSPAR Scientific Assembly that takes place in Busan, South Korea from 13 – 21 July 2024. We kindly invite you to contribute to the TGCSS.1 session (session description below) and submit an abstract before the deadline February 9, 2024. Submission details may be found here: <https://www.cospar2024.org/>.

Sincerely,

Drs. Daniel Baker and Amal Chandran

Session Title: **Small Spacecraft - Big Science**

The Committee on Space Research (COSPAR) in 2019 established a new Task Group to develop an 'actionable' plan for an international constellation of small satellites. It was suggested that a particularly useful constellation would be one that measures the plasma conditions in the ionosphere, with sufficient measurement density to substantially improve space weather forecasts. The COSPAR team, known formally as the Task Group on establishing a Constellation of Small Satellites (TGCSS), began its deliberative work in early March of 2020. In addition to detailing the key science objectives for this program, the Task Group members agreed to start addressing several implementation issues and concerns. The Task Group members have recognized two important and distinct aspects of the COSPAR Action Plan. One branch of activity should be geared toward harnessing and taking good advantage of what international COSPAR adherents already are doing in the smallsat realm. By identifying and orchestrating such efforts, COSPAR is able to perform a worthwhile service to the space community and the nations of the world. The other aspect of this plan is to build capacity amongst nations and institutions that presently have little (or no) space involvement or experience. By bringing more developing nations to the “space exploration table', COSPAR will greatly increase and benefit the entire space enterprise.

In the spirit of moving into the implementation phase, this session will cover topics directly related to the identified mission concepts and allow participating teams to build connections:

1. Recommended payload options and calibration.

2. Reference spacecraft system design concepts and lessons learned.

3. Data aggregation, dissemination, and analysis concepts.

4. Supporting ground systems, testing recommendations.