Recent Advances in Space Research in Monitoring Sustainable Development Goals

Papers are invited for a special topical issue of *Advances in Space Research* (ASR) entitled **"Recent Advances in Space Research in Monitoring Sustainable Development Goals".**

The Sustainable Development Goals (SDG's) by the United Nations (UN) consists of actions by all countries – poor, rich and middle-income – to protect the planet and promote prosperity. To meet these goals requires essential strategies that build on economic growth and a range of social needs including education, health, social protection, and job opportunities, while addressing issues with climate change and environmental protection. The recent developments on Earth Observation and artificial intelligence (AI) technologies provides a great opportunity to develop indicators and reliable solutions to achieve the outcomes mentioned by SDG's.

The paradigm of geospatial information management is changing rapidly due to technological advancements in data acquisition, processing and storage. Innovative techniques need to be investigated to cope with increasing demand for highly accurate and reliable information acquisition from the earth's surface which can be applied to counter various challenges such as global warming, urbanization, effective use of natural resources, and environmental management. Furthermore, new technologies and innovative approaches are highly beneficial for representing and assessing the human environment. As highlighted in the recent SDG report 2020, that for most of the goals less than half of the countries of the world have comparable international data. Even for those countries with some good quality data, the coverage may not be homogenous making it difficult to make any trend analysis. Therefore, the UN and many countries recommend investing in innovative data collection, with integration of satellite derived data and information identified as an important area of innovation.

The proposed special issue aims to contribute to COSPAR's key mission on emphasis on exchange of space related results and information at the international level by serving as an innovative knowledge exchange platform for authors from around the globe to deliberate on the latest advancements, state-of-the-art developments and solutions that can help the community to solve many real-world challenges.

This special issue aims to contribute to the goal of a liveable world in harmony with nature by integrating human creativity with technology. The special issue will commit to the Sustainable Development Goals (SDGs), agreed by all UN member states in 2015, and use them as a roadmap for a sustainable and inclusive recovery and will demonstrate the role of space data in achieving the SDGs.

The special issue will be committed to all SDGs mainly Climate Action, Life on Land, Sustainable Cities and Communities focusing on taking urgent action to combat global warming, climate change and their impacts in order to fight against global threats on ecosystems which result in long-term serious socio-economic effects on nature and human life. All submitted manuscripts must include some aspect of space research: data, experimental results, or various interpretation of phenomena in space utilizing groundbased equipment. Papers must be submitted electronically to <u>https://www.editorialmanager.com/AISR.</u> To ensure that all manuscripts are correctly identified for inclusion into the special issue, authors must select "Special Issue: Adv. Space Res. for SDGs" when they reach the "Article Type" step in the submission process. Submitted papers must be written in English and should include full affiliation postal addresses for all authors. The general format for submission of papers can be found on the *ASR* Elsevier web site at

http://www.journals.elsevier.com/advances-in-space-research/

Only full-length papers will be considered for publication, subject to peer review by a minimum of two reviewers. There are no page limits although the length of the paper should be appropriate for the material being presented. While the deadline for submissions is **1 June 2022**, papers will be published electronically as soon as they are accepted. The printed issue will be assembled within a reasonable time with late papers being printed in regular issues of ASR. All articles will be typeset at no cost to the author; there is a charge for printing color figures; there is no charge for color figures on the electronic version.

Prof. Dr. Bülent Bayram (bayram@yildiz.edu.tr) is the Guest Editor for this special issue. Questions can be directed to Prof. Bayram or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com).