

## **Recent advances in equatorial, low- and mid-latitude mesosphere, thermosphere and ionosphere studies**

Papers are invited for a special topical issue of *Advances in Space Research* (ASR) entitled “*Recent advances in equatorial, low- and mid-latitude mesosphere, thermosphere and ionosphere studies*”.

The coupling processes taking place between mesosphere, thermosphere and ionosphere, from equatorial to mid latitudes, are of significant importance to understand the variability of Earth's middle and upper atmosphere. The main objective of this ASR special issue is to highlight the recent developments in the field of equatorial, low- and mid-latitude mesosphere, thermosphere and ionosphere from observational (ground-based and space-borne), theoretical and simulation studies. This ASR special issue is open to all scientists who have an appropriate scientific paper related to various aspects in this area that include: Short-term, long-term and space-time variability of the mesosphere, thermosphere and ionosphere; response of the thermosphere-ionosphere system to forcing from above and below; coupling between high-, mid- and low-latitude regions; magnetosphere-ionosphere-atmosphere coupling; Lithosphere-ionosphere coupling; Equatorial electrodynamics: Equatorial Ionization Anomaly (EIA), Equatorial Electrojet (EEJ), Spread-F phenomena; Ionospheric irregularities, scintillations; F-region multi-layer stratification, F3 and StF4 layers; Mid-latitude trough; Sporadic E layer; Space weather effects on the ionosphere; Geomagnetic storms; solar flares; Ionospheric response to SSW; Nowcasting/forecasting modelling of the ionosphere, data-assimilation and tomography; Satellite and ground based observational techniques.

We welcome high quality and relevant manuscripts from all scientists in the upper atmosphere community.

Papers must be submitted electronically to <https://www.editorialmanager.com/aisr/>. To ensure that all manuscripts are correctly identified for inclusion into the special issue, **authors must select “SI: Recent progress in MTI”** when they reach the "Article Type" step in the submission process.

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/>

Submitted papers must be written in English and should include full affiliation postal addresses for all authors. 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 28<sup>th</sup> February 2023**, 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 nominal charge for printing color figures although there is no charge for color figures on the electronic version.

Dr. Venkatesh Kavutarapu (venkateshk@prl.res.in) and Dr. Michael Pezzopane (michael.pezzopane@ingv.it) are the Guest Editors for this special issue. Questions can be directed to Drs. Venkatesh and Pezzopane or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssarc@msn.com).