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India was elected to lead the Technical Commission I on 'Sensors, Platforms and Imagery' of the International Society for Photogrammetry and Remote Sensing, for the term 1996-2000 at the Vienna Congress. This Commission mainly deals with the planning of aerial and space missions, inter-calibration of the sensors, evaluation of data reception, pre-processing, quality of image data and standardisation of recording media. Five Working Groups dealing with specific themes support the activities of TC-1.

Imaging the earth from space has become vital for understanding the various processes and their impact on human activities and vice-versa. Globally, the earth observation systems are changing from their specific missions to an integrated interdisciplinary endeavour to understand the Earth as a total system. Earth Observation from Space provides reliable data on various aspects of the Earth’s environment, essential for sustainable development activities at local and global level. One of the major thrust areas in earth observation in the recent times is to provide high resolution stereo data for topographic survey. This is important as large areas in many developing countries are yet to be mapped. The planned imaging spectrometers are likely to provide data on biochemical properties of vegetation, plant species, moisture stress, phytoplankton types, etc. Multiband and multi-polarisation SAR will provide all weather capability and help addressing many innovative applications. These new systems also pose challenges for data processing and product generation and dissemination. Another area of interest is the integration of the varied datasets from different missions – calling for a concerted effort for inter-sensor calibration using suitable calibration sites and developing application specific models and analysis tools.

The capabilities of the earth observation system can contribute to sustainable development and for maintaining the fragile balance between productivity functions and conservation practices. In view of this, the topic of the ISPRS TC-1 Symposium was chosen to be ‘Earth Observation System for Sustainable Development’. We have received overwhelming response from the international scientific community. We have received about 40 papers dealing with various aspects of sensor calibration, characteristics of sensors, satellite data pre-processing, archival needs, generation of DEM and
deriving height information, image scanners and design of micro and small satellites.

Apart from this, three invited talks on observation requirements for sustainable development, earth observation systems and data integration for sustainable development by eminent scientists have been scheduled in a special Theme session of the Symposium. Another important aspect of the EO programme is international cooperation calling for integrated efforts in observation, data products generation and modelling. This is the spirit of the Integrated Global Observing Strategy (IGOS) which is being championed by the International Committee on Earth Observation Satellites (CEOS). In view of this, a special session on CEOS and IGOS has been planned.

Another major event in the Symposium is the presentation by a few major industry houses on the emerging technologies as visualised by them. An International exhibition where many industry houses are exhibiting their products will run parallel to the Symposium.

With such a wide range of topics and events and also the large number of experts that are attending the Symposium, I am sure that the opportunity will be best utilised for formal and informal exchanges of technical knowledge and also for forging newer alliances and association – all of which will be to the benefit of society and to Earth as a whole.

(George Joseph)
President, TC-1, ISPRS
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