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# INTERNATIONAL SOCIETY FOR PHOTOGRAMMETRY AND REMOTE SENSING

# TECHNICAL COMMISSION I ON SENSORS, PLATFORMS AND IMAGERY

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## INDIAN SOCIETY OF REMOTE SENSING DEHRADUN

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Mr V. Jayaraman Director Earth Observation System E-mail: viav@isro.ernet.in ISRO HQ. Bangalore 560 094, India

Phone: +91 79 6423956 Fax: +91 79 6568073 Space Applications Centre E-mail: george@sac.ernet.in

> Phone: +91 79 6568971 Fax: +91 79 674 1626

> > Phone: +91 80 3416358 Fax: +91 80 3415298

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| Chairperson: Chairperson | Dr Manfred Schroeder<br>DLR Institute of Optoelectronics<br>POB1116, D-82230 Wessling<br>Germany | Phone: +49 8153 28 2790<br>Fax: +49 8153 28 1444<br>E-mail:<br>manfred.schroeder@dlr.de |  |
|--------------------------|--|---|--|
| Co-Chairperson:          | Dr A. Alan Belward   | Phone +39 332 789 298   |  |

Space Applications Institute Fax: +39 332 789 536 Joint Research Centre Commission of the European Communities 121020 Ispra (VA), Italy

E-mail: alan.belward@jrc.it

#### WG I/2: Pre-processing archival and dissemination of image data

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|--------------|---|---|
| 0. 01        | Dr. Lalaren Thermon ed  | Phome: 11 202 254 2102  |

Co-Chairperson Dr Jolyon Thurgood Phone: +1 303 254 2102 Director, International Business Fax: +1 303 254 2217 Development Email: Space Imaging ithurgood@spaceimage.co 9351 Grant St., Suite 500 Thornton CO 80229-4360 USA

WG-I/3: Sensors and platforms for topographic survey

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|-----------------|--|---|
| Co-Chairperson: | Dr T. Natarajan<br>Director<br>Institute of Remote Sensing<br>Anna University<br>Madras 600 025<br>India | Phone: +91 44 235 1723<br>Fax: +91 44 235 2166<br>E-mail:<br>annalib@sirnetm.emet.in              |

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| WG I/5: Advanced p                            | latforms an  | d sensors   | nete ratemer  | W. V.F. Sancar na  |
|   | Mr Takashi<br>Earth Obser<br>(EORC)<br>National Sp<br>of Japan (N<br>1-9-9 Roppor<br>Roppongi, I<br>Tokyo 106,   | Moriyama<br>vation Research Centre<br>ace Development Agenc<br>ASDA)<br>ongi, Minato-ku<br>First Building 13 F<br>Japan | Phone : +81<br>Fax: +81 3 3<br>E-mail:<br>y <u>moriyama@</u>                              | 3 3224 7053<br>224 7052<br>eorc.nasda.go.jp                  |
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| 8 591 236 75<br>591 237 81<br>olm@bahnhof.sc  | Phone: +46<br>Fax: +46 8<br>E-mail:<br>dan.rosenh(   | tosenholm<br>ic Office<br>farsta  | Prof. Dan F<br>GAF, Nord<br>Ekvagen 4<br>S-195 44 Iv<br>Sweden                            | :Chairperson:  |
| 803 254 2102<br>3 254 2217<br>paceimage.cn    | Phone: +1 ]<br>Fax: +1 30<br>Email:<br>ithurgood@g   | Thurgood<br>ternational Business<br>nt<br>jing<br>St., Suite 500<br>O 80229-4360  | Dr Jolyon 7<br>Director, In<br>Developme<br>Space Imag<br>9351 Grant<br>Thornton C<br>USA | Co-Chairperson   |
|   |  | for topographic survey  | d platforms   | WG-I/3. Sensors an   |
| 511 762 2485<br>11 762 2483<br>mi-bannover.de | Phone: +49<br>Fax: +49 5<br>E-mail:<br>karsten@ipi.  | sen<br>of Hannover<br>Str.1<br>annover, Germany   | Dr K. Jacol<br>University<br>Nienburger<br>D-30162 H                                      |  |

Co-Chairperson:

Dr T. Natarajan Director Institute of Remote Sensing Anna University Madras 600 025

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### PREFACE

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.

concerted effort for inter-sensor colibration using suitable (George Joseph)

# President, TC-1, ISPRS

# ISPRS SYMPOSIUM ON EARTH OBSERVATION SYSTEM FOR SUSTAINABLE DEVELOPMENT

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Bangalore, February 2-27, 1998

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