



**ISRS**

# SIGNATURES

*Newsletter of the Indian Society of Remote Sensing - Ahmedabad Chapter*

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## *In this issue*

Editorial	1
ISRS-ISPRS Symposium	2
News & Snippets	4
ISRO Achieves New heights	5
Educational Excursion	5
ISRS-AC Activities	6
ISRS-AC members superannuated	6
Awards	6

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## **Editorial**

*Dear Members,*

*I am thankful to the members for their overwhelming appreciations for the previous issue of Signatures. At the same time I would like to express my regrets for the few mistakes which were committed inadvertently. The ISRS-AC is the largest chapter and has grown further during the last year. The growing membership of ISRS-AC and demand from members has made the editorial committee to deliver the Signature issue on time. The current issue highlights the memories and achievements of ISRS-AC and its members.*

*I would like to congratulate the ISRS-AC and its Executive Council and members who have contributed to the grand success of ISPRS TC-IV Symposium at Goa. Members of ISRS-AC have actively contributed towards organization of the Symposium, Tutorials and Workshops. This has made us feel proud and shows not just the professionalism but also the dedication and commitment to the cause of dissemination of remote sensing information. As suggested in the last issue, I welcome one or two lead articles but of short and popular nature which would interest the members.*

*Wish you a happy browsing!*

## **NEW ISRS-AC MEMBERS**

**ISRS-AC facilitates new membership enrolment. 15 new Life members have been included during October 2006-March, 2007. The ISRS-AC continues to be the largest Chapter of the ISRS with its total strength of 353 members.**

## **FORTHCOMING EVENTS**

**Astronautical Society of India (ASI) and Indian Space Research Organization (ISRO) will host 58<sup>th</sup> International Astronautical Congress at Hyderabad during September 24-28, 2007.**

## **ISRS-AC Newsletter Editorial Committee**

**Chief Editor: Mr. K.R.Manjunath**

**Editorial members:**

**Mr.C.P.Singh, Mr.Ramesh Sojitra and Dr.Abha Chhabra**



## ISRS-ISPRS International Symposium on "Geospatial Databases for Sustainable Development"

(September 25 - 30, 2006), Goa, India

The ISPRS Technical Commission (TC) IV on Geodatabases and Digital Mapping along with the Indian Society of Remote Sensing (ISRS) has organized an International Symposium on 'Geospatial databases for Sustainable Development' during September 27-30, 2006 along with two pre-symposium tutorials and two pre-symposium conferences during Sep. 25-26, 2006. ISRS-AC played a key role in the symposium.



Dr. R.R. Navalgund, Director, Space Applications Centre (ISRO), Ahmedabad welcomed the delegates and made his opening remarks. He said that since the inception of ISPRS, ISRS has been working closely with it on a variety of issues concerning remote sensing and Photogrammetry and hoped to continue the association and organize the ISPRS congress sometime in future.



Dr. Shailesh Nayak, President, ISPRS TC-IV and Director, INCOIS, Govt. of India, Hyderabad gave a detailed account of the activities of ISPRS TC-IV.



Dr. K. Radhakrishnan, President, Indian Society of Remote Sensing (ISRS) and Director, National Remote Sensing Agency (NRSA), Hyderabad gave an account of ISRS activities in the country. He said that

ISRS is a dynamic and strong society of 3000 life members, 50 fellows and 22 chapters spread across the country and members are doing extremely good work in promoting remote sensing among the student and scientific community of their respective regions.



Prof. John Trinder, the First Vice President, ISPRS talked about ISPRS. He said that restructuring of ISPRS commissions in 2002 has brought the applications of digital databases under the purview of TC-IV and the present symposium offers the opportunity to all the working group chairs to get together and interact. He has also inaugurated the "Industry Exhibition" and opened to the delegates.

Dr. S.K. Saha, Secretary, ISRS has organized a ceremony of presentation of ISRS awards viz. Bhaskara award, Geospatial award, Geospatial awards, PR Pisharoty Memorial award and Best paper award in ISRS journal to the winners for their excellent contributions in the field of Remote Sensing and Geoinformatics.

The Symposium was inaugurated by Dr. P. S. Goel, Secretary, Ministry of Earth Sciences, Govt. of India. In his keynote address, he emphasized that creation of "Synergy between Science and Application of Geospatial Databases" is the need of the hour for sustainable development.

In all 325 scientists including 125 scientists from 23 countries attended the symposium and participated in deliberations. Three plenary sessions, highlighting the main theme of the symposium was organized. On the first day, ten invited talks were delivered by eminent scientists and working group chair/co-chairs of the ISPRS TC-IV. Twenty-four technical sessions, two poster sessions and one special session on 'Digital Asia' were organized. All technical sessions were initiated by a lead talk. In all, 211 papers were presented in both oral (161 papers) and poster (50 papers) presentations. Symposium proceedings (two volumes) have been brought out. Soft copy of both abstract and proceedings volume were brought out and distributed to all the participants.

In addition to the main symposium, two pre-symposiums, two tutorials and a popular lecture were also organized during September 25-27, 2006:

**1. Geoinformation for Disaster Management (Gi4DM):** A two day symposium was organized during September 25-26, 2006 for monitoring and prediction of disasters. The symposium was attended by about 60 participants. The symposium was inaugurated by Dr. Irvin Itzkovitch and delivered the keynote address.

**2. ISRO-ISPRS-IEEE-GEOSS Workshop:** was organized on 26th September, 2006 addressing i) The User and the GEOSS Architecture VI and ii) Applications in 'Public Health for the Indian Ocean Region'. Dr. Shailesh Nayak, President, ISPRS TC-IV inaugurated the symposium. J.S. Pearlman of the Boeing Company gave a brief overview of GEOSS. About 40 delegates participated and held round table discussions on various aspects of GEOSS architecture and its application in public health.

**3. Urban Planning and Infrastructure Development:** A two day tutorial on "Urban Planning and Infrastructure Development" was conducted during September 25-26, 2006 addressing RS and GIS concepts as well as application of Geospatial data for urban planning.

Dr. Shailesh Nayak, President, ISPRS TC-IV inaugurated the tutorial. Explaining the relevance of the tutorial, he pointed out that the Union Government had undertaken mapping of over 500 cities and towns in the country using RS and GIS technologies.

Dr. S.K. Pathan along with eminent experts in the field of urban planning conducted the tutorials. The experts dealt with fundamental of RS, creation of geospatial databases using GIS techniques and application of these techniques. The tutorial comprised both theory classes as well as hands-on exercises. 18 candidates (lecturers, professors, research scholars and students) participated in the tutorials. An examination was conducted at the end of two day tutorial.

**4. Extraction of features from High Resolution data:** A one day tutorial was also organized on September 26, 2006 emphasizing the need of high resolution data for grass root level applications. Dr. Shailesh Nayak inaugurated the tutorial and said the main purpose of the tutorial is to train young minds on extraction of information from high spatial resolution data. Later Dr. E. Baltsavais introduced students to the world of high spatial resolution and explained various methods involved in high resolution imagery. Dr. P.K. Srivastava co-ordinated the tutorials and emphasized the significance of Cartosat-I data. 10 students from Ajmer University attended the tutorials.

**5. Popular Vikram Sarabhai Memorial lecture on "Mission to Moon, Chandrayan-1":** It was organized on 27<sup>th</sup> September, 2006 and was delivered by Dr. J.N. Goswami, Director, Physical Research Laboratory, Ahmedabad. He informed that The Chandrayan-1 is planned to complete lunar mapping using RS technology in one and half years and hoped to answer many questions related to the depth of lunar crust, presence water, minerals etc.

The ISPRS TC-IV symposium with all above mentioned activities concluded on September 30, 2006 with the distribution of prizes to all best presentations in both 'Oral' and 'Poster' by Prof. Ian Dowman, President, ISPRS.

*"Some people dream of success  
While other wake up and work hard at it !"*

*--anonymous*

## NEWS & SNIPPETS

### GLOBAL WARMING IMPACT ON POLAR ICE SHEETS CONFIRMED

NASA scientists have confirmed a net loss of ice from the combined polar ice sheets between 1992 and 2002 and a corresponding rise in sea level. This is the most comprehensive survey ever undertaken of the enormous ice sheets covering both Greenland and Antarctica shows a net loss of ice to the sea. This survey was carried out by a team of researchers lead by Dr. H. Jay Zwally of NASA's Goddard Space Flight Center in Greenbelt, Maryland. Researchers used nine years of elevation mapping over much of Antarctica and 10.5 years of data over Greenland from the European Remote Sensing Satellites 1 and 2. (Source: Environment News Service, March 15, 2007)

### NEW REMOTE SENSING JOURNALS

**Journal of Applied Remote Sensing (JARS)** published by the International Society for Optical Engineering (SPIE) has started from January 2007 as a peer-reviewed electronic-only journal ("e-journal"). This online journal would cover the concepts, information, and progress of the remote sensing community, including past, current, and future remote sensing programs and experiments; coverage of remote sensing user requirements for programs and experiments; methodologies for the optimal utilization of remote sensing data; measurement characterization; satellite mission requirements and implementation etc. Website: <http://spie.org/app/Publications>

The first issue of peer-reviewed **Journal of Geomatics (JOG)** published by the Indian Society of Geomatics would be released in April' 2007. This journal would cover the recent research and progress of the geomatics community. The contributions may be sent to [cej@isgindia.org](mailto:cej@isgindia.org). Website: <http://isgindia.org>

*"Logic will get you from A to B. Imagination will take you everywhere."*

*-Albert Einstein*

### DISASTER WARNING SYSTEM BY ISRO

An advanced national disaster warning system is being developed by ISRO which will be in place in a year's time. Under this system a data-base would be created about flood-prone areas and its vulnerability to other disasters banking on its past history. This was declared by Shri G. Madhavan Nair, Chairman ISRO on November 13, 2006, while participating in the Asia-Pacific Remote Sensing Conference held at Panaji, Goa.

#### *GloNASS may become commercial*

The Russian Minister for Defence is planning to lift restrictions on the Global'naya Navigatsionnaya Sputnikovaya Sistema (GloNASS), the 24-satellite Russian global positioning system. This would enable accurate and unlimited commercial use of this global positioning system. Source: [http://www.asmmag.com/ASM/content/2006/ASM\\_039/main\\_news\\_3.html](http://www.asmmag.com/ASM/content/2006/ASM_039/main_news_3.html)

#### *The Next Radarsat*

Canada is planning a follow-on mission to the Radarsat series, the world's oldest C-band space based synthetic aperture radar. The new constellation is expected to be in orbit somewhere between 2012 and 2015. Source: [http://www.asmmag.com/ASM/content/2006/ASM\\_039/main\\_news\\_2.html](http://www.asmmag.com/ASM/content/2006/ASM_039/main_news_2.html)

#### *Mars Express scientists find a different Mars underneath the surface*

Mars is showing scientists that it has an older, craggier face buried beneath its surface. The results were obtained by MARSIS, the pioneering sounding radar onboard European Space Agency's (ESA) Mars Express orbiter. It has found evidence that these buried impact craters – ranging from about 130 to 470 kms in diameter are present under much of the northern lowlands. Giovanni Picardi, of the University of Rome 'La Sapienza', Principal Investigator of the Mars Express MARSIS radar described these findings as unprecedented. Source: *Nature*, December 14, 2006.



## ISRO ACHIEVES NEW HEIGHTS



ISRO's Polar Satellite Launch Vehicle, PSLV-C7, successfully launched four satellites-India's CARTOSAT-2 and Space capsule Recovery Experiment (SRE-1), Indonesia's LAPAN-TUBSAT and Argentina's PEHUENSAT-1 into a 635 km high polar orbit on January 10, 2007. For the first time, a Dual Launch Adaptor was used in PSLV to accommodate two primary satellites in tandem. CARTOSAT-2, the twelfth in the IRS satellite series, is an advanced remote sensing satellite capable of providing scene-specific spot imagery. It carries a Panchromatic camera (PAN) to provide imageries with a spatial resolution of better than 1 metre and a swath of 9.6 km. The satellite can be steered up to 45 deg along as well as across the track. CARTOSAT-2 data will be used for cartographic applications, urban and rural infrastructure development and management, as well as applications in Land Information System and GIS. SRE-1 was successfully recovered on January 22, 2007 after being maneuvered to reenter the earth's atmosphere and descend over Bay of Bengal about 140 km East of Sriharikota. The successful launch, in-orbit operation of the on board experiments and re-entry and recovery of SRE-1 has demonstrated India's capability in important technologies like aero-thermo structures, deceleration and flotation systems, navigation, guidance and control. SRE-1 is an important beginning for providing a low cost platform for micro-gravity experiments in space science and technology and return specimen from space.

**INSAT-4B**, was successfully launched by the European Ariane-5 ECA launch vehicle of Arianespace on March 12, 2007. The 3,025 kg INSAT-4B is the second satellite in the INSAT-4 series. With 12 high power Ku-band transponders and 12 C-band transponders, INSAT-4B will further augment the INSAT capacity for Direct-To-Home television services and other communication services.

## EDUCATIONAL EXCURSION

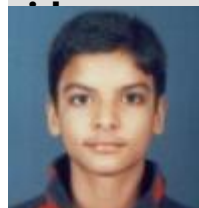
Indian Society of Remote Sensing - Ahmedabad Chapter, Indian Society of Geomatics- Ahmedabad Chapter, Indian Meteorological Society - Ahmedabad Chapter and Indian National Cartographic Association-Gujarat Branch jointly organized one-day environmental education camp to Narmada dam and nearby environs for members and their families on February 17, 2007. About 110 members with their families participated and enjoyed this trip.



## CONGRATULATIONS !!!



ihndI kond` saOk Wara 'ivaSva  
ihndI idvasa' ko ]plaxya pr janavarI  
10, 2007 kao AayaaOijat inabaMV  
p`ityaaOigata maoM Da. AaBaa  
CabaDa nao tR,,, <aIya purskar  
p`aPt ikyyaa. soak inadoSak Da  
navalagMaud nao gaNatMn~  
maaraoh maoM ]nhoM  
ar p`dana ikyyaa .



Arinjay Vyas son of Dr S.P.  
Vyas, ISRS-AC Executive  
member stood amongst the Top

## ISRS-AC ACTIVITIES

Shri R.M. Pandya delivered L. N. Calla Memorial lecture on "Space Science Technology and Applications", on November 18, 2006 at M.G. Science College, Ahmedabad.



## ISRS-AC MEMBERS SUPERANNUATED



Shri R.M. Pandya, former Manager, Remote Sensing Area Facility, superannuated in November, 2006.



Dr Aishwarya Narain, former Project Director (R&D), Disaster Management Support Programme superannuated in December, 2006.



Dr. K. L. Majumder, former Deputy Director Remote Sensing Applications and Image Processing Area superannuated in January, 2007.

On behalf of all ISRS-AC members, we wish them a healthy and prosperous life ahead!!

*"You can't do anything about the length of your life, but you can do something about its width and depth"*

*-Henry Louis Mencken*

*"And in the end, it's not the years in your life that count. It's the life in your years."*

*--Abraham Lincoln*

## ISRS MEMBERS AWARDED DURING ISRS-IPRS SYMPOSIUM - 2006



Shri A. R. Dasgupta was awarded with National Geo-spatial award for excellence - 2005 by ISRS in recognition of his outstanding lifetime contributions to the development and extension of geospatial systems, and promotion of related activities in the country.



Shri Shashikant A. Sharma was awarded with Indian National Geospatial Award - 2006 by ISRS in recognition of his significant contribution in developmental work on geospatial utility software for cost effective e-governance.



Shri K.R. Manjunath was awarded with P.R. Pisharoty Award - 2006 by ISRS in recognition of his significant research contribution in newer areas of applications of remote sensing in agriculture. The award was shared with Dr. Rajkumar of MOG, SAC