



❖ CSSTEAP Newsletter ❖

Quarterly Newsletter of Centre for Space Science and Technology Education in Asia and the Pacific (Affiliated to UN)

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ADVISORY AND GOVERNING BOARD MEETINGS OF CSSTEAP

The eighth meeting of Advisory Committee (AC) and eleventh meeting of Governing Board (GB) of CSSTEAP were held on May 17 and 19, 2006 respectively at ISRO HQ, Bangalore. Dr. Viktor Kotelnikov of United Nations-OOSA, Vienna Chaired the AC meeting. Mr. Wisnu P. Marsis (LAPAN Indonesia), Dr. S Namasivayam (Director, ACCIMT, Sri Lanka), Mr. Sjaak Beerens (ITC, The Netherlands), Dr. Sanjay Limaye (Wisconsin, USA), Prof. Ray Harris (UCL, London), Dr. Peter Willmore (Univ. Of Birmingham, U.K.), Prof. L. Venugopal Reddy (Vice Chancellor, Andhra University, India), Mr. V Sundararamaiah (Scientific Secretary, ISRO), Dr. R.R Navalgund (Director, SAC, Ahmedabad), Dr.

K. Radhakrishnan (Director, NRSA, Hyderabad), Dr.V.K Dadhwal, Dean, IIRS & Director-in-Charge, CSSTEAP, Mr. Jacob Ninan (Programme Director, Intl. Cooperation, ISRO, Bangalore), Course Directors, Program Coordinators, CSSTEAP and Course Coordinators attended the meeting. The committee took a review of the Centre's technical and academic activities since one year. Various issues like implementation of Board of Studies (BOS) recommendations, research activities in the form of awarding of M.Tech fellowship of the program at the Centre, continuation of feedback evaluation of the past students of CSSTEAP of different courses, continuous interaction between the alumni and the centre through website, putting more information related to courses and educational materials on website, continuing the exploration of affiliation with different universities for award of M.Tech degree and research program, designing theme specific short term courses on space technology for disaster management, space technology, development of managers for disaster management, satellite navigation, etc. were discussed. The AC appreciated the efforts of the Centre for excellent progress made and expressed satisfaction at the achievements and also for support of the host country. The committee congratulated Government of India/ISRO for the celebration of 10 years of CSSTEAP in November 2005. The AC also noted the committed effort of the Centre, in



AC members along with special invitees during AC meeting



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particular its Director and the host institutions namely IIRS (NRSA), SAC & PRL have made the Centre reach such high levels. The AC endorsed the courses, future programmes and technical activities of the Centre.

The GB meeting on May 19, 2006 was Chaired by Mr. G. Madhavan Nair, Chairman, Governing Board CSSTEAP and Secretary, Department of Space, Govt. of India. Several members of Governing Board of CSSTEAP viz., Dr. Igor Ibragimov (Uzbekcosmos, Uzbekistan), Mr Kartar Singh Bhalla (Hony. Consul General of Nauru), H.E. Mr. Han Chang On (Ambassador, DPR Korea), Mr. Tara Prasad Pokharel (Embassy of Nepal), Mr. Wisjnu P. Marsis (LAPAN, Indonesia), Dr. S Namasivayam (Director, ACCIMT, Sri Lanka), Dr. Viktor Kotelnikov (UN-OOSA), Dr.

Prof. J.N Goswami (Director, PRL, Ahmedabad), Mr. Jacob Ninan (Programme Director, Intl. Cooperation, ISRO), Mr. Chandy Andrews (CCA, ISRO), Director, CSSTEAP, Course Directors of all courses and higher officials of various centres of Department of Space, Govt. of India attended the meeting. Several important issue like expansion of CSSTEAP in the Asia-Pacific region, review of the action items from the last GB meeting, the Centre's strategy for the research programme, successful celebration of commemoration of 10 years completion of CSSTEAP, budget allocation for the centre, etc. were discussed. UN-OOSA representative, Dr. Viktor Kotelnikov briefed



Advisory Committee meeting in progress

Thongchai Charupatt (GISTDA, Thailand), Dr. Mahdi Kartasasmita (LAPAN, Indonesia), Mr. Nurgali Arystanov (Embassy of Kazakhstan), Dr. Sjaak Beerens (ITC, The Netherlands), Mr. S.V Ranganath (Additional Secretary, ISRO), Mr. V Sundararamaiah (Scientific Secretary, ISRO), Dr. V Jayaraman (Director, EOS, ISRO), Dr. R.R Navalgund (Director, SAC, Ahmedabad), Dr. K. Radhakrishnan (Director, NRSA, Hyderabad),



GB members along with dignitaries during GB meeting at ISRO H.Q., Bangalore

about the outcome in the form of recommendations of the eighth AC meeting to the GB members. Director, CSSTEAP presented brief report on the achievements of the centre in the past one year. Director, CSSTEAP also presented on future strategy of the Centre and viable recommendations to make the Centre broad based with the involvement as many countries of Asia-Pacific region to join the Centre, to embark on obtaining international funding for the academic activities of the Centre, identification of specific steps to increase visibility of training and education in space science and technology areas, advanced research program, core staffing of the centre, requisite

FIFTH POST GRADUATE COURSE ON SATELLITE COMMUNICATIONS

The knowledge and the experience gained on Satellite Communications theory and its applications during the course were put to the best use for the social upliftment of their country by choosing an appropriate project. The participants in consultation with their local guides at the Space Applications Centre generated the pilot project reports, which were reviewed in detail by the experts at SAC. The suitability and feasibility studies carried out were discussed and individual project guides played a vital role in giving their project a proper direction especially from the feasibility point of view in their home country. The Pilot project presentations, were evaluated by a panel of experts headed by Dr. K.S. Dasgupta, Group Director, ADCTG, the Course Director, the Module Focal Points and the invited experts. The panel critically reviewed the pilot project presentations and gave valuable suggestions towards the suitability and the feasibility point of view.

The participants proceeded to the Andhra University as a part of the final tour of the course. The pilot projects were evaluated by the Professors at Andhra University, Vishakapatnam. The participants also spent time at the Andhra University and also got a glimpse of the Port city of Andhra Pradesh, Vishakapatnam. It was in Vishakapatnam that many of the participants saw Ocean and the Beach for the first time in their life.

Then the participants proceeded to Prof. Satish Dhawan Space Centre (SDSC), Sriharikota, the launching pad of Rockets in India. It was a dream come true for many participants to see the massive launch vehicle support steel structure and launch motors and launch vehicle pads. After an overnight stay at SDSC, the participants proceeded to Chennai



Satcom-V participants with dignitaries on dais

for the last train journey back to Ahmedabad, thus concluding the series of technical cum cultural tours in India.

The participants were the most fortunate to have been chosen amongst the few in the Space Applications Centre, Ahmedabad to have got an opportunity to meet the H.E. The President of India, Dr. A.P.J. Abdul Kalam during his visit to the Space Applications Centre. The Valedictory function was held on the 29th April 2006. Dr. R.R. Navalgund, Director, SAC, delivered the Welcome Address and introduced the Chief Guest, Prof. B.L. Deekshatulu, Former Director, CSSTEAP to the audience. Dr. V.K. Dadhwal, Director-in-Charge,



Director, SAC delivering Welcome address

Dr. R.R. Navalgund, released the course material compiled in the form of CD. The Chief Guest, Prof. B.L. Deekshatulu, released the Memoirs and in his valedictory address gave an excellent overview of the Satellite Communications. He also enlightened the audience as to how the world is moving fast towards knowledge based society and emphasized that SATCOM engineering education therefore occupies a very important role in the whole chain of knowledge centric



Valedictory Address by Prof B.L. Deekshatulu

Prof. B.L. Deekshatulu presented the Diploma certificates to the participants while, Dr. R.R. Navalgund presented the Award of Merit to the rank holders. The participants finally departed to their respective home countries carrying with them the knowledge and memories of the exciting time they spent together in India with us.

TENTH POST GRADUATE COURSE ON REMOTE SENSING AND GIS

The tenth Post-Graduate Course on Remote Sensing and Geographic Information System (RS&GIS) of CSSTEAP, was conducted at Indian Institute of Remote Sensing (IIRS), Dehradun, from October 1, 2005 to June 30, 2006. Total 19 participants from 13 countries of Asia-Pacific Region (China-1, India-2, Indonesia -2, Iran-1, Kazakhstan-1, Kyrgyz Republic-1, Mongolia -2, Myanmar -1, Nepal -2, Sri Lanka -2, Thailand -2,

The entire Course is divided into three modules. Each module is of three months duration. The module - III which started from April 2006, is basically designed to carry out pilot project work by the course participants. The objective of this module is to make the Course participants capable to carry out research on their own towards accomplishment of natural resource management. The course participants learnt a great deal during this module. The broad topics of the pilot projects under taken by the course participants during Module III are Spatial variability of soil moisture & soilscape characterization using MODIS data, Cropping system analysis & crop diversification planning, Geomorphological & hydro-geological investigation in part of North East India, Geo-technical characterization & deterministic modeling of landslides, Morphometric terrain analysis, Inventory & monitoring of forest plantation, Mangrove vegetation characterization in Krishna Delta, Forest dynamics & vulnerability



Course participants with Director, CSSTEAP, Course Director

analysis, Afforestation / reforestation site assessment, Coastal zone management of Cochin coastal area, Determination of water quality parameters in coastal water of Cochin, Site suitability analysis for industrial area in Chandigarh City, Hydrodynamic investigation of a flood event, Mesoscale hydrological modeling of watersheds, Special Decision modeling of LULC change, Evaluation of interpolation techniques for DEM



Valedictory function of 10th RS & GIS course

generation, Customized geo-spatial weather information system using web GIS, Spectral band absorption analysis of Hyperspectral data, Use of SAR Interferometry for DEM generation & change detection.

The valedictory function of the Course was held on June 28, 2006. Dr. George Joseph, Hon. Distinguished Professor, ISRO was the Chief Guest and Dr. K. Radhakrishnan Director, NRSA was Guest of Honour of the function. Dr. V.K. Dadhwal, Director in-Charge, CSSTEAP & Dean IIRS welcomed the Chief Guest, Guest of Honour and other dignitaries. Shri. G. Madhavan Nair, Secretary Dept. of Space, Chairman, ISRO and Chairman, Governing Board, CSSTEAP addressed the gathering through Spacenet. The Course report was presented by Course Director, Dr. S.K. Saha. On this occasion many dignitaries from India and abroad sent their wishes and appreciation to the course participants as well as to the Centre in the form of messages. Total fifteen messages were received from different dignitaries. The excerpts of these messages were presented by Prof. V.K. Jha,

BACKGROUND OF CSSTEAP

In response to the UN General Assembly Resolution (45/72 of 11th December, 1990) endorsing the recommendations of UNISPACE-82 the United Nations Office for Outer Space Affairs (UN-OOSA) prepared a project document (A/AC.105/534) envisaging the establishment of Centres for Space Science & Technology Education in the developing countries. The Objective of the Centres is to enhance the capabilities of the member states in different areas of space science and technology that can advance their social and economic development. The first of such centres, named as Centre for Space Science & Technology Education in Asia & the Pacific (CSSTEAP) was established in India in November 1995.



CSSTEAP Building

Department of Space, Government of India has made available appropriate facilities and expertise to the Centre through the Indian Institute of Remote Sensing (IIRS) Dehradun, Space

Applications Centre (SAC) & Physical Research Laboratory (PRL) Ahmedabad. The Centre is an education and training institution that is capable of high attainments in the development and transfer of knowledge in the fields of space science & technology. The emphasis of the Centre is on in-depth education, training and application programmes, linkage to global programmes / databases; execution of pilot projects, continuing education and awareness and appraisal programmes. The Centre offers Post Graduate level and short courses in the fields of (a) Remote Sensing and Geographic Information System, (b) Satellite Communications and GPS, (c) Satellite Meteorology and Global Climate, (d) Space and Atmospheric Sciences. A set of standard curricula developed by the United Nations is adapted for the

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Uzbekistan

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Fortcoming Courses

- International Training course on RS & GIS applications in Urban Studies at IIRS, Dehradun during August 14-Sep 15, 2006.
- Fifth 9 month Post Graduate course in Satellite Meteorology & Global Climate at SAC, Ahmedabad from August 1, 2006.
- Fifth 9 month Post Graduate course in Space & Atmospheric Sciences at PRL, Ahmedabad from August 1, 2006.

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CSSTEAP welcomes the views and opinions of the readers of Newsletter. Short communications on space science and technology education which may be relevant to Asia Pacific Region are also