Centre for Space Science and Technology Education in Asia and the Pacific

Announces

FOURTEENTH POST GRADUATE COURSE in

SATELLITE COMMUNICATIONS

&

FIFTH POST GRADUATE COURSE

ìn

GLOBAL NAVIGATION SATELLITE SYSTEM







Organized by

Centre for Space Science and Technology
Education in Asia and the Pacific (CSSTEAP)

(Affiliated to the United Nations)

Conducted by:

Space Applications Centre (SAC), ISRO

Academic Year

2024 - 2025

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Post Graduate Courses on SATCOM & GNSS

Background

Satellite Communications and Global Navigation are an integral part of the modern life across the world. From the last few decades, the use of space technology for welfare of mankind and overall development of the humanity is growing exponentially. SATCOM (Satellite Communication) has been a trusted choice, not only for the communications needs but also for economic and societal growth and for ensuring the safety and security. Similarly, the Global Navigation Satellite system, (GNSS) has also proliferated into human lifestyles and has become an integral part of both rural and urban societies. SATCOM and GNSS provided several advantages, including their ubiquitous and resilient nature.

In addition to the conventional usage of telephony, television and radio broadcasting services, etc. satellite communications play important roles in banking, transport, news gathering and various other societal applications. Vis-à-vis, satellite based navigation positioning has become a standard, precise and easy way for navigation. GNSS is used today is every developed and developing countries of the world for purposes like vehicle guidance, transportation, Search & Rescue, mapping urban planning, precision timing etc. in both civilian and strategic sectors.

For sustainable development in Asia and the Pacific, all concerned countries are required to have access to space technology so that the benefits obtained can be shared across them. An essential pre requisite to involving in these prospects is the building of indigenous capacities for the development and utilization of space science and technology in societal development. However, there is still a considerable gap between the technology developing and disseminating the knowledge and information to the communities utilizing the application. This gap can be bridged by training the professionals, researchers and user groups at different levels by transferring the state of art technology to the concerned community through capacity building. The awareness of various existing and upcoming positioning systems and the knowledge of the concerned technology, among the decision makers would be helpful in effective use of high-end navigation and positioning systems for development of human community.

Keeping this in view, the Centre for Space Science and Technology Education in Asia & the Pacific (CSSTEAP) is offering a 9-month post-graduate diploma course in Satellite Communications (SATCOM-14) & Global Navigation Satellite System (GNSS-05) with provisions for integrated M.Tech. degree

About CSSTEAP

All countries should have access to space technology and must share the benefits. An essential pre requisite to partaking in these opportunities is the building of various indigenous capacities for the development and utilization of space science and technology. In recognition of such a pre requisite, a consensus has emerged within the international community that if effective assimilation and appropriate application of space technology are to succeed in the developing countries, devoted efforts must be made for capacity building at the local level, for the development of necessary high-level knowledge and expertise in space technology fields. Towards this end, the United Nations General Assembly had called for the establishment of Centres of Space Science and Technology Education at the regional level in the developing countries.

Under the auspices of the United Nations, through its Office for Outer Space Affairs (UNOOSA), six regional Centres are established on the basis of regions that correspond to the United Nations Economic Commissions: Asia and the Pacific (India, China), Latin America and the Caribbean (Brazil & Mexico), Africa (Morocco, Nigeria) and Western Asia (Jordan). All of these Six Centres are affiliated to the United Nations through UNOOSA. These Centres use existing facilities and expertise already available in education and other research institutions in their respective regions.

The Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), affiliated to the United Nations was established in India in November, 1995. The Centre's headquarter is established in Dehradun, India at the Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Government of India, Dehradun. For conducting its programs, CSSTEAP has arrangements with Department of Space (DoS) at its campuses at:

- Space Applications Centre at Ahmedabad
- · Physical Research Laboratory, Ahmedabad
- Prof U R Rao Satellite Centre (URSC), Bengaluru
- · Indian Institute of Remote Sensing, Dehradun and
- National Remote Sensing Centre (NRSC), Hyderabad

GOALS OF CSSTEAP

CSSTEAP is an education and research institution, capable of high attainments in the development and transmission of knowledge in the fields of space science and technology. The Centre offers best possible education, research and application experience to its participants in all its programs. The principal goal of the Centre is development of skills and knowledge of university educators and researchers, engineers, application scientists and

government officials through rigorous theory, research, applications, field exercises and pilot-projects in those aspects of space science and technology that can enhance social and economic development in each country. The programs aim at development of indigenous capability of participating countries, in designing and implementing space-based research and applications programs. The Centre will also foster continuing education programs for its graduates and awareness programs for policy and decision-makers and the general public.

It should be emphasized that the overall objective of the centre is to assist participating countries in developing and enhancing the knowledge and skills of their citizens in relevant aspects of space science and technology in order that such individuals can effectively contribute to national development programs.

AFFILIATION TO THE UNITED NATIONS

The Centre has entered into a cooperative agreement with the United Nations, by virtue of which the centre becomes a recipient of the cooperative academic activities from UN, which provides expert advice, educational curricula, technical support, necessary documentation and other appropriate assistances.

EDUCATIONAL PROGRAMS AND COURSES

The educational programs of the Centre are oriented towards the dissemination of knowledge in relevant aspects of space science and technology. The initial emphasis of the Centre is to concentrate on in-depth education, research & applications programs, and linkages to the global programs/databases, execution of pilot projects, continuing education and awareness and appraisal programs. Scholars and professionals, who contribute to the educational programs are renowned experts in their respective fields from both within and outside the region.

The activities of the Centre are guided by an International Governing Board, Intl. Academic Advisory Committee and Board of Studies. The current Governing Board details is listed in Appendix-2. These curricula have been reviewed by an international Advisory Committee of CSSTEAP from time to time and ratified by the UN Office for Outer Space Affairs (UNOOSA).

ACADEMIC ACTIVITIES

The academic activity is divided into two phases. Phase-I is of 9 months' duration and executed at the Centre in India. After successful completion of the Phase-I, the participants are encouraged to take up Phase-II research project of one-year duration in their home country. Phase-II allows participants to take up research project relevant to their home country or organization and apply the technologies. Centre also offers fellowships to the meritorious candidates to do research in Phase II in India. The centre has so far successfully conducted more than 60 PG courses across all its campuses.

SATCOM-14 and GNSS-05 Courses

The Centre for Space Science and Technology Education is Asia and the Pacific offers the following Post Graduate level courses:

- Remote Sensing and Geographic Information System (RS & GIS), organized every year
- Satellite Communications (SATCOM), organized every alternate (even) years
- Global Navigation Satellite Systems (GNSS), organized every alternate (even) years
- Satellite Meteorology (SATMET), organized every alternate (odd) years
- Space and Atmospheric Sciences (SAS), organized every alternate (odd) year
- Besides post graduate level courses, the Centre also conducts short courses /workshops on above subjects on specific themes of space science and technology.

In 2024-25 the 14^a Post Graduate Course in Satellite Communications (SATCOM-14) and the 5^b Post Graduate Course in GNSS (GNSS-05) is being offered for the participants from Asia and Pacific Countries. These two Post Graduate courses will be organized in two phases:

Phase-I (9 Months, in Campus, India)

- Core Modules, where the emphasis is on the development and enhancement of the knowledge and skills of university educators, researchers, engineers, application scientists and government officials.
- Pilot-Project, oriented towards planning and executing project which provides an opportunity to fine-tune the skills for executing theme-based study.
- The Centre may consider attending the course in online mode for the first 8 weeks for few selected foreign candidates, on special request by their nominating agencies.
 However, on arriving to India, the candidates have to fulfill all administrative and academic requirements, similar to other candidates who will join on time.

Phase-II (1 Year, in home country)

• Research Project for scholars to conduct and execute projects in their respective country with a view to transfer the technology in his/her organization. It will also be a test of the methodology and knowledge assimilated during Phase-I at the centre.

COURSE RECOGNITION BY ANDHRA UNIVERSITY

CSSTEAP has arrangement with Andhra University (Estd. 1926), Vishakhapatnam, India for awarding Master's (M. Tech.) degree subject to the eligibility criteria of the Andhra University. After successfully completing, the 9-months P.G. Diploma course candidate should complete one-year project work successfully for award of Master of Technology (M. Tech.) degree. The terms and conditions of this arrangement are subject to review from time to time by the Andhra University.

Course Objectives

The overall objective of this 9-months' course is to introduce the concepts of the existing technology of SATCOM/GNSS among the participants. The participants will be introduced and familiarized with the relevant topics of the subject with lectures, hands on activities, projects and many other means. With this, they shall be able to (i) know the background of the developments (ii) understand the working principles of the systems, (iii) become acquainted with the latest applications of SATCOM/GNSS and be able to develop new applications.

The participants will further be able to (a) serve as catalysts for furthering the skills and knowledge of other professionals in their countries, (b) Enhance the self-reliance by contributing to policy making, planning, development and management of SATCOM and GNSS systems and their applications in their countries.

Course Contents

The contents of the course are highly integrated and designed to maximize linkages across the following key themes. For more detailed description, refer to Appendix-1A & 1B

Fundamentals

Technology

Applications

- Background
- SATCOM/GNSS Basic Theory
- SATCOM/GNSS System Architecture
- SATCOM/GNSS Payloads
- SATCOM/GNSS Signals
- SATCOM/GNSS Receivers and Earth Stations
- Data, Standards and Special topics
- Services and Applications

INVITATION OF NOMINATION AND SPONSORSHIP

Nominations are invited from candidates in countries of Asia and the Pacific Region for the educational program of the Centre. Nominations of candidates will have to be endorsed/sponsored by recognized institutions (e.g. organization heads etc.) in their respective countries. Endorsing / sponsoring institutions should ensure that the returning scholar will contribute in development oriented activity in the area of newly acquired knowledge and skills. The nominating institution should also ensure that essential facilities and support would be provided to the returning participant pursuing M.Tech project for one-year period. The Centre will provide internet based scientific guidance.

Important Details

Selection

Course

Offline (In Person) Course mode:

Announcement: 01 February, 2024

Opening of Application Submission: 01 February, 2024

Closing of Application Submission: 25 April, 2024

Selection Letter to Candidates: 30 June, 2024

Number of Seats: 20 in SATCOM 18 in GNSS

Commencement of the Course: 01 September, 2024

Closing of the Course: 31 May, 2025

Who Should Apply

Professionals Development and Service Engineers and specialists

> Technical Professionals, Decision Makers and planners

Government officials

Students and Young researchers

Researchers and Faculties from relevant areas

Decision Makers

Researchers & Students

ELIGIBILITY

Bachelor's Degree in Electronics/Telecommunications/Electrical Engineering/Computer Science OR Master's degree in Science (Physics, Electronics) or equivalent with at least 3 years of experience in teaching/research or professional experience in the relevant field. The candidates should be nominated and/or sponsored by the organization for the disciplines they are working in.

How to Apply

Applicants should be made in <u>ONLINE MODE ONLY</u> by visiting the CSSTEAP website <u>www.cssteapun.org</u>. The details of the application procedure will be available at the web page. Applicants are required to follow the instructions given therein to successfully submit the application. Offline applications will NOT be considered.

SELECTION OF CANDIDATES

Based on the completed application forms received, the Centre will select the candidates as per selection criteria set by a Selection Committee. Selection criteria include satisfying eligibility requirement, country representation, proficiency in English language, sponsorship etc. Preference will be given to the sponsored candidates, whose nominating organization provides fully or partly international air travel (both ways) and/or fellowship.

IMPORTANT INFORMATION:

- 1. Interested candidates have to fill application form in online mode ONLY.
- 2. It is essential that full passport details are provided in the Application Form. Application Forms without passport details may not be considered.
- Candidate must also provide their Medical fitness details with the application, mentioning
 medical history for diseases requiring medical attention. If any information is hidden or
 found later, the Centre will be compelled to send the candidate back home at his own cost.
- 4. Applicant should attach copies of certificate of Medical Fitness Certificate as instructed in the application form. Originals should be brought with the candidate while joining the course, for verification.
- 5. Highest degree obtained (Degree certificate and mark sheet/grade card) to be provided
- 6. Applicants, who have done their higher studies in a medium (language) other than English, are required to submit TOEFL score or a diploma/certificate of English language issued by an accredited language institution in the country or by the local UNDP.
- 7. All the degree certificates, if not in English may please be translated in English and attested by the Head of the organization / notary or transcript in English can be submitted with seal.
 - In case of any issue in filling up the application form, please write us your problem to cssteap-admissions@iirs.gov.in

More About the Course

MEDIUM OF INSTRUCTION

The language of the courses is English. Proficiency both in written and spoken English is MUST. Candidates not proficient in English should not apply. Applicants, who have done their higher studies in a medium (language) other than English, are required to submit TOEFL score or a diploma/certificate of English language issued by an accredited language institution in the country or by the local UNDP. The head of the nominating/sponsoring organization need to affirm the applicant's competence in spoken and written English language. Preference will be given to those who have secured high score in TOEFL examination. Supporting document regarding the accreditation of the institute should be enclosed along with the application.

FACULTY

The faculty for the course consists of scientists and engineers in different fields, drawn from Space Applications Centre, other Centres of Indian Space Research Organisation (ISRO) and various other agencies/universities from India and other countries, mainly from Asia and the Pacific region. These experts have long and varied experience in the field of satellite communications, satellite technologies and applications. The core faculty has a strong scientific background with a number of publications, experience of participating in international scientific programs and organizing a number of courses to their credit.

TECHNICAL FACILITIES

Space Applications Centre has state of the art earth stations and various well-equipped laboratories, where, research & development on satellite communication and related topics are carried out. SAC has entire infrastructure to design, develop and fabricate the satellite payloads and earth stations. SAC also has capability for installation and commissioning of earth stations on turnkey basis and provides consultancy services to various agencies in building earth stations.





COURSE METHODS AND TEACHING AIDS

ISRO has developed expertise in satellite communication over the four decades and launched many communication satellites. Modern methods of teaching and instruction will be used for imparting training during the course. Soft copy of the lectures will be supplied to all the students. The course methods include classroom lectures, online lectures, video lectures, computer-based training packages, laboratory experiments, group discussions, demonstrations, seminar presentation and field work / case studies. Computer-based interactive packages will also be used for self-learning.





TECHNICAL TOURS

As part of the course, the participants may will have the opportunity to visit different centres of ISRO/Dept. of Space, Govt. of India and other organizations concerned with satellite communications and GNSS. However, this may depend upon various other situation arising at the time of the course. Attending technical tour, as per the course program as per the schedule is mandatory for all participants.

Participants are also taken to several places of interest and heritage in India during the technical tours. They are also encouraged in attending selected festivals during their stay in India.







EVALUATION PROCEDURE

The performance of the participants will be assessed through both external and internal theory tests, practical and computer-assisted interactive tests at periodic intervals during each semester of the course. Participants who are not able to qualify in the prescribed examinations for the 9-months course may be considered for award of only a "Certificate of Attendance" by the Centre.

ATTENDANCE

The centre keeps a strict observance on the necessary attendance of the participants. Absence during the course for reasons other than medical illness (certified by qualified doctors) is not encouraged. A minimum of 90% attendance is necessary for each individual participant for awarding the Diploma / Degree.





AWARD OF DIPLOMA/DEGREE

On successful completion of the Phase-I of the 9-months course, the Centre will award Post Graduate Diploma Certificate. Eligible participants, completing Phase-II Project work i.e. research project in home country satisfactorily within the stipulated period, may submit the work to Andhra University (India). The Andhra University will consider award of M.Tech.



degree, provided that the participant satisfies their eligibility criteria. However, it should be noted that, CSSTEAP allows only few selected participants to continue with M.Tech projects, depending upon their academic performance and interest towards higher studies.

COURSE EXPENSES AND FINANCIAL ASSISTANCE TO PARTICIPANTS

The overall expenses for the Course for each participant include Course Fee of Approx. US\$ 6000 besides cost for the international travel (to/from Ahmedabad), Local tours and Living expenses.

For this Course, Government of India has offered to waive off the course fee of US \$ 6000 per participant of the Asia-Pacific region selected by the Centre. Thus, no course fee is payable by the selected participants from the Asia Pacific region. However, the participants, who find suitable sponsorship or funding for meeting these expenses, will be given preference.

The Government of India offers living expenses of INR 31000/- per month fellowship* to only few selected candidates from Asia Pacific region, during their period of stay in India for the course.

In addition, the following allowances are also offered to all the students.

- Book & printing allowance INR 2,000 or actuals whichever is lesser (One time, on production of purchase bill)
- Project allowance-INR 1,500 (one time)
- Expenses of any technical tour conducted by CSSTEAP will be is also born by Govt. of India
- 90 % attendance is compulsory for receiving all the above financial assistances

Please note the following points in regard to the financial assistances provided

- *The selection of recipients of the fellowship will be solely at the discretion of CSSTEAP.
- Candidates proposing to avail the GOI Fellowship and the international travel assistance have to specifically request for the same in Application Form.
- Preference will be given to the self-sponsored candidates, whose nominating organization provides fully or partly international air travel (both ways) and/or fellowship.

HEALTH AND LIFE INSURANCE

Medical, life and disability insurance should be undertaken before reaching India, by the participants themselves or on their behalf by their nominating /sponsoring institute/organization for covering entire health and disability risks. No medical expenses will be borne by the Centre. However, participants will be paid medical expenses for minor ailments on actual basis (as out patients only) as and when such expenses are incurred. The center will have only limited liabilities as far as medical expenses are concerned in such cases. Candidates must clearly specify if they are suffering from any health disorders which may affect their study programmes. Candidate in sound physical and mental health only need to apply.

Participant, who is not covered by appropriate medical insurance while in India, would be required to take a medical insurance policy in India by themselves within 10 days from the day of their reaching India. Any cost pertaining to the medical emergency arising during the intermediate period has to be borne by the candidate.

Medical fitness certificate from Authorized government medical officer covering status of eye, chest (Tuberculosis), vaccinations, heart, lungs, liver, spleen, hydrocele, skin & V.D., Hepatitis, HIV, Yellow fever and other contagious diseases be enclosed with the application form.

(In case if any medical information requiring attention is hidden and if found during the course, the centre will be compelled to send the candidate back home and all expenses towards the same will be borne by the candidate/sponsoring organization.)

ACCOMMODATION

Accommodation for the participants will be arranged in SAC Guest House. Kitchenette facility will be available to the participants. A sum of INR 150/- (approx.) per day is to be paid by each participant towards accommodation charges. Accommodation and other charges may be revised by SAC/ISRO/CSSTEAP during the course, without any prior notice. Food and other



expenses such as cooking gas are to be borne by the participants. Spouse or any other person will NOT be allowed to stay along with the candidate in the hostel during the entire tenure of the course. Staying in hostel is compulsory for all the participants and staying outside is not allowed. Vehicle parking facility will not be provided to the participants within the office premises or in the guest house campus. No request in this regard will be entertained by CSSTEAP during the course. No religious or political activities are allowed within the office premises.

CONDUCT

Candidates have to strictly abide by the conduct rules and regulations of the institute. Each candidate has to give an undertaking in this regard at the time of registration. In case of the violations of the rules disciplinary action may be taken by the authorities as deemed appropriate. The decision will be conveyed to your sponsoring organization.

About CSSTEAP

CSSTEAP was established in India in November 1995 with its headquarters in Dehradun and over the past 28 years, the center has emerged as a Centre of Excellence in capacity building in the field of space science and technology application. The CSSTEAP programs are executed by the faculty of Department of Space at campuses namely, Indian Institute of Remote Sensing (IIRS), Dehradun, Space Applications Centre and Physical Research Laboratory, Ahmedabad and UR Rao Satellite Centre, Bengaluru. The training programs includes PG and Short Courses on RS & GIS, Satellite Communications, Satellite Meteorology and Global Climate, Space & Atmospheric Science, Global Navigation Satellite Systems, Small Satellite Missions and DRR regularly. Besides this, many short courses, webinars, MOOC and workshops on various themes are also organized. For more information visit www.cssteapun.org.



Dr. R. P. Singh Director, CSSTEAP

About SAC

Space Applications Centre (SAC), one of the major centers of the Indian Space Research Organization, is engaged in the research and development of applications of Space Technology in the field of Communications, Remote Sensing, Meteorology, and Satellite Navigation. Its achievements include development of communication, navigation and meteorological payloads and designing various applications. SAC has immensely contributed in the recent ISRO achievement of successful soft landing on moon by delivering important payloads like camera, altimeter etc. SAC has one of the biggest cleanrooms in Asia where the satellite payloads are integrated and tested. This centre is conducting CSSTEAP courses since 1996 and provides its infrastructure to conduct the courses to the students of CSSTEAP. For more information, visit www.sac.gov.in



Shri Nilesh Desai Director, SAC

Contact Us



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Appendix 1A

Credit System for PG Course in Satellite Communications (SATCOM-14)

PAPER	SUBJECTS	CREDITS
	SEMESTER-I	
MSAT.I.1A	Foundation Course	3
MSAT.I.1B	Foundation Lab	1
MSAT.I.2A	Communication System	4
MSAT.I.2B	Communication System Lab	2
MSAT.I.3A	Satellite Technology	7
MSAT.I.3B	Satellite Technology Lab	3
MSAT.I.4A	Digital Signal Processing	3
MSAT.I.4B	Digital Signal Processing Lab	1
MSAT.I.5A	Modulation, Multiplexing and Multiple Access	3
MSAT.I.5B	Modulation, Multiplexing and Multiple Access lab	1
MSAT.I.6	Seminar	2
	Semester-I Total Credits	30
	SEMESTER-II	
MSAT.II.1A	Earth Station Technology	4
MSAT.II.1B	Earth Station Technology Lab	2
MSAT.II.2A	SATCOM Services	4
MSAT.II.2B	SATCOM Services Lab	2
MSAT.II.3A	Applications and Trends in Satellite Communications	3
MSAT.II.3B	Applications and Trends in Satellite Communications Lab	1
MSAT.II.4A	SATCOM - Planning, Management and Operation	3
MSAT.II.4B	SATCOM - Planning, Management and Operation Lab	1
MSAT.II.5	Pilot Project	10
	Semester-II Total Credits	30
	TOTAL	60

Appendix 1B

Credit System for PG Course in GNSS (GNSS-05)

PAPER	SUBJECTS	CREDITS
	SEMESTER-I	
MGNSS.I.1A	Foundation Course	3
MGNSS.I.1B	Foundation Lab	1
MGNSS.I.2A	Fundamentals of NAVCOM	2
MGNSS.I.2B	Fundamentals of NAVCOM Lab	2
MGNSS.I.3A	GNSS Signals and Systems	5
MGNSS.I.3B	GNSS Signals and Systems Lab	3
MGNSS.I.4A	Navigation Receivers	4
MGNSS.I.4B	Navigation Receivers Lab	2
MGNSS.I.5A	Position Determination Techniques	4
MGNSS.I.5B	Position Determination Techniques lab	2
MGNSS.I.6	Seminar	2
	Semester-I Total Credits	30
	SEMESTER-II	
MGNSS.II.1A	Advanced receivers and Augmented Systems	4
MGNSS.II.1B	Advanced receivers and Augmented Systems Lab	2
MGNSS.II.2A	GNSS/INSS Integrated Navigation	3
MGNSS.II.2B	GNSS/INSS Integrated Navigation Lab	1
MGNSS.II.3A	GNSS Applications	4
MGNSS.II.3B	GNSS Applications Lab	2
MGNSS.II.4A	Space Weather and GNSS	2
MGNSS.II.4B	Space Weather and GNSS Lab	2
MGNSS.II.5	Pilot Project	10
	Semester-II Total Credits	30
	TOTAL	60

Appendix 2



Governing Board Members and Special Invitees during 28th Governing Board Meeting held on December 12, 2023

Governing Board Members

CHAIRMAN

SHRI S. SOMANATH INDIA

Members

Md. Azizur Rahman Bangladesh

Dr. Hong Yong IL

DPR Korea

Prof. Dr. Erna Sri Adiningsih Indonesia

Mr. Arman Pishini *Iran*

H.E. Mr. Zhalgasbayev Nurlan *Kazakhstan*

Prof. Abdykalykov Akymbek Abdykalykovich *Kyrgyz Republic*

H. E. Dato Muzafar Shah Mustafa *Malaysia*

Prof Budeebazar Avid *Mongolia*

Dr. Kyi Thwin *Myanmar*

H.E. Ms. Marlene Inemwin Moses *Nauru*

Mr. Revati Raman Paudel Nepal

H.E. Mr. Josel F. Ignacio *Philippines*

H.E. Mr. Vahagn Afyan Republic of Armenia

> Dr In Sang Moon Republic of Korea

Eng. Dr. S. Panawennage Sri Lanka

Dr. Pakorn Apaphant *Thailand*

Dr. Kamol M. Muminov *Uzbekistan*

Dr. Aarti Holla-Maini UN-OOSA (Observer)

Prof. Dr Freek van der Meer ITC, The Netherlands (Observer)

Secretary

Dr. Raghavendra Pratap Singh Director, CSSTEAP, India