

NaSAEAST-2013 (a) group of participants (b) & (c) technical session



Few snaps of NaSAEAST-2013 inaugural function, technical exhibition and cultural program

### <u>A two day workshop on</u>

## **REMOTE-SENSING TECHNIQUES IN THE EXPLORATION OF ATMOSPHERE AND NEAR EARTH ENVIRONMENT (RemTEANE-13)**

Society for Applied Microwave Electronics Engineering and Research (SAMEER), Mumbai in collaboration with Gauhati University, Guwahati had organised a two day workshop on *Remote-Sensing Techniques* during 14 and 15 November 2013. The workshop was held at the Phanidhar Datta Memorial Hall, Gauhati University. Scientists from SAMEER and Professors from Gauhati University had presented learned discourses on the working and design aspects of State of Art Remote sensing Techniques along with their application potentialities in exploration of atmosphere and near earth environment. Scientists, Engineers, Research scholars and Students from different parts of North East Region had participated in the workshop. This event created an

interactive platform between experts and the participants for achieving inputs for both fundamental and application oriented problems related to the subject matter of the workshop, through exchange of ideas and thoughts. The workshop was a success.

The Brochure ,A few Photographs of the event and the program are enclosed herewith

### Patron Dr Mridul Hazarika

Vice-Chancellor

National Organizing Committee Members: Dr. A K Barbara, Prof. Emeritus , Department of Physics, GU BM Bayeja , Sr. Director & Group Coordinator, R&D in CC&BT, Deity Dr. AL Das, Director, SAMEER, Mumbai Dr. S K Sarkar, NPL, New Delhi Mrs. J V Chande, SAMEER, Mumbai Dr. K Chalapati, SAMEER, Mumbai

### Convener

Prof. M Devi, Department of Physics, GU Dr. K P Ray, SAMEER, Mumbai

Dr. A Agarwal, SAMEER, Mumbai Prof. A <u>Gohain Boruah</u>, Department of Physics, GU Prof. D Sarkar, Department of Physics, GU Prof. P H Talukdar, Department of USIC & Instrumentation, GU Mr. A Sarma, Department of Computer Science, GU Dr. K Bora, Department of Physics, GU Dr. K Kalita, Department of Physics, GU Dr. M P C Kalita, Department of Physics, GU Dr. K Prakash, GU Dr. M Saikia, GU Mr. A J D Sarma, GU Mr. P C Kalita Student Members

Hirakiyoti Goswami, SAMEER, Mumbai Santanu Kalita, Department of Computer Science, GU Subrat Das, Department of Computer Science, GU Alaka Medhi, Department of Physics, GU Bandita Choudhury, Department of Physics, GU Runmi Athparia, Department of Physics, GU



SAMEER, Mumbai is a premier R & D Laboratory dedicated to research, design and development in the field of RF and Microwave systems. SAMEER is developing the state of the art active aperture ST Radar indigenously, with support from the parent ministry DeitY, MC&IT, Govt. of India. SAMEER is collaborating with Gauhati University, which is a host University, for housing this world class instrument. The RemTEANE-13 workshop is designed to expound to the designed to expound to the academicians, scientists, researchers and students about the potentialities of the instruments, mainly the RADARS. This will lead to optimize the scientific utility of ST Radar once it is installed and commissioned.

### Relevant activities at Department of Physics, GU:

The department of Physics, Gauhati University (GU) was founded in 1953. Since its establishment, the department has devoted itself in pursuance of research and application of Physics in specialized branches. This endeavor has generated research groups in concerned areas; the core organizing members of this workshop is engaged in electronics and associated areas of research. Starting from the scratches, the group has made contributions in the field of Remote Sensing by creation of state of art systems like Lidar, Dial , Sodar, Disdrometer at GU and in problems related to earthquake and hazard predictions. The team has received a ST-Radar at GU for the NE region and has earned a core position in a collaborative program of West Pacific Region for floating micro satellite families for earthquake prediction research.

Workshop Subjects :

The following deliberations will be presented by the

- 2.
- 3.
- 4. The Proposed ST Radar facility at GU and its
- 5. Remote sensing techniques in exploration of near earth environment
- 6. LIDAR: its potentiality to understand in cloud aerosol interaction

participants related to above topics. A one page abstract should reach the convener, GU by Qth November, 2013.

#### **Registration:**

There is no registration fee for the workshop

### Accommodation and Travel support :

Local hospitality, accommodation (on request) and transportation to the venue will be provided . However travel support will be offered subject to the availability of fund.

Interested participants are requested to contact the convener ,  $\ensuremath{\text{GU}}$ 

Contact Persons: E-mail: md555@sify.com kpray@sameer.gov.in

Brochure of RemTEANE-13

A TWO DAY WORKSHOP ON

SAMEER



REMOTE-SENSING TECHNIQUES IN THE **EXPLORATION OF ATMOSPHERE AND** NEAR EARTH ENVIRONMENT (RemTEANE-13)



Organized by Gauhati University SAMEER, Mumbai and ESES

Date: 14-15 November Venue: Phani Dhar Datta Seminar Hall, Gauhati University Assam-781014

Scientists from SAMEER and Gauhati University:

- Radar : Concepts and applications
- SODAR: Design and application
- Cloud Radar and application
- potential applications
- 7. Overall view of the remote-sensing techniques

### **Contribution from participants:**

A short session is organized on contribution from



Few snaps of inaugural function, concluding session and group of participants of RemTEANE-13

# <u>launching of *"International Journal of Electronics and Applied Research (IJEAR)"* and holding of seminars and workshops .</u>

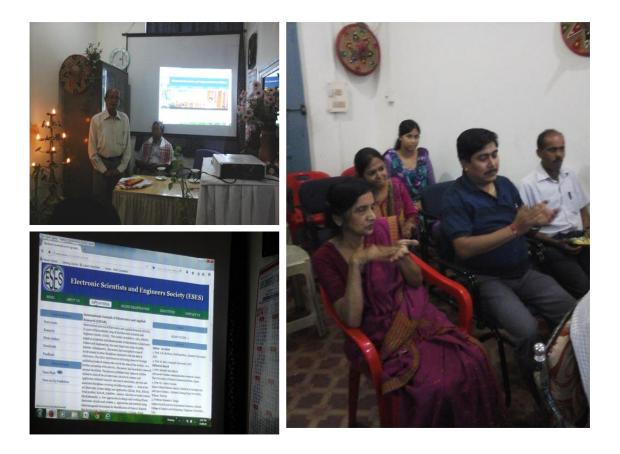
International Journal of Electronics and Applied Research (IJEAR), is a part of the academic wing of the Electronic Scientist and Engineers Society (ESES). This Society founded in 1984, initially aimed at promotion and dissemination of information in Electronic Science and Engineering, the most important

areas of public interest. Subsequently, the society had enlarged its scope of involvement in other disciplines associated with the field of electronics. The ESES contributes in initiating research through publishing books of science relevant to the aims of the Society. *As a further promotion of its activity, the society has launched a research journal the IJEAR. The* journal *publishes* basic research articles related to state of the art electronic circuits & systems and application oriented research relevant to electronics, physics and associated disciplines covering the following topics:

- 1. State of the art Electronic system design and application (LIDAR, DIAL, SODAR, Wind profiler, RADAR, Satellites, Sensors, Microwave based systems like Radiometer.
- 2. New approaches in design and working of basic Electronic circuits and systems
- 3. Approaches and methods using Electromagnetic techniques for identification of Natural Hazards like Earthquake, Tsunami, Volcanic eruption, Cyclone, Worst weather spells.
- 4. Signal processing and Data mining (speech & image processing ; DTW, neural network, Botnet detection etc ; statistical data analysis.)
- 5. Understanding on Physics and dynamics of the atmosphere and near earth environment towards better predictability of climatic modification ; aerosol cloud interactive processes : observations through remote sensing systems , model and analytical computation.
- 6. High mode programming.

The society also keeps provision of inducting topics in addition to those mentioned in the list above, in special issues related to ESES workshops and seminars.

The journal aims at to encourage young scientists and engineers to involve themselves in research activities in the defined areas by providing an easy access to the work of International repute. It also offers a platform to the academic community mainly of developing countries to be abreast with the modern research and technical scenario in the stated disciplines at a relatively reduced cost. The Society keeps a provision to publish a periodic compilation of best published papers in the form of Books



Lunching of IJEAR, a few snaps 22 June 2014

### A visit to Northeastern Space and Application Centre (NESAC), Umium,

### <u>Meghalaya</u>

The ESES has patronized a academic visit of 4<sup>th</sup> semester MSc Physics student to NESAC Umium, Meghalaya. A team of 22 students accompanied by teachers and research scholars had a one day long program on 2<sup>nd</sup> May 2014 at this centre



The group of students visiting NESAC along with Mr. S. S. Kundu, Scientist of the center

## <u>National Seminar on Advances in Electronics and Allied Research</u>, organized at the Guahti University during December 27-30, 2014 :

### The NaSAEAST-2014 Committee:

Chief Patron: Dr. M Hazarika Vice-Chancellor, GU

#### Patron:

Dr. A L Das, Director, SAMEER, Mumbai Prof. A G Barua, Head, Dept. of Physics, GU Dr. R K Barman, Head, Science and Technology division, ASTEC Mr. G P Choudhury, President, G.B., Dimoria College

Advisor: Prof. T C Deka, Ex Head, Dept. of Zoology, GU Dr. H Deka, Principal, Dimoria College

President: Prof. A K Barbara Prof. Emeritus, Dept.of Physics, GU

Secretary: Prof. M Devi Dept. of Physics, GU

Joint Secretary: Dr. K Prakash Executive Member, ESES

Convener: Dr. A J D Sarma Dept. of Physics, Assam down town University

Jt-Convener: Dr. D Chakrabarty Handique Girls' College, Guwahati

Co-Convener: Mr. A K Buzarbaruah, Dept. of Physics, Dimoria college Dr. M Saikia, Executive Member, ESES Mr. H J Gowami, Executive Member, ESES

Treasurer: Ms. A Medhi, Executive Member, ESES

For details visit www.eses.co.in

### National Organising Committee Members:

Dr. K P Ray, Head, RFMS Division, SAMEER, Mumbai Dr. S K Sarkar, NPL, New Delhi Dr. B Singh, RBS College, Agra

### Local Organising Committee Members:

Prof. P H Talukdar, GU Dr. M K Barman , M.C. College Barpeta Prof. M P Bora, GU Prof. B Bhattacharya, GU Mr. A Sarma, GU Dr. D Hazarika , Assam Engineering College Dr. K Bora, GU Dr. K Kalita, GU Dr. K Kalita, GU Dr. K Kalita, GU Mr. P C Kalita, GU Mr. P C Kalita, GU Mr. A Rahman, Pub Kamrup College Mr. M Chakrabarty, IIT Guwahati Mr. B J Deka, Dimoria College Mr. A Sahman, Dimoria College Mr. A Kalita, GU

### **Student Members:**

Subrat Das, Dept. of Computer Science, GU Runmi Athparia, Dept. of Physics, GU Kritika Pathak, Dept. of Physics, GU Bandita Choudhury, Bajali College Himangshu Das, IIT Guwahati Hrishikesh Talukdar, Dept. of Physics, GU Gyandeep Saikia , Dept. of Physics, GU

> Contact Persons Prof. M Devi Secretary, ESES Dr. A J D Sarma Convener, NaSAEAST-2014 e-Maii: eses.assam@gmail.com Mobile: +91 9864056314, +91 9577385891



Advances in Electronics and Allied Science & Technology



Organised by Electronic Scientists and Engineers Society (ESES), Gauhati University and Dimoria College Date 27- 30 December, 2014

Venue Gauhati University (GU), Guwahati and Dimoria College, Khetri, Assam

NaSAEAST-2014 is a part of Annual Activities of the ESES

### BACKGROUND

Founded in 1984, the ESES initially aimed at promotion and dissemination of information in Electronic Science and Engineering, the most important areas of public interest. The core members of the Society being involved in research related to the field of Electronics, the society was grown under this discipline. Subsequently, it had enlarged its scope of involvement in other areas associated with the field of electronics.

In this year the ESES has entered thirty years of its foundation and as a part of celebrating this occasion the society has taken up activities such as launching of the 1st issue of its "International Journal of Electronics and Applied Research (IJEAR)". The IJEAR offers a platform to the academic community mainly of developing countries to be abreast with the modern research and technical scenario in the stated disciplines at a relatively reduced cost. The society keeps a provision to publish a periodic compilation of best published papers in the form of books.

One of the main goals of the society is to encourage young scientists and engineers in their pursuit of research by organizing research level seminar/conferences and interactive sessions with persons of eminence . The NaSAEAST-2014 is a part of such programmes organized in collaboration with Gauhati University and Dimoria College, Khetri, during December 27-30, 2014 .The objective of this meet is to lay a platform to researchers from academia and industry to discuss multiple aspects of many relevant problems of today and to exchange ideas and experiences towards their solutions.

The creation of academic environment and scientific mind set amongst the young generation through poster and model competitions is also a part of the ESES activities. The NaSAEAST-2014 in such an attempt, organizes a session on poster / working model competition for firesh graduate and post-graduate students.

### CALL FOR PAPER

Considering these aims and objectives, the NaSAEAST-2014, invites papers from scientists, engineers, academician, researchers and industrialists on the following themes:

- State of art electronic system design and application to fundamental and applied research
- Remote sensing techniques in exploration of causes to current atmospheric changes including natural hazards
- New approaches in the design of need based electronic systems and devices applicable to medical field and industry
- 4. Signal processing and Data Mining
- 5. Robotics and remote control systems
- 6. Computational methods in applied science and technology
- 7. Biotechnology
- 8. Nanotechnology

For promotion of innovative ideas and thought a session on poster / working model competition for fresh Graduate and post-graduate students is also arranged on the following themes.

- 1. Satellite and sensors including nano satellite
- 2. Robotics and application
- 3. Remote sensing and hazard monitoring
- 4. Embedded systems and application
- 5. Any other theme on applied science

#### ACCOMMODATION AND TRAVEL SUPPORT

Local hospitality, accommodation and transport to the venue will be provided. However , travel support will be offered subject to the availability of funds.

### SUBMISSION OF EXTENDED ABSTRACT

The participants may submit their extended abstracts to eses.assam@gmail.com conforming to any of the themes.

Last date of submission of abstract is 15/11/2014 Acceptance of abstracts will be intimated by 10/12/2014

The abstract should be limited to one single spaced A4 size page with following specifications

- a. The title: 14pt, bold
- b. The authors name and address: 12 pt
- c. Text of the abstract: 11 pt

E-mail address of the first author must be provided. The presented papers may be published in a referred journal, the IJEAR.

### REGISTRATION

Scientists/ Enginee	Rs.	1000.00 800.00	(non-ESES member) (ESES member)
Research Scholar:			
	Rs.	500.00	(non-ESES member)
	Rs.	400.00	(ESES member)
Student:			
	Rs.	200.00	(non-ESES member)
	Rs.	150.00	(ESES member)
Professional/Indust	rialist	/Compan	y:
	Rs.	2000.00	

### **GUWAHATI WEATHER**

The temperature during the period may vary from a minimum of  $10^{\circ}$  C to a maximum of  $21^{\circ}$  C and the relative humidity may range from a minimum of 50% to a maximum of 85%.