



# CALCUTTA SECTION

Geo code R0 01 37

**2008**

## PART A - SECTION SUMMARY

### A.1 Executive Summary

- ✓ One day **mini-colloquium** organized jointly by Calcutta Section and EDS chapter at Sikkim Manipal Institute of Technology, Sikkim on 6<sup>th</sup>. March,2008 as an Outreach Program supported by IEEE Region 10 SSVR grants
- ✓ Workshop on "EM Theory and Antenna" organized by AP-MTT chapter of the Section with many well known speakers from abroad at Heritage Institute of Technology, Kolkata on 27<sup>th</sup> November 2008. The event was followed by a Banquet meeting with delegates from IEEE MTT Section and IEEE Head Quarter.
- ✓ The **Celebration for the 30 years** of the formation of IEEE Calcutta Section (1978-2008) was held by organizing a one –day conference **CALCON' 08** on November 24, 2008 at Stadel ,Gate-3, Yubabharati Stadium, Saltlake, Kolkata 7000103. The Theme of the conference was " Advances in Electro-Technology".
- ✓ WIE-AG , IEEE India Council and IEEE Calcutta Section jointly organized first **out reach program** at BITM, Suri on 11<sup>th</sup> April ,2008 and the second one at Women's Polytechnic, Chandannagar on 15<sup>th</sup> Nov.2008.
- ✓ **WIE, Affinity Group** belonging to IEEE Calcutta Section has earned the well deserved '**2007 WIE Affinity Group of the Year**'
- ✓ PES Chapter organized a short term course on 'Digital Signal Processing' between 7<sup>th</sup>. & 12<sup>th</sup>. July, 2008 and one day seminar on 'Roadmap of Power sector in India' on 14<sup>th</sup>. November, 2008.
- ✓ **PES Chapter** bagged **High Performance Chapter Award (HPCA) for eighth time** in a row.
- ✓ **COMSOC Chapter** has received the **Communication Society Chapter Achievement Award**
- ✓ GOLD AG organized 2<sup>nd</sup> National Conference on **Recent Trends in Information systems (ReTIS 2008)** held at Department of CSE JU during February 7-9,2008. It was sponsored jointly by IEEE Calcutta Section.
- ✓ Formation of Student Branch at National Institute of Technology at Jamshedpur.
- ✓ Observed of **World Telecommunication Day**.

- ✓ Section organized a special meeting of all IEEE volunteers of Section and Chapters with [Region- 10 Director, Prof. Janina Mazierska](#) during her [visit](#) on February 6, 2008.

## A.2 Financial Report

Opening Balance: **Rs. 17,17,482.64**

Income: Rs. 15,83,186.73

Expenses: Rs. 17,79,989.85

Closing Balance: **Rs. 15,20,679.52**

## A.3 List of Section Officer and Executive Committee Members

Prof. Kalyan K Mallik	-	Chairman
Prof. Debasish Saha	-	Vice-Chairman
Prof. Chandan Kumar Sarkar	-	Vice-Chairman & Chairman EDS Chapter
Mr. Sanjay Kar Chowdhury	-	Secretary & Chairperson Membership Development
Dr.(Mrs) Iti Saha Misra	-	Treasurer
Prof. Salil Kumar Sanyal	-	Past Chairman
Prof. Rabindranath Nandi	-	Member & Chairman CAS Chapter
Mr. Kalyan Kumar Das Gupta	-	Member & Chairman Awards
Prof. Dipak Kumar Basu	-	Member
Prof. Rana Dattagupta	-	Member
Prof. Alak Kumar Das	-	Member
Prof. Nirmalendu Chatterjee	-	Member
Prof. Sujoy Basu	-	Member
Prof. Santosh Kumar Chowdhury	-	Member
Mr. Rabindra Nath Lahiri	-	Member
Mr. Tarak Kumar Bandyopadhyay	-	Member
Prof. Sujit Kumar Biswas	-	Member
Prof. Kesab Bhattacharya	-	Member
Prof. Mita Nasipuri	-	Member & Chairperson Computer Chapter
Dr. Gargi Keeni	-	Member & Chairperson Professional Activities
Prof. Pradip Kr. Saha	-	Member
Prof. Niladri Chakraborty	-	Member
Prof. Susmita Sur Koley	-	Member
Prof. Prasanta Kumar Basu	-	Member & Chairman Educational Activities Committee
Prof. Ajit Kumar Chattopadhyay	-	Ex-Officio Member & Chairman IA Chapter
Prof. Sivaji Chakravorti	-	Ex-Officio Member & Chairman PES Chapter
Dr. Swarup Mandal	-	Ex-Officio Member & Chairman COMSOC Chapter
Prof. Bhaskar Gupta	-	Ex-Officio Member, Chairman AP-MTT Chapter & Chairman Student Activities Committee
Prof Somenath Sarkar	-	Ex-Officio Member, Chairman LEOS Chapter
Dr. Jamuna Kanta Singh	-	Ex-Officio Member & Chairman GOLD Affinity Group and Chairman Newsletter
Prof. Nabanita Das	-	Ex-Officio Member & Chairperson WIE Affinity Group

## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Programs

- Effort in Membership Development: Through EXECOM Meeting, AGM, Special Drives, Technical Seminars/Symposia/ Workshops
- Evidence of retention of members: In the members roster
- GOLD, WIE and Infirmity Group Activity: Two Affinity groups of IEEE Calcutta Section, GOLD and WIE have been very active in organizing various Seminars and Technical talks. In particular GOLD AG successfully in organized 2<sup>nd</sup> National Conference on '**Recent Trends in Information systems' (ReTIS-2008)** which was held at Department of CSE JU during February 7-9, 2008. It was sponsored jointly by IEEE Calcutta Section.

### B.2 Professional and Continuing Education Activities

Continuing Educational activities including conferences, technical event, training courses:

#### Technical Lecture Meetings organized by the Section

IEEE Calcutta Section has organized the following lecture meetings in various fields in the year 2006. The lectures were well attended and organized at various institutes with very good interactions among the members of industry and academia including students.

#### a. Technical Lecture

Sl.	Speaker & Affiliation	Topic	Venue	Remark	Date
1	Prof. T .K Sarkar, Syracuse University, USA	A look at some of the principles of Wireless Communication from a Maxwellian viewpoint	Seminar Room of Deptt. of EE,JU		Jan 3, 2008
2	Prof. B.N .Biswas, Academy of Technology	Application of Microwave Photonics to communications & Microwave Oscillator	Academy of Technology	Jointly with EDS & AP-MTT Chapters	Jan12, 2008
3	Dr. S. Sengupta Motorola,UAE	Cellular Technology	Committee Room of the Deptt. Of ETCE,JU		Feb 1, 2008
4	Prof S. Mukhopadhyay, Massey University	Sensor for Food Processing	Committee Room, Deptt. of ETCE, JU	Jointly with EDS Chapter	Feb 4, 2008

	New Zealand				
5	Prof. D.Saha, IIM Kolkata	Improving TCP performances in Wireless/Mobile Networks: Challenges and solutions	A.Dey Memorial Hall, Deptt. of CSE JU	Jointly with GOLD AG	Feb 7, 2008
6	Prof. B. Bhattacharya, ISI,JU	Geometric Primitive in Digital images and applications	K.P.Bose Memorial Hall	Jointly with GOLD AG	Fed 8, 2008
7	Mr, K .Sarkar, Jadavpur University	Summarization of Multiple Medical Documents	A. Dey Memorial Hall, Deptt. of CSE, JU	Jointly with GOLD AG	Feb 9, 2008
8	Dr. A.S.Mondal CEERI, Pilani	Modeling the visual Cortex Area1(V1) for Pattern Recognition	A. Dey Memorial Hall, Dept. CSE, JU		Feb 12, 2008
9	Prof.M.K.Kund u. ISI. Kolkata	Soft Computing methodologies: Applications in Image processing and Analysis	Seminar Hall of JIS College of Engineering		Feb 23, 2008
10	Prof. S. Deleonibus Grenoble , France	CMOS at the end of the roadmap and its extension beyond ITRS	Seminar Hall of Sikkim Manipal Institute of Technology	Jointly with EDS Chapter	Mar 6, 2008
11	Dr. S. Sen IIT, Kharagpur	Overview of Fractional Order Systems	Seminar Hall of Deptt of IEE, JU		Mar 28, 2008
12	Dr. S. Das, BARC, Mumbai	Essence of Fractional Calculus in Applied Sciences-Part 1	Seminar Hall of Deptt. of IEE,JU		Mar 29, 2008
13	Prof. K.K Mallik, Jadavpur University	ICT-Infrastructure and Application Trends	Seminar Hall of BIET,suri	Jointly with WIE AG	April 11, 2008
14	Prof. P.K. Basu, University of Calcutta	From Morse Code to Radio over Fibre	Seminar Hall of IEM, Salt Lake	Jointly with WIE AG	May 17, 2008
15	Prof. K.R.K.Rao, Texas Instruments, Bangalore	A perspective on Analog System Design	Subarna Jayanti Bhawan,JU		June 16, 2008

16	Mr.Anand K. Texas Instruments , Bangalore	Introduction to Audio Codecs	Subarna Jayanti Bhawan, JU		June 17, 2008
17	Mr. V.G.Thomas, Texas Instruments, Bangalore	Introduction to TI DSP kits	Subarna Jayanti Bhawan, JU		June 18, 2008

18	Prof. S. Das University of Texas at Arlington, USA	Sensor Networks and Smart Environments	Rabindra Okakura Hall, Salt Lake		July 11, 2008
19	Prof.S. Chakroborty, IIT,Kharagpur	Overview of Ultra- wideband Communications	Rabindra Okakura Hall, Salt Lake		July 12, 2008
21	Dr. Iti Saha Misra, Jadavpur University	4G Cellular:Where we stand?	Seminar Hall of Women's Polytechnic, Chandannagar	Jointly with WIE AG	Nov 15, 2008
22	Dr. S. Roy, Utah State University,USA	VLSI-CAD Research at Utah State University	Committee Room of Deptt. of ETCE,JU		Nov 27, 2008
23	Dr.M.L.KAR, Cable Television Laboratories, USA	Broadband delivery over Cable Network in North America	Committee Room of Deptt. of ETCE,JU		Dec 4, 2008
24	Prof. S.K.Mitra, University Of Southern California,USA	Image Processing using Quadratic Volterra Filters	Eastern Zonal Cultural Centre, Salt Lake		Dec 15, 2008
25	Prof. A.K. Nandi, The University of Liverpool,UK	Blind Signal Separation Independent Component Analysis	Seminar Hall of TEQIP Building, JU		Dec 20, 2008
26	Dr. G. Chattopadhyay, California Institute of Technology, USA	A 600 GHz Imaging Radar for Contraband Detection	Committee room of Deptt. of ETCE, JU		Dec 23, 2008

- b) The Section organized '**World Telecommunication and Information Society Day**' on 17 May 2008 and the following technical lectures were organized to mark the occasion

Sl.No.	Speaker and Affiliation	Topic	Venue	Remarks	Date
1	Prof P.K.Banerjee ETCE JU	Context aware application for mobile system beyond 3G	Institute of Engineering and Management Saltlake, Kolkata	Jointly with WIE-AG	May 17, 2008
2	Prof P.K.Basu I.R.P.E, C.U	From Morse Code to Radio over Fiber	-do-	-do-	-do-
3	Prof Nabanita Das ISI, Kolkata	Sensor Network Prospect, Challenges and Social Impacts	-do-	-do-	-do-
4	Dr Amitava Mukherjee IBM	Present Scenario and Future challenges in Pervasive Computing	-do-	-do-	-do-

- c) The section organized one day conference **CALCON '08**

The Celebration for the 30 years of the formation of IEEE Calcutta Section (1978-2008) was held by organizing a one –day conference CALCON' 08 on November 24, 2008 at Stadel ,Gate-3, Yubabharati Stadium, Saltlake, Kolkata 7000103. The Theme of the conference was " Advances in Electro-Technology". The inauguration of the conference was held at 9-30 AM. At the request of Dr. (Mrs) I. Saha Misra, Chairperson WIE-AG of IEEE Calcutta Section ,the dignitaries took their seats in the dais which include Prof. S.K. Sanyal, Chairman IEEE Calcutta Section, Prof .S. Sen Gupta, Vice Chancellor, West Bengal University of Technology and Chief Guest of the function, Prof S. Datta, Pro Vice-Chancellor, Jadavpur University and Guest of Honor in the function, Prof M. K. Mitra, Dean, FET Jadavpur University and Special Guest in the function and Prof .K.Bhattacharya, Organizing Chair of CALCON'08

Prof S.K. Sanyal in his welcome address mentioned about the activities of IEEE Calcutta Section since its inception in 1978. Both Prof. S. Datta and Prof M.K.Mitra stressed on the requirement of close interactions between the IEEE and Academic Institutions for mutual benefit. Prof S. Sen Gupta emphasized on the involvement of all Technical Institutions in

IEEE activities and formally inaugurated the conference by lighting traditional lamp. Finally, Prof K. Bhattacharya gave the formal vote of thanks.

In this conference about 25 IEEE Members and around 50 persons participated as the Registered Delegate. There were in total Four Invited Lectures – First two in the Pre – Lunch Session while the last two in the Post-Lunch Session. The details of the Invited Lectures are given below.

<b>Sl.No.</b>	<b><u>Speaker and Affiliation</u></b>	<b><u>Topic</u></b>
1	Prof S.N.Singh, Deptt of EE, IIT, Kanpur	Fundamentals of Competitive Electricity Market
2	Prof, D.Dutta, Deptt of ECE, MSIT, Nazirabad, Kolkata-700150	Design Methodologies for Wavelength Routed Optical Backbone Network
3	Mr. S. Misra, GM, RS Software, Sector V, Salt Lake Kolkata-700091	Service Oriented Architecture- Applications and Challenges
4	Prof M.K.Mitra, Dean,FET, Jadavpur University, Kolkata -700032	Nano Technology

After the Technical Sessions there was a banquet at the lawn of the Stadel in which several IEEE members and their families took part.

### **OUTREACH ACTIVITIES**

IEEE Calcutta Section jointly with EDS Chapter organized one day mini-colloquium at SMIT on 6<sup>th</sup> March 2008. In addition to this mini- colloquium, two day conference was also organized in which Five Distinguished Lecturers of IEEE EDS Chapter were invited to present their talks. The colloquium and also the conference were well attended. The SMIT, Sikkim, IEEE Calcutta Section and Nalanda Engineering College, Bhubaneswar, Orissa provided the major support towards the logistics. This program generated a lot of interests among the various cross section of the people in the IEEE activities resulting in many new IEEE members.

WIE-AG , IEEE India Council and IEEE Calcutta Section jointly organized first out reach program at BITM, Suri on 11<sup>th</sup> April ,2008 and the second one at Women's Polytechnic, Chandannagar on 15<sup>th</sup> Nov.2008. Both these programs were very successful.

### **NATIONAL CONFERENCE**

National Conference on Research and Development in Hardware and Systems (CSI-RDHS 2008) organized by CSI, Kolkata Chapter, Kolkata, on June 20-21 2008

National Conference on Device Intelligent System and Communication & Networking (AEC-DISC 2008) organized by Deptt. of Electronics and Telecommunication Engineering, Asansol Engineering College, Asansol, on August 1-2, 2008

### **INTERNATIONAL CONFERENCE**

IEEE CALCUTTA SECTION

9<sup>th</sup> International Conference on Distributed Computing and Networking (ICDCN 2008) organized by Deptt. of Computer Science and Engineering, JU January 5-8,2008.

International Workshop on Frontiers in Electronics Information and Communication Engineering organized by Deptt. of ETCE. JU, on December 20, 2008

### **B.3 Students Activities**

- **Active Student Branches activity**

The IEEE Student Branch organized a Round Table Discussion on "Relevance of Microwave Education in Present Day Communication"

IIITG Student Branch organized a Seminar on "Interaction with Industries": jointly with HIT Student Branch.

- **Recruitment of student members**

The SAC Chairman in consultation with the Branch Counselors is doing a good job to increase the no. of Students joining IEEE. Lots of private Engineering Colleges are showing keen interest to form IEEE Student Branches.

- **Student paper Contest**

The WIE Affinity Group organized a one-day Student Paper and Model Design Contest, EDCC-2008 in collaboration with the IEEE Student Branch of Calcutta University.

- **Formation of New Student Branch**

A new IEEE Student Branch has already been formed at NIT Jamshedpur in 2008.

### **B.4 E-mail and Newsletter Activities, Home Page**

- **Number of hard print Newsletter:** One in September every year
- **Number of electronic Newsletters:** Same available in the website of the Section
- **Section, Chapters and Student Branches Web Pages:**
  - The IEEE CALCUTTA SECTION WEBSITE is active with address - [www.ewh.ieee.org/r10/calcutta](http://www.ewh.ieee.org/r10/calcutta)
  - Section and some of the Chapters have websites linked mutually. The
  - important activities are given in the website.

### **B.5 Awards & Accolades:**

WIE, Affinity Group belonging to IEEE Calcutta Section has earned the well deserved First Place in 2007 as WIE Affinity Group of the Year

COMSOC Chapter has received the Communication Society Chapter Achievement Award

Power & Energy Chapter bagged High Performance Chapter Award for 8<sup>th</sup>. year in row.

## B.6 Chapter Activities

- **IEEE CAS Chapter** organized One Day Educational Program ` A **Student Professional Awareness Conference (SPAC)** with a theme on advances in VLSI Circuits, Nano Devices and Communication Systems with a great success at Indian Institute of Chemical Engineers auditorium on 22<sup>nd</sup> August 2008 . The other activities of the Chapter include various technical talks
- **AP-MTT Chapter** organized one half day **Workshop** on "EM Theory and Antenna" at Heritage Institute of Technology on 27<sup>th</sup> November 2008 . A Banquet meeting with delegates from IEEE HQ and MTT USA was also held after the Workshop on the same day at Mainland China Gurusaday Road. The AP-MTT Chapter also arranged one conference on " Microwave in Space" on 8<sup>th</sup> September 2008 in which many well known speakers talked on different aspects. Besides these two conferences, many Technical Lectures were organized by the Chapter throughout the year
- **The IEEE LEOS Chapter** was very active in organizing several lectures in various categories including ten technical talks by the distinguished speakers. These lecture were arranged at various Institutes and Universities to make the activities of the Chapter well publicized. One **Educational Program** was also arranged on 28<sup>th</sup> February 2008 to commemorate the invention of Sir CV Raman
- **EDS Chapter** jointly with Section organized a **mini-colloquium** of **DL speakers** at SMIT Sikkim on 6-8 March 2008. In addition to mini colloquium, there was a two day National Conference with invited speakers from the various parts of India as well as the speakers from SMIT. The Chapter also arranged several DL talks through out the year 2008
- **The IA Chapter** successfully organized Seven Technical Lectures. The Chairman of IA Chapter, Prof. A. K. Chattopadhyay delivered Technical Lectures as IEEE Distinguished Lecturer in various countries of South America
- **The Computer Chapter**, IEEE Calcutta Section in collaboration with the Department of Computer Science & Engineering, University of Calcutta, organized a seminar on "Recent Trends in Computing" on January 04, 2008. The venue of the seminar was Meghnad Saha Auditorium, Rashbehari Siksha Prangan, University of Calcutta. Two lectures were delivered in the seminar by eminent speakers: Prof. Sajal K. Das, UTA, USA and Prof. S. Ghosh, Univ. Iowa, USA. In addition the Chapter also successfully organized several Technical Lectures of current topic which were all well attended
- **The PES Chapter** organized a **short term course** on DSP during July 7-12, 2008 and also a one-day Seminar on "Roadmap of Power Sector in India" on November 14, 2008. In addition the Chapter also organized several Technical Lectures and one Distinguished Lecture Program on 'Gas Insulated System'.
- **The COMSOC Chapter** organized IEEE **Distinguished Lecture Program** where Dr.Bhumip Khasnabish,Verizon Lab, USA, gave a lecture on "Converged Services and NGN: Implementation and Implications" in January 08.

## **PART C – GOALS AND PLANS**

### **C.1 Goals**

- To increase the no. of members by organizing more nos. Seminars, Educational Activities, Workshops/Symposia etc.
- To increase the outreach activities by organizing IEEE Programs outside the City of Kolkata.

### **C.2 Implementation Plans**

- To organize Special Membership Drives.
- To organize IEEE Awareness Programs.
- To organize Student Programs.
- To organize Seminars/Symposia/Workshops in the recent State-of-the-art Technologies

## **PART D - OTHERS**

### **D.1 Relationship with National Societies**

- The relationship with National Societies like The Institution of Engineers (India), The Institute of Electronics & Telecommunication Engineers India, Computer Society of India is cordial.

### **D.2 Special Events**

- More IEEE Programs in Private Engineering Colleges in and around Kolkata, in other states like Orissa, Assam, Jharkhand, Sikkim etc.

### **D.3 Concern areas and suggestions**

- It is suggested that to promote Student Activities, the newly formed Student Branches must be supported with start-up funds of US \$ 1000.00 for **two** consecutive years in addition to usual Rebate (i.e. US\$ 500.00 for each year).