

Kharagpur Section

PART A - SECTION SUMMARY

A.1 Executive Summary –

- Section Executive Committee Member List

Dr. Pabitra Mitra (Chair)

Dr. Alok Kanti Deb (Vice Chair, Treasurer and Control System Society Chair)

Dr. Amitabha Bhattacharya (Secretary and Student Branch Advisor)

Dr. Anirban Mukherjee (Engineering in Medicine and Biology Society Chair)

Dr. Mrityunjoy Chakraborty (Signal Processing Society Chair)

Dr. Chittaranjan Mandal (Member and Membership Development Chair)

Dr. Debdoot Sheet (Member and Web Media Chair)

Dr. Shailendra Kumar Varshney (Member)

Dr. Sudip Misra (Member)

Dr. Chandan Chakraborty (Member)

Dr. Raja Datta (Past Chair)

- Section Highlights

IEEE Kharagpur Section constituent bodies are:

Kharagpur Section

IIT Kharagpur Student Branch

HIT Student Branch

Women in Engineering Affiliate

Haldia Subsection

Control Systems Society

Engineering in Medicine Biology Society

Signal Processing Society

Antenna and Propagation Society (under processing)

IEEE EMB Student Club

IEEE SPS Student Branch Chapter

Membership statistics:

Associate Member 3

Fellow 1

Graduate Student Member 162

Life Senior Member 3

Member 112

Senior Member 32

Student Member 79

Total: 392

- Major Events (International, National)
Technically cosponsored few national conferences

- Major Student and Affinity Group Activities

Student Branch Activities:

Linux fest

Workshop on LaTeX

Kharagpur Data Analytics Group

Workshop on Matlab

Hardware Hackathon

Membership Development Boot Camp

WiE Activities:

STAR activity to attract women in engineering profession undertaken in schools around Kharagpur

WiE Leadership Summit 2015 in IIT Kharagpur

- Awards
Outstanding Section Membership Retention Performance 2015
WiE STAR activity award

A.2 Financial Report – (Please follow the format given below)

- Summary (as per submitted L50)
Financial report submitted via Netsuite

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.: 529
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - Membership boot camps were organized
 - Social gathering were organized for membership retention
 - Personal campaigning was undertaken by executive committee members

B.2 Chapter Activities

1. Total number of Chapters in the Section: 3
2. Number of Chapters formed in the current year: 2 + 1 more under processing
3. Number of active Chapters (Chapters who have reported required number of meetings during the year): 3
4. Summary of Chapter activities
CSS Chapter organized 6 technical talks
EMB Chapter organized 6 technical talks
SPS Chapter organized 1 technical talk

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

Kharagpur Section seminar activities: 8
CSS Chapter seminars: 6
EMB Chapter seminar: 6
SPS Chapter seminar: 1
WiE Chapter Seminar: 6
Total: 27

Table of Seminars:

Title	Date
Recent Advances in Computational and Optimization Methods for Active Vibrati...	15-January
A Massive Drive for IT Literacy through Open Source Software - KHARAGPUR SEC...	22-January
Bottom-up Integration of Data-Aware Communities - KHARAGPUR SECTION	06-February
Test Pattern Generation using Boolean Proof Engines - KHARAGPUR SECTION	20-February
Semantic and Fuzzy Modeling for Human Behavior Recognition in Smart Spaces...	02-March
IEEE Workshop on Introduction to MATLAB - KHARAGPUR WOMEN IN ENGINEERING AFF...	12-March
IEEE Workshop on Thesis Writing using LaTeX - KHARAGPUR WOMEN IN ENGINEERING...	18-March
Biomedical Big Data Analytics for Patient Centric & Outcome Driven Health Ca...	20-March
ARTSENS - An Automatic Device for Comprehensive Evaluation of Arterial Stiff...	30-April
Functional Nanomaterials: Targeted Imaging Endoylosis using integrated ligh...	06-May

Bio engineering - KHARAGPUR EMB18 CHAPTER	06-May
Robots with Light - KHARAGPUR EMB18 CHAPTER	01-June
Achievable Rates and Upper Bounds on the Capacity of Optical Fiber Channels ...	27-July
Innovization: Discovery of Innovative Solution Principles through Multi-Obje...	30-July
Applications of Machine Learning in Haptic Perception - KHARAGPUR SP01 CHAPT...	31-July
Proof Techniques : Boolean (DDs, satisfiability), Word-level (Extensions of ...	17-August
Verification : Simulation vs Formal, Constrained Random Simulation,	18-August
Debugging : Finding Faults, Error Assumption, Corrections Test: Black box vs ...	19-August
Network Service Provisions in Future Power Grid - KHARAGPUR WOMEN IN ENGINEE...	26-August
Antenna Systems for 21st Century Satellite Communication Payloads - KHARAGPU...	24-September
Noise Enhanced Information System - KHARAGPUR SECTION	03-November
Perceptual Organisation in Affective Computing - KHARAGPUR CS23 CHAPTER	24-November
Design of an Embedded System for Low cost Haptic Rendering of Emotion Expres...	25-November
Generalized Closed form Approximations for Pull-in Characteristics of Electr...	04-December
Micro Grid Cluster - KHARAGPUR WOMEN IN ENGINEERING AFFINITY GROUP	09-December

B.4 Students Activities

5. Total number of Student Branches in the Section: 2
6. Number of Student Branches formed in the current year: 0
7. Section level student activities (student congress, paper and other contests, awards etc) : 2 student and WiE travel awards
8. Number of active Student Branches (Student Branches who have reported required number of meetings during the year): 2
9. Summary of Student Branch activities (Student Branch wise with attachment table/information)

IIT Kharagpur Student Branch:

Title	Date
The IEEE Student Branch organized a Seminar on Project Ara - Modular Smartphones and Their Applications by Mr. Khasim Syed Mohammed, Tech Lead, Android Engineering, Linaro, Bangalore, India	05-March
The IEEE Student Branch, EMB Student Club and WiE Affinity conducted a Workshop on Introduction to MATLAB	12-March
Workshop on LaTeX for Thesis Writing	18-March
Lecture on Biomedical Imaging Big Data Analytics for Personalized Care at the EE Seminar Room, Department of Electrical Engineering, IIT Kharagpur by Prof. May D. Wang, as a part of EMBS DLP program	19-March
Hardware hackathon: On "Happy Ageing: Ambient Assisted Living for Elderly" during. Total submission: 11 teams (34 students), finally selected 6 teams (18 students). Winner team "The Creators" designed a "smart arm" which was selected as 'top 10 technologies' in IEEE UPP mini projects competition and subsequently received a grant of \$240 for implementing the idea.	15-16-August
Student Seminar series: by Anirban Santara, title: "Deep Learning from a Novice Perspective and Recent Innovation from KGPians	11-August
Webinar on 'Technical writing with the help of Latex' was presented by Tamoghna Ojha, Sri Phani Krishna Karri, Debanjan Das. The webinar was organised by IEEE India SCT.	30-July
IEEE day celebrations. Agenda: Membership development boot camp, IEEE membership benefits, Recent Event and Opportunities with IEEE Student Branch, EMB Student Club, and WiE Affinity Group. The event concluded with Award distribution to Hardware Hackathon winners.	06-October
New Office Inauguration: The new office of IEEE kharagpur Section, Student Branch and its associated student bodies was inaugurated by Prof. P P Chakraborty, Honourable Director of IIT Kharagpur	07-October

Haldia Institute of Technology Student Branch

Title	Date
Robotix Workshop	Round the Year

B.5 Affinity Group Activities

10. Young Professional (YP): Yet to start activity
11. Women In Engineering (WIE)
 - Organized STAR Program in Schools in Kharagpur to encourage women in engineering
 - Organized WiE Leadership Summit 2015 in IIT Kharagpur
 - Organized regular technical seminars
12. Life Member: Not present

B.6 Awards & Recognition Activities

- Award constituted by the Section: NIL
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2015:
Outstanding Section Membership Retention Performance 2015
WiE STAR activity award

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year): NIL
- Home Page of the Section (give the URL and how often it is updated)
<http://ewh.ieee.org/r10/kharagpur>, event driven update
- Other means of contacts with Section members including social media
Section and Student Branch have their facebook pages. All activities are advertised via facebook.
Mailing listservers are also maintained and used for notification of all the activities

B.8 Industry Relations

- Membership growth and retention: New industry members are targeted
- Activities for/with industrial members: Field trips to industries are organized

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.: Several workshop on technology for disabled were organized
- SIGHT Activities: SIGHT proposals were submitted

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)
 - Field trip with family members are organized
 - AGM dinner is organized
 - IEEE day is celebrated

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
- Funding secured from the IEEE and external sources including sponsorships

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed : NIL
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections: NIL
- Joint activities with any other Section: Joint technical seminars were organized with Kolkata Section

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organising technical, educational and professional activities: Support is given to Haldia Sub section
- Joint activities for membership development: NIL
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section: Efforts are being made to constitute a Kolaghat Subsection

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

Regular organization of technical activities
 Maintaining an active student branch
 Organizing social functions
 Participating in outreach activities
 Organizing membership development bootcamps

C.6 Problems anticipated and suggestions for solutions, if any: Shortage of funds

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

Creation of student innovation labs.
 Creation of new societies
 Increasing outreach activities
 Organizing technical activities

D.2 Goals and Future Plans

Increase membership count
 Increase technical activity
 Enhance outreach programs
 Creation of new societies
 Increasing membership base by including undergraduate students
 Organizing international conferences

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

Identify new membership bases

Popularize Electrical and Electronics Engineering
Include interdisciplinary topics in scope of IEEE
Organize membership bootcamps
Offer innovative membership benefits and more networking with peers.