



**“WHEN YOU WANT TO KNOW HOW THINGS REALLY WORK,
STUDY THEM WHEN THEY’RE COMING APART.”**

-William Gibson

About the Department

The **Department of Electronics and Communication Engineering** of Siliguri Institute of Technology (NAAC Accredited) was established in the year of 1999. At present the department runs about 10 state-of-the-art laboratories for undergraduate and R&D activities. The department consists of qualified and experienced faculty and technical staff with noteworthy research background.

Message from the Principal

THE FACT OF LAUNCHING THE "ELECTRONIKA"-2K23 EDITION BY THE FACULTY, STAFF AND STUDENTS OF ECE DEPARTMENT OF SILIGURI INSTITUTE OF TECHNOLOGY GIVES ME IMMENSE PLEASURE. IT IS INDEED A MATTER OF PRIDE AND SATISFACTION HAVING THIS NEWSLETTER WHICH SHOWCASES THE PROGRESS IN THE AREAS OF ACADEMIC, EXTRACURRICULAR, FACULTY AND STUDENTS' ACHIEVEMENTS OF THE DEPARTMENT. ELECTRONIKA"-2K23 IS FOCUSED ON ALL SORTS OF ACTIVITIES UNDERTAKEN BY A DEPARTMENT AND OPENS THE OPPORTUNITY TO ENHANCE THE WRITING SKILLS AMONG THE MEMBERS. THIS WILL NOT ONLY BENEFIT THE STUDENTS WITH THE INFORMATION OF THEIR DEPARTMENTAL ACHIEVEMENTS BUT ALSO MOTIVATE AND ASPIRE OTHERS TO KNOW THE HEIGHTS ACHIEVED BY THE ECE DEPARTMENT. I CONGRATULATE THE EDITORIAL BOARD OF THIS NEWSLETTER WHO HAVE PLAYED A WONDERFUL ROLE IN ACCOMPLISHING THE TASK IN RECORD TIME. I EXPRESS MY DEEP SENSE OF GRATITUDE TO HOD, DR. DEBAJYOTI MISRA FOR UNDERTAKING THE TASK AND SUCCESSFUL COMPLETION OF THE SAME. ALSO MY HEARTFELT CONGRATULATIONS TO STAFF MEMBERS AND STUDENTS FOR THEIR FRUITFUL EFFORT. WITH ALL MY BEST WISHES.



**DR. MITHUN CHAKRABORTY,
PRINCIPAL , SIT**

Vision of the Department

To become a nationally recognized center of excellence that produces skilled, innovative and ethical engineers relevant for academics and industry.

Mission of the Department

- To offer qualitative Electronics and Communication engineering education and professional ethics of global standards through innovative methods of teaching and learning with practical orientation so as to prepare students for successful career / higher study.
- Foster culture of innovation and research in the field of Electronics & Communication engineering.
- To provide best learning environment to the students, faculty and staff members conducive to creating excellence in technical education.

Message from the HOD

We are delighted to unveil the ECE Department's Newsletter for the Academic Year 2023-24, showcasing the remarkable achievements and endeavors of our dedicated faculty and students. It is our hope that this publication will kindle the flames of enthusiasm within our students and foster a passion for groundbreaking research among our esteemed faculty members. Our department's core mission remains unwavering—to nurture confident technologists who embody not only technical prowess but also the values of Indian ethos. We take pride in offering an enriching learning environment, facilitated by a team of exceptionally qualified faculty, dedicated to inspiring students to hone their technical acumen and instill the ethos of teamwork. We extend our heartfelt appreciation to the diligent Electronika editorial board for their continued commitment to academic excellence. Best wishes for their continued outstanding contributions



**DR. DEBAJYOTI MISRA,
HOD, ECE**

Mr. Shuvadip Das, Ms. Joyeta Barman, Ms. Biplab Sarkar, Ms. Vaishnavi Sonar, Mr. Sumit Singh, Mr. Rajarshi Chakraborty, Mr. Suvrangshu Roy, Mr. Gopi Kumar & Mr. Aditya have been selected in Capgemini.



Mr. Vishesh Agarwal, Ms. Nikki Prasad, Ms. Keshar Gupta & Mr. Ravi Kumar Byahut have been placed in Virtusa.



It was a great accomplishment for **Ms. Ruparna Dutta, ECE 4th year** for being selected as a Research Scientist at ISRO Orbitx for Atal-Yaan.

Ms. Pronita Roy has been selected in Tata Consultancy Service (TCS).



Ms. Sujata Paul has been placed in LTIMindtree.



Ms. Pooja Kumari Prasad has been selected in TCS and Capgemini.

It was a great achievement for **Mr. Saptaparna Goswami, ECE 3rd year** for being selected as an Intern at ISRO Outreach Programme.

Congratulations to **Mr. Aniruddha Das** from **ECE 4th Year** for being winner at Smart India Hackathon-2022.



Mr. Gourav Agarwal has been selected in Capgemini and Hexaware.



Ms. Puja Karmakar has been selected in Cloudkaptan and Capgemini .

Mr. Azel Karthak has been selected in Capgemini and Exavalu.



Mr. Aniruddha Das has been selected in Prescriber 360.



Our students **Mr. Satyaki Sinha, Mr. Swarup Das, Mr. Yash Raj Ghosh, Mr. Shrijit Das, Mr. Subhranil Sarkar** from **ECE 3rd** year are working on a Project that analyzes the farmland and identifying the areas within the farmland with poor and deficient crops that is used to detect the fire occurred in forest under the umbrella of **CPS Club, ECE, SIT**.



EDC Cell, SIT organized SIT Ideathon on 19.10.2022. Students from **Department of Electronics and Communication Engineering** were part of both the Team 1 and Team 2 and are doing brainstorming in different ideas and provides solutions for them.

Our students **Mr. Yash Raj Ghosh & Mr. Tirtha Bhattacharjee** from **ECE 3rd** year are working on a Project titled "Friendly Robot with Surveillance System" under the umbrella of **CPS Club, ECE, SIT**.



CPS Club, ECE, SIT got the Financial Assistance under the Scheme for Promoting Interest, Creativity and Ethics among Students (**SPICES**) from All India Council for Technical Education (**AICTE**).

To welcome the newly admitted student the Department had organised a freshers welcome program on 16th of November 2022.



All the students along with the teachers of the ECE department had celebrated Rakhi Utsav in college in the month of August, 2022.



DEPARTMENTAL ACTIVITY

To celebrate the festival of the light department of Electronics and Communication Engineering with all of it's students and teachers had with colours and lights on November 2022.



Department of Electronics and Communication Engineering along with **Department of EE** and **Department of CSE** had organised a faculty development program on "Recent trends in technology advancement for Sustainable Society in the area of Engineering" from 8th to 12th August 2022.

An alumni interaction program was organised by the department on 18th October 2022 . In this program our alumni Sarans who is presently working with INTEL was communicating with our present students and explaining them about the industrial needs of electronics.



Department of Electronics and Communication Engineering organised a cloth donation camp for the poor and needy peoples of Jishu Ashram and also patti of Siliguri in the month of September.



To enrich the academic excellence and to maintain the bonding with students and parents our department is regularly organising the mentor mentee meet and parent teacher meet in each and every semester.

Dept of ECE, Siliguri Institute of Technology has signed a MoU with Ardent Computech Pvt Ltd, Kolkata. The objective of the MoU is to provide industrial exposure to the students and prepare them Industry Oriented.

FACULTY PUBLICATIONS

- **Dia Ghosh, Arindum Mukherjee, Shantanu Mandal, N. R Das and B N Biswas** , "Controlling birhythmicity in a new dual loop optoelectronics oscillator with an injection locked van der Pol oscillator". Physica D: Non linear Phenomena, Elsevier-2022; Science Citation Index.
- **Aditi Sengupta , Prolay Halder , Mir Sahidul Ali , Chandan Kumar Ghosh and Sanjib Bhattacharya** , "Li₂O-ZnO-MoO₃-SeO₂ glass-nanocomposites and their crystalline counterparts: microstructure, electrical transport mechanism and first principle DFT analysis", Physica Scripta, July 2022, DOI 10.1088/1402-4896/ac7ae9.
- **Aditi Sengupta, Anil Chamuah, Rakesh Ram, Chandan Kumar Ghosh, Sanghraj Diyali, Bhaskar Biswas, Mir Sahidul Ali and Sanjib Bhattacharya** , "Formation of Li₁₀Zn₄O₉, Li₂MoO₃, and ZnSeO₃ Nanophases: Roles in Electrical Conductivity and Electrochemical Stability in Lithium Ion Conductors and their Crystalline Counterparts" , ECS Journal of Solid State Science and Technology, November 2022, DOI: 10.1149/2162-8777/aca2dd.
- **Sarmistha Mondal** Investigations on Low birefringent Liquid Crystalline materials for high Information Content Display" in International Conference on Intelligent Application of Recent Innovation in Science & Technology (IARIST-2K22) , on 7-8 July, 2022.

- **Aditi Sengupta , Sanjib Bhattacharya , Chandan Kr. Ghosh**, “Conduction process in some promising lithium-ion doped glassy ceramics”, Materials Today: Proceedings”,ELSEVIER, July 2022, DOI: <https://doi.org/10.1016/j.matpr.2022.06.410>.
- **Aditi Sengupta**, “A Comparative Study Of Electrical And Dielectric Properties Of A Novel Glassy Ceramic And Its Crystalline Counterpart”, presented in the International Conference on Nanotechnology: Opportunities & Challenges (ICNOC-2022) organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India on November 28-30, 2022. (proceeding yet to come).
- **Aditi Sengupta**, “Comparative Study of Electrical Relaxation Phenomenon Between a Glassy Ceramic and Its Crystalline Counterpart” presented in 5th regional Science and Technology Congress at Coachbehar Panchanan Barma University on 17th and 18th January 2023.
- **Sarmistha Mondal** “Electro-Optic and Dielectric Spectroscopy Measurements on Two Chiral Negative Dielectric Anisotropy Materials” presented in 5th regional Science and Technology Congress at Coachbehar Panchanan Barma University on 17th and 18th January 2023.

BOOK CHAPTER

Aditi Sengupta

Chapter name: Comparison Between Some Glassy Systems and Their Heat-Treated Counterparts

Book name: Lithium Ion Glassy Electrolytes , Page number : 127-133, October 2022

Publisher: Springer DOI: 10.1007/978-981-19-3269-4_12 .

RESEARCH GRANT

Dr. Debajyoti Misra has submitted a Project Proposal to WBDST of Rs. 12 Lakh (Approx) entitled as “Development of a cost effective IoT based Waste Management System for Clean and Hygenic City.”

FACULTY ACHIEVEMENTS

Dr. Manas Kumar Parai was awarded PhD. degree from Indian Institute of Engineering Science and Technology in November, 2022.

Dr. Dia Ghosh received her PhD. degree in "Radio Physics and Electronics" from University of Calcutta in September, 2022.



International Conference on Data Science and Communication (ICTDSC 2023)



By using Communication technologies together with data science, we can create whatever we dream. **ICTDSC 2023** has given a platform to showcase the recent advancement of these field to technologist, scientist and other professionals in front of the globe.

This Conference is special for many ways. By organizing first time we have receive immense response across the globe from countries like Australia, Georgia, Portugal, Malta, Tanzania, Iran Bangladesh Czech Republic, USA and almost all states of the India. We have received almost 200 research articles out of them our reviewer team selected best 60 research articles. We know that Springer Nature is the world's largest academic book publisher who will publish these 60 research articles in their book series named autonomous and data driven and Industrial computing.



EDITORIAL BOARD

WALL MAGAZINE 2K23



EDITOR IN CHIEF



**Mrs. Anindita
sinha**



**Mrs. Aditi
Sengupta**

ADVISORY BOARD

**Dr. Mithun Chakraborty,
Principal, SIT**

**Dr. Debajyoti Misra, HOD, ECE
& Coordinator, IQAC**

STUDENT EDITORS



**SWARUP DAS,
4TH YEAR ECE**

It was really a great experience for me to work on ELECTRONIKA2K23. In this newsletter we highlighted the success stories of our department, which is moving ahead day by day. I also want to thank Anindita mam and Aditi mam for giving us this great opportunity.




**VINAYAK SHARMA,
3RD YEAR ECE**

It was truly great to be a part of the annual newsletter ELECTRONIKA2K23 and designing it. It shows how the department is growing each and every year with great minds and achievements. I'm thankful to Anindita Mam and Aditi Mam for this opportunity.

WE WELCOME YOUR COMMENTS AND IDEAS FOR FUTURE ISSUES

 <https://www.facebook.com/people/Department-of-Electronics-Communication-Engineering-SIT/100063871843089/>

 SIT-9434527272