# **HETC Chronicle**

Hooghly Engineering & Technology College Issue: July 2023 - June 2024

The edition is available at www.hetc.ac.in

# Principal's Column

In the past few years, Hooghly Engineering & Technology College's e-Newsletter, HETC Chronicle, has been a visually appealing news bulletin.

Maintaining the college's heritage, the July 2023–June 2024 e-newsletter will feature a variety of events and contributions, including academic, extracurricular, social and sports and game activities.

The publication of this newsletter adds a new feather to this college's endeavor, which has been focused on reaching greater heights of excellence in academics and other co-curricular fields with the full support of teaching and non-teaching staff and students.

# **Campus News**

Installation of a sanitary napkin vending machine was done on 14th July 2023.



The farewell ceremony of the 2023 pass-out batch was organized by the cultural committee at the college auditorium on 14th July 2023.



# e-Newsletter Committee

## **Chairman:**

Dr. Smitadhi Ganguly

#### **Convener:**

Mr. Jagadish Bhattacharya.

#### Members:

- Mr. Shyamal Pal. Mr. Sandip Basu. Mr. Subham Ganguly. Mr. Manish Kumar Singh. Ms. Arpita Das. Ms. Shilpi Saha.
- Ms. Sudeshna Banerjee.



• The NSS unit of HETC celebrated the Kargil Vijay Diwas on 26th July 2023.



• The Orientation Program was organized on 31st August 2023. From that day the induction program begins. The induction program ends on 13th September 2023.



• The students of HETC organized Teacher's Day on 5th September 2023.



• On NSS Day, September 2r23rd, 2023, the HETC NSS unit conducts a dengue awareness program.



• The NSS unit of HETC conducted the "Swachhata Hi Seva 2023" on 28th September 2023.



• On 10th October 2023, the CE Dept. in collaboration with Pinnacle organized a 1-day workshop on "Emerging trends in the BIM industry" for students of the CE Department.



On October 13, 2023, HETC students won multiple contests at a cultural meet at Hooghly Women's College.



• Speakers from WEBEL delivered lectures on "E-waste management" on 23rd November 2023.



• HETC organized a School Carnival for secondary and higher secondary school students on 25th November 2023.



• HETC organized a Spot Quiz at Chinsurah Book Fair on 12th December 2023.



• Dr. Soumya Kanta Roy delivered a lecture on "Environmental Science" for the students of ECE department on 15th December 2023.



• Cricket tournament was organized by the Games & Sports Committee from 19th to 20th December 2023.



• The Badminton tournament was organized by the Games & Sports Committee on 20th December 2023.



• ICC and Women's Cell of HETC organized an awareness program on prevention of sexual harassment of women at the workplace on 21st December 2023.



• The students of HETC participated in "AIDS Awareness Rally" organized by the NSS unit of HETC on 13th January 2024.



• The students and staff members of HETC celebrated "Republic Day" on 26th January 2024.



• Alumni Committee of HETC organized Alumni Meet on 28th January 2024.



• The NSS unit of HETC organized an awareness program on "First Time Voter" on 6th March 2024. Mr. Subham Ganguly addressed the students in this program.



• The Boy's Football Tournament was organized by the Games & Sports Committee from 28th March to 4th April 2024. The team comprising 3rd and 4th year of EE won the tournament.



• The students and the members of the cultural committee of HETC organized the Annual Cultural Fest "Utkarsha 2K24" on 19th April 2024.



• The NSS unit of HETC conducted a "World Earth Day" quiz on 21st April 2024. A total of 393 students participated in the event.



• The NSS unit of HETC organized a blood donation camp at the seminar hall on 24th April 2024. 100 students and staff members of HETC donated blood to this camp.



• The NSS unit of HETC donated 100 plants to the students, faculty, and staff members of HETC on World Environment Day on 5th June 2024.



The NSS unit of HETC organized a yoga program on the 10th International Yoga Day on 21st June 2024.



• The IQAC, IIC, and EDC of HETC organized a one-week FDP on "Industry 6.0: Navigating the Ethical Frontier of Artificial Intelligence and Data Science" from 25th June to 29th June 2024.



• The Cultural Committee organized a farewell ceremony for the 2024 pass-out batch at the college auditorium on 29th June 2024.



#### **Departmental Academic Activities**

- The Department of Civil Engineering tested Concrete Cubes of various grades for the Subhadip Infra Project Pvt. Ltd. Chinsurah, Bidnan, Polba: Dadpur, Hooghly, West Bengal, India. Pin- 7121305 on 21st July, 2023.
- The Department of Civil Engineering tested Concrete Cubes of various grades for Pradip Dey, Govt. Licensed Civil Contractor, Kalupukur Main Road, Chandannagar, Hooghly, West Bengal, India. Pin-712136 on 20th September, 2023.
- The Department of Civil Engineering tested Concrete Cubes of various grades for Priti Enterprise, 305(132) Chatterjee Para Lane, P.O.: Sheoraphuly, Hooghly, West Bengal, India on 20th September 2023.
- The Department of Electronics and Communications Engineering, Vivekananda Road, Pipulpati, Hooghly, West Bengal 712103 organized a one-day seminar on the topic "Energy Science and Engineering" on 15th December 2023.
- The Mechanical Engineering department organized a one-day field visit at Bandel Thermal Power Station, Bandel on 22nd November 2023.
- The Department of Civil Engineering tested Concrete Cubes of various grades for SDO Chandannagar Irrigation Sub Division, Lichutala, Chandannagar, Hooghly.
- The Department of Civil Engineering tested Concrete Cubes supplied by Mr. Amit Pan, Govt. Contractor & General Order Supplier, Kantagoria, Singrapur Hooghly Compressive strength of Concrete.
- The Civil Engineering Department of HETC organized a 2-week workshop, "REVIT Professional Training: An approach to BIM" from 18th January to 2nd February 2024.
- The Department of ECE, Hooghly Engineering & Technology College organized a Seminar on 'IoT and Robotics' on 12th March, 2024. The seminar was conducted by Conocimiento Infotech and was presented by the distinguished CEO, Indranil Das, and the esteemed CTO, Ayan Bag.

#### **Students' Participations**

- Mr. Surja Biswas, a student of the Mechanical Engineering Department, has represented India in the Shooting event of '50 Meter Rifle Prone Men Junior' in the "ISSF World Championships" held at Changwon, South Korea from 14th July to 25th July 2023.
- A total of 31 students of the ME department visited BTPS to gather first-hand field visit experience of thermal power on 22nd November 2023.
- Mayukh Sen of the ECE Department participated in ETH India 2023 (World's Biggest Hackathon) from 8th to 10th Dec. 2023. KTPO, Bengaluru. He submitted the project "Crime Diesel" to ETH India 2023.

• The Games & Sports Committee organized the "HETC Cricket Tournament 2023" for the session 2023-24 during 19th and 20th December, 2023

Winners Team	CE 4 <sup>th</sup> Year
Runners Up Team	CSE 3 <sup>rd</sup> Year

Position	Name	Department	Year
Man of the Tournament	Abhik Banerjee	CSE	3 <sup>rd</sup>
Man of the Final Match	Anubhav Mukherjee	CE	4 <sup>th</sup>
Best Bowler	Keshav Kumar	CE	4 <sup>th</sup>
Best Batsman	Abhik Banerjee	CSE	3 <sup>rd</sup>
Best Fielder	Anubhav Mukherjee	CE	4 <sup>th</sup>

 The Games & Sports Committee organized the "HETC Badminton Tournament 2023" for the session 2023-24 during 19th and 20th December, 2023

Winners Team	Shreya Mishra (ECE 3 <sup>rd</sup> ) and Eshita Dey (ECE 3 <sup>rd</sup> )
Runners Up Team	Sonamoni Jana (CSE 1st) and Anchita Das (CSE 1st)

• The Games & Sports Committee organized the "Annual Sports Meet 2024" for the session 2023-24 on 13th January, 2024, comprising four girl's events which are as follows:

Sl. No	Event Name	Position	Name	Department	Year
		1 <sup>st</sup>	Ahana Bhattacharyya	CSE	4th
1	Potato Race	$2^{nd}$	Priyanka Banerjee	CSE	1 <sup>st</sup>
	(Girls)	3 <sup>rd</sup>	Prachi Singh	ECE	1 <sup>st</sup>
		1 <sup>st</sup>	Priyanka Banerjee	CSE	1 <sup>st</sup>
2	100 Mt Run (Girls)	$2^{nd}$	Disha Mukherjee	CSE	2nd
		3 <sup>rd</sup>	Alisha Khatun	CSE	3rd
		1 <sup>st</sup>	Monami Sarkar	CSE	2nd
3 Balance Rac (Girls)	Balance Race	$2^{nd}$	Pamela Pal	CSE	3rd
		$3^{rd}$	Purbita Koley	CSE	3rd
	Musical Chair (Girls)	1 <sup>st</sup>	Tota Jana	CSE	2nd
4		$2^{nd}$	Nilanjana Bairagi	CSE	3 <sup>rd</sup>
		3 <sup>rd</sup>	Srijani Soo	CSE	3rd

• The Games & Sports Committee organized the "Annual Sports Meet 2024" for the session 2023-24 on 13th January, 2024, comprising four boy's events which are as follows:

Sl No	Event Name	Position	Name	Department	Year
		$1^{st}$	Tushar Ghosh	CE	4 <sup>th</sup>
1	300 Mt Run (Boys)	$2^{nd}$	Souradip Ghosh	CSE	2 <sup>nd</sup>
	(Boys)	3 <sup>rd</sup>	Anujit Paul	ECE	$2^{nd}$
		$1^{st}$	Tridib Kundu	EE	4 <sup>th</sup>
2	Long Jump (Boys)	$2^{nd}$	Krishnendu Das	CE	4 <sup>th</sup>
		3 <sup>rd</sup>	Sk. Md. Hujaifa	CE	4 <sup>th</sup>
		1 <sup>st</sup>	Sk Samsuddin	CSE	3 <sup>rd</sup>
3	Shot Put	$2^{nd}$	Debanik Chakraborty	ME	4 <sup>th</sup>
	(Boys)	3 <sup>rd</sup> Sayar P	Sayar Paul	CSE	$2^{nd}$
	High Jump	1 <sup>st</sup>	Krishna Chandra Ghosh	CE	4 <sup>th</sup>
4		$2^{nd}$	Krishnendu Das	CE	4 <sup>th</sup>
	(Boys)	3 <sup>rd</sup>	Sourendra Mohan Pakira	CE	4 <sup>th</sup>

 The Games & Sports Committee organized the "HETC Football Tournament 2024" for the session 2023-24 from 28th March to 4th April, 2024

Winners Team	EE 3 <sup>rd</sup> year+4 <sup>th</sup> Year	
Runners Up Team	CE 4 <sup>th</sup> Year	
Fair Play Award	CE 3 <sup>rd</sup> Year	

Position	Name	Department	Year
Man of the Tournament	Tushnik Das	EE	3 <sup>rd</sup>
Man of the Match	Priyotash Patra	EE	3 <sup>rd</sup>
Best Midfielder	Sk. Md. Hujaifa	CE	4 <sup>th</sup>
Highest Goal Scorer	Tushnik Das	EE	3 <sup>rd</sup>
Best Goalkeeper	Krishnendu Das	CE	4 <sup>th</sup>

#### **Students' Achievements**

- Sayan Gupta, Mohar Maitra, and Bishal Ram, ECE Department published a conference paper on "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System" in the IEEE Silchar Subsection Conference (IEEE SILCON-2023), held during 03-05 November 2023 at the National Institute of Technology Silchar, India.
- Abhishek Bhattacharjee of the ECE Dept. has authored a chapter provisionally accepted for publication in the book "Artificial Intelligence for Wireless Communication Systems: Technology and Applications", CRC Press, Taylor & Francis Group.
- Subham Das, Sumana Hazra, Sayantan Mallik, and Sourav Nandi of the ECE Dept. have authored a chapter that has been provisionally accepted for publication in the book "Artificial Intelligence for Wireless Communication Systems: Technology and Applications", CRC Press, Taylor & Francis Group.
- Kunal Chakraborty, Ayanabha Santra, Krishnaditya Saha, Esha Mallick, EE Department published a journal paper on, "Transient Analysis of A SEPIC Converter Under Peak Current Mode Control," International Journal of Engineering Research & Technology (IJERT) Volume 12, Issue 09 (September 2023), ISSN:2278-0181, DOI: 10.17577/IJERTV12IS090052
- Manoj Kumar Dey, Sayantika Das, Madhushree, and Koustubh Majumdar of the CSE Dept., published a Scopus-indexed book chapter on "AI, ML AND IOMT Integrated Approach to DNA Sequence Analyzing Prediction" has been provisionally accepted for publication in the book "Artificial Intelligence for Wireless Communication Systems: Technology and Applications", CRC Press.
- Avishek Bhattacharjee, a final year student of the ECE Department won the first prize in the 14th Inter-University Engineering Science and Academic Meet 2024, organised by Forum of Scientists, Engineers & Technologists - FOSET at JIS College of Engineering. Title of conference paper, "AI-based Smart Blind Glass System."
- Avishek Bhattacharjee, a final year student of the ECE Department presented a paper "GreenShield: CNN-Based Real-Time Forest Monitoring and Response" on 10th June 2024 in the Electrical Engineering and Systems Science Journal. https://doi.org/10.48550/arXiv.2406.16917.
- Sakshar Das, a 3rd-year student from the CSE department has taken on six highly regarded NPTEL certification exams—conducted by the IITs and IISc—and has emerged as a national topper in all of them! His extraordinary performance has earned him a well-deserved place in the elite NPTEL Stars category, an honour reserved for top achievers. Here is a look at his outstanding scores:

95/100 in "The Joy of Computing using Python"
91/100 in "Theory of Computation"
90/100 in "Data Structure using Java"
86/100 in "Ethics in Engineering Practice"
85/100 in "Programming, Data Structures, and Algorithms Using Python"
75/100 in "Discrete Mathematics"

#### **Faculty and Staff Participation**

- Ms. Piyali Das, Assistant Professor, CE Department, participated in a two-day Online training course on "Repair and Rehabilitation of Structures of hydropower projects" organized by C.W & P.R.S., Pune from 13th - 14th December 2023.
- Dr. Soumya Kanta Ray, Assistant Professor, CE Department, participated in One Week Online short-term course 'Sustainable and Durable Green Concrete-Future and Applications' at Dr B R Ambedkar National Institute of Technology (NITJ) from 18 - 22 December 2023
- Mrs. Piyali Das, Assistant Professor, CE Department, participated in One Week Online short-term course 'Sustainable and Durable Green Concrete-Future and Applications' at Dr B R Ambedkar National Institute of Technology (NITJ) from 18 - 22 December 2023
- Mrs. Arpita Das, Assistant Professor, CE Department, participated in One Week Online short-term course 'Sustainable and Durable Green Concrete-Future and Applications' at Dr B R Ambedkar National Institute of Technology (NITJ) from 18 - 22 December 2023
- Mr. Saikat Datta, Assistant Professor, CE Department, participated in One Week Online short-term course 'Sustainable and Durable Green Concrete-Future and Applications' at Dr B R Ambedkar National Institute of Technology (NITJ) from 18 - 22 December 2023
- Mr. Saikat Datta, Assistant Professor, CE Department, participated in One Week Online short-term course 'Sustainable and Durable Green Concrete-Future and Applications' at Dr B R Ambedkar National Institute of Technology (NITJ) from 18 - 22 December 2023.
- Mr. Saikat Datta, Assistant Professor, CE Department, participated in a Five-Day Online FDP on "Numerical Analysis and Global Optimization" organized by the Division of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai from 06th July to 10th July 2023.
- Mr. Manab Kumar Saha, Assistant Professor, CSE Department, has attended a five-day online National Faculty Development Program on "Recent Trend in Blockchain Technology and Cyber Security" organized by the Department of Computer Science & Engineering JIS University from 26 - 30 September 2023.
- Dr. Ankan Bhattacharya, Associate Professor, ECE Department, participated in a 5-day online FDP on Recent Advances in Electronics & Communication Engineering; 22-26 Aug. 2023; Organized by AIEM, Hooghly and technically co-sponsored by IEEE ComSoc., Kolkata Chapter, ISTE WB and IEI India.
- Dr. Ankan Bhattacharya, Associate Professor, ECE Department, was the Technical Committee member of the International Conference on Communication Software and Networks (ICCSN 2023).
- Dr. Ankan Bhattacharya Associate Professor, ECE Dept., participated in the Faculty Knowledge Sharing program on "Tech. Invol. In Coll. Pedagogy" by IFCAI Business School, Kolkata.

- Mr. Subhojit Malik, Assistant Professor, ECE Department, presented a conference paper on "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System" at the IEEE Silchar Subsection Conference (IEEE SILCON-2023), held during 03-05 November 2023 at the National Institute of Technology Silchar, India.
- Mr. Subhajit Roy, Assistant Professor, ECE Department, presented a conference paper on "RSVM: Promising Approach for Early Heart Disease Prediction" at the IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS-2023) organized by Sharnbasva University, Kalaburagi 24th to 25th November 2023.
- Mr. Manish Kumar Singh, Assistant Professor, ECE Department, has attended a five-day faculty development program for "Innovation in Recent Trends and Research Application on Computing and Informatics" organized by the Department of Information Technology in association with IQAC, Haldia Institute of Technology from 31st July 4th August 2023.
- Mr. Jagadish Bhattacharya, Assistant Professor, the ECE Department, has attended a five-day faculty development program for "Innovation in Recent Trends and Research Application on Computing and Informatics" organized by the Department of Information Technology in association with IQAC, Haldia Institute of Technology from 31st July 4th August 2023.
- Mr. Swarup Samanta, Assistant Professor, ECE Department, has attended a five-day faculty development program for "Innovation in Recent Trends and Research Application on Computing and Informatics" organized by the Department of Information Technology in association with IQAC, Haldia Institute of Technology from 31st July - 4th August 2023.
- Mrs. Swagata Choudhury, Assistant Professor, the ECE Department, has attended a five-day faculty development program for "Innovation in Recent Trends and Research Application on Computing and Informatics" organized by the Department of Information Technology in association with IQAC, Haldia Institute of Technology from 31st July 4th August 2023.
- Shyamal Pal participated in a one-week online faculty development program on "The Future of Generative AI in Academic Research and Publishing" organized by the Department of Computer Application and Science, IEM from 2nd January to 6th January 2024.
- Sanghamitra Das participated in a one-week online faculty development program on "Recent Trends in Computational Approaches" organized by the Department of Information Technology, Narula Institute of Technology from 2nd January to 6th January 2024.
- Sanghamitra Das successfully participated & completed the AICTE Training And Learning (ATAL) Academy Faculty Development Program on Bridging Academia and Industry: A NEP-Centric Approach to AI, Robotics, and Industry 4.0/5.0 at SUPREME KNOWLEDGE FOUNDATION GROUP OF INSTITUTIONS from 05/02/2024 to 10/02/2024.

- Sanghamitra Das participated in the 5-Day Faculty Development Program on Recent Trends and Applications in Data Science, organized by the Department of Computer Science, Sister Nivedita University, Kolkata, India conducted from 26th February 1st March, 2024.
- Sanghamitra Das participated in 5 Days Faculty Development Program on "Effect of Generative AI in Modern Research and Industry", organized by the Department of Computer Science, Sister Nivedita University, Kolkata, India conducted from 29th April 2024 to 3rd May, 2024.
- Suhas Deb has participated and successfully completed the 5-day Blended Mode Short Term Training Program (STTP) on "Application of AI and ML in Electrical and Electronics Engineering" held on April 01-03 & April 08-09, 2024 organized by the Department of Electrical Engineering, BBIT, Kolkata.
- Soumi Dey has successfully completed 12 12-week FDP Online certification courses from NPTEL in "Programming in Java" from Jan to April 2024.
- Soumi Dey has completed a certification course in AutoCAD conducted by NEILIT, Kolkata under the guidance of L&T Construction M &M CSR Dept during April 2024
- Soumi Dey completed an A-level from NEILIT on 9th May 2024.
- Soumi Dey get certified CCNA course from Udemy June in 2024
- Sannistha Banerjee Completed the Faculty Development Program through ICT mode on "Data Analytics" organized by the National Institute of Technical Teachers Training and Research (NITTTR), Kolkata from 13th May to 17th May, 2024
- Sannistha Banerjee Completed Faculty Development Program through ICT mode on "Data Science" will be organized by the National Institute of Technical Teachers Training and Research (NITTTR), Kolkata from 24th June to 28th June, 2024
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted into the Advisory/Organizing Committee of the seventh "International Conference on Communication, Devices and Networking (ICCDN 2024)" organized by the Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Majhitar, Sikkim during 19-20 January, 2024.
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted into the Technical Committee of the "5th Information Communication Technologies Conference (ICTC 2024)" Nanjing, China from May 10-12, 2024
- Dr. Ankan Bhattacharya, Associate Professor & HOD of ECE Department is Inducted into the Programme Committee of the 3rd World Conference on Artificial Intelligence, Machine Learning, and Data Science, May 23-24, 2024, in Rome, Italy
- Dr. Ankan Bhattacharya, Associate Professor & HOD of ECE Department is Inducted into the Programme Committee of the 7th International Conference on Information Communication and Signal Processing (ICICSP 2024), Zhoushan, China

- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted into the Programme Committee of the 5th Information Communication Technologies Conference (ICTC 2024) Nanjing, China
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted into the Programme Committee of the 5th International Conference on Computing, Networks and Internet of Things (CNIOT 2024), sponsored by Tokyo University of Science and Cisco Networking Academy, May 24-26, 2024 in Tokyo, Japan
- Mr. Subhojit Malik was appointed as the reviewer for the 3rd IEEE International Conference on Computer Vision and Machine Intelligence (CVMI), 2024 organized by IIIT Allahabad, Prayagraj, India.
- Dr. Tanumoy Ghosh, Assistant Professor, CE Department, participated in and completed the faculty development program on "Fundamental Machine Learning" organized by NITTTR Kolkata, from 11th November to 15th March, 2024.
- Dr. Tanumoy Ghosh, Assistant Professor, CE Department, participated one-week virtual FDP on "Dreamweaving: Turning Ideas into Creative Reality" held from the 6th to the 10th February 2024. Organized by IIC Cell, Regent Education and Research Foundation Group of Institutions.
- Saikat Datta, Assistant Professor, CE Department has participated in One Week FDP on "Environmental Impact and it's Protection" organized by the Department of Civil Engineering, Haldia Institute of Technology, West Bengal, India during 13th 17th May, 2024.
- The IQAC, IIC, and EDC of HETC organized a one-week FDP on "Industry 6.0: Navigating the Ethical Frontier of Artificial Intelligence and Data Science" from 25th June to 29th June 2024. The list of participants is as follows:

Sl. no.	Name of the participants	Dept.	Designation
1	DR. ABHRANIL DE	BSH	ASSISTANT PROFESSOR
2	DR. AISHWARYA MUKHERJEE	BSH	ASSOCIATE PROFESSOR
3	MR. PRADIP GHOSH	BSH	ASSISTANT PROFESSOR
4	DR. PRATYAY DEBNATH	BSH	PROFESSOR
5	MR. PRITAM BISWAS	BSH	TECHNICAL ASSISTANT
6	DR. RAJESH PATRA	BSH	ASSOCIATE PROFESSOR
7	MR. RAJSEKHAR BHATTACHARYA	BSH	ASSISTANT PROFESSOR
8	MS. SUDESHNA BANERJEE	BSH	ASSISTANT PROFESSOR
9	MS. SREYASI RUPA DE	BSH	ASSISTANT PROFESSOR
10	DR. SUBHAM GANGULY	BSH	ASSISTANT PROFESSOR
11	MR. SAURAV CHOWDHURY	BSH	SENIOR TECHNICAL ASSISTANT
12	MR. PRITAM BISWAS	BSH	TECHNICAL ASSISTANT
13	MS. ARPITA CHATTOPADHYAY	CE	ASSISTANT PROFESSOR
14	MS. ARPITA DAS	CE	ASSISTANT PROFESSOR
15	MS. PIYALI DAS	CE	ASSISTANT PROFESSOR
16	DR. SOUMYA KANTA RAY	CE	ASSISTANT PROFESSOR

17	MR. SHIBASISH DEB	CE	ASSISTANT PROFESSOR
18	MR. SAIKAT DATTA	CE	ASSISTANT PROFESSOR
19	DR. TANUMOY GHOSH	CE	ASSOCIATE PROFESSOR
20	MR. ARUP MALLICK	CSE	ASSISTANT PROFESSOR
21	DR. BISWAJIT HALDER	CSE	PROFESSOR
22	MR. DIBYENDU SAMANTA	CSE	ASSISTANT PROFESSOR
23	MR. CHIRANJEET SARKAR	CSE	ASSISTANT PROFESSOR
24	MS. DHRITI CHAKRABORTY	CSE	ASSISTANT PROFESSOR
25	MR. MANAB KUMAR SAHA	CSE	ASSISTANT PROFESSOR
26	MS. MOUSOMI ROY	CSE	ASSISTANT PROFESSOR
27	MS. MOUSUMI BISWAS	CSE	ASSISTANT PROFESSOR
28	MS. PARNA SATAPATHI(SAHA)	CSE	ASSISTANT PROFESSOR
29	MS. SAMAYITA SARKAR	CSE	ASSISTANT PROFESSOR
30	MS. SANGHAMITRA DAS	CSE	ASSISTANT PROFESSOR
31	MR. SHYAMAL PAL	CSE	ASSISTANT PROFESSOR
32	MR. SOURAV BANIK	CSE	ASSISTANT PROFESSOR
33	MR. SUMANTA DAW	CSE	ASSISTANT PROFESSOR
34	DR. ANKAN BHATTACHARYA	ECE	ASSOCIATE PROFESSOR
35	MS. BIDISHA SENGUPTA	ECE	SENIOR TECHNICAL ASSISTANT
36	MR. BISWAJIT BASAK	ECE	ASSISTANT PROFESSOR
37	MR. DEB KUMAR SHEET	ECE	ASSISTANT PROFESSOR
38	MR. DHRUBAJYOTI BHAUMICK	ECE	ASSISTANT PROFESSOR
39	MR. JAGADISH BHATTACHARYA	ECE	ASSISTANT PROFESSOR
40	MR. MANISH KUMAR SINGH	ECE	ASSISTANT PROFESSOR
41	MS. SHYAMALI GAYEN	ECE	SENIOR TECHNICAL ASSISTANT
42	MR. SUBHAJIT ROY	ECE	ASSISTANT PROFESSOR
43	MR. SUBHOJIT MALIK	ECE	ASSISTANT PROFESSOR
44	MR. SWAGATA CHOUDHURY	ECE	ASSISTANT PROFESSOR
45	MR. SWARUP SAMANTA	ECE	ASSISTANT PROFESSOR
46	MR. ANIKENDU MAITRA	EE	ASSISTANT PROFESSOR
47	DR. ANIRBAN UPADHYAYA	EE	ASSISTANT PROFESSOR
48	DR. AVIJIT MAITY	EE	PROFESSOR
49	MR. DEBASISH MITRA	EE	ASSISTANT PROFESSOR
50	MR. KAUSHIK SIT	EE	ASSISTANT PROFESSOR
51	MR. SNEHASISH PAL	EE	ASSISTANT PROFESSOR
52	MS. SOUMI DEY	EE	TECHNICAL ASSISTANT
53	DR. SUHAS DEB	EE	ASSISTANT PROFESSOR
54	MR. RANJIT MAJHI	EE	SENIOR TECHNICAL ASSISTANT
55	MS. DIPANWITA BISWAS	ME	ASSISTANT PROFESSOR
56	MR. RAJIB KUMAR MANDAL	ME	ASSISTANT PROFESSOR
57	MR. SAMIR GHOSH	ME	ASSISTANT PROFESSOR
58	MR. SANDIP BASU	ME	ASSISTANT PROFESSOR
59	DR. SMITADHI GANGULY	ME	ASSOCIATE PROFESSOR

• Details of Indian Institute of Remote Sensing (IIRS), ISRO Outreach Programme Conducted by HETC in 2023-2024

Sl. No.	Name of Programme	Date / Duration	Total No. of Successful Participants
1	Geospatial Technology for Climate Smart Agriculture	July 10, 2023 to July 14, 2023	23
2	Satellite meteorology applications in weather and climate studies	August 07, 2023 to August 11, 2023	15
3	Overview of Space Technology (course in Hindi)	September 14, 2023 to September 28, 2023	1
4	Remote sensing based data analytics in Agriculture	October 26, 2023	24
5	Overview of Geo-computation and Geo-web Services	October 30, 2023 to November 03, 2023	4
6	Geo-data sharing and Cyber Security	November 28, 2023 to December 11, 2023	1
7	Applications of Geospatial Technology in Paleochannel Studies (Course in Hindi)	May 20, 2024 to May 24, 2024	5
8	Forest carbon & water cycle monitoring and modelling	May 13, 2024 to May 17, 2024	42
9	Geospatial technology for modelling of Urban Environment	May 27, 2024 to May 31, 2024	10

## Faculty and Staff Achievements/Activity

- Mr. Soumya Kanta Ray, Assistant Professor, CE Department, completed his PhD from IIEST Shibpur in December 2023.
- Dr. Biswajit Halder of the CSE Dept., acts as a reviewer of the Journal of The Institution of Engineers (India): Series B (SC Imago, IEIB).
- Dr. Suhas Deb of the EE Dept., acts as a reviewer of the IEEE Conference of SPS (ASPCON 2023)
- Dr. Suhas Deb of the EE Dept., was the reviewer of papers at the Conference of (ICDAI 2023)
- Dr. Ankan Bhattacharya of the ECE Dept., was the Reviewer of the International Academic Conference on Optics and Photonics (IACOP 2023).
- Dr. Ankan Bhattacharya of the ECE Dept., proposed a Special Issue for SN Applied Sciences, Springer (Scopus Indexed Journal).
- Dr. Ankan Bhattacharya of ECE Dept., received the Outstanding Reviewer of Radio Science certificate/award.
- Mr. Subhojit Malik of the ECE department received membership in the International Association of Engineers (IAENG) with membership number 359316.
- Mr. Subhojit Malik received his Ph.D. coursework completion result on 03.05.2024.

- Mr. Subhojit Malik received the Best Paper Award for the Paper titled "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System" presented at the 2023 IEEE Silchar Subsection Conference (IEEE SILCON-2023), held from November 3rd to 5th, 2023, at the National Institute of Technology Silchar, India.
- Mr. Subham Ganguly received the degree, Doctor of Philosophy (PhD) in English from Raiganj University, West Bengal on 31.08.2023.
- Dr. Subham Ganguly delivered a lecture as a guest speaker in a Lecture-cum-Workshop on "Mastering Communication Skills", organized by Bejoy Narayan Mahavidyalaya, Itachuna, Hooghly, on 7th November 2023.
- Sannistha Banerjee defended her PhD Thesis entitled "Advanced Signal and Data Processing Techniques for Detection and Classification of Transient Events in Microgrid" in the Electrical Engineering Department of the National Institute of Technology Durgapur under the guidance of Dr. Partha Sarathee Bhowmik on 21st March 2024.
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted as an Editorial Board Member: Bulletin of Electrical Engineering and Informatics [Scopus Indexed Journal]
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Inducted into the Editorial Board of "Human-centric Computing and Information Sciences (HCIS)", SCI Indexed, Q1 Journal, as an Associate Editor
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is Invited article published in IEI Annual Technical Volume V: Recent Trends in Antenna Technology for Modern Wireless Communication
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is included in IEI Epitome: Members in the News, Vol. 9, Issue 1, Jan. 2024
- Dr. Ankan Bhattacharya, Associate Professor & HOD of the ECE Department is included in IEI Epitome: Publication by Members, Vol. 9, Issue 4, Apr. 2024
- Mr. Subhojit Malik was appointed as a reviewer for the 3rd IEEE International Conference on Computer Vision and Machine Intelligence (CVMI), 2024 organized by IIIT Allahabad, Prayagraj, India.
- Ms. Arpita Das, Assistant Professor, CE Department, submitted her Ph.D. thesis from NIT Durgapur in February, 2024.

## **Publications of Faculty Members**

# Publications in Journal

#### International Journal

- Arpita Das and Showmen Saha. "Effect of graphene nanoplatelets (GNPs) in cementitious material." Sādhanā (SCI) 48, no. 4 (2023): 263.DOI:10.1007/s12046-023-02320-y
- Das A., Saha S., (2023) Relative characteristics of various nano-cement composite. Journal of Mines, Metals & Fuels (Vol. 71, 2023) (Scopus Indexed)
- Mousomi Roy, Shouvik Chakraborty, and Kalyani Mali, "Metaheuristic-supported image encryption framework based on binary search tree and DNA encoding", Multimedia Tools and Applications, 19th August 2023, https://doi.org/10.1007/s11042-023-16471-x, Springer, E-ISSN: 1573-7721, P-ISSN: 1380-7501 (IF: 3.6, Current IF: 3.6 Acceptance Rate: NA) (indexed in SCIE, SCOPUS, etc.)
- Mousomi Roy, Shouvik Chakraborty, and Kalyani Mali, "An evolutionary image encryption system with chaos theory and DNA encoding", Multimedia Tools and Applications, 6th March 2023, vol. 82, pp.33607-33635, https://doi.org/10.1007/s11042-023-14948-3, Springer, E-ISSN: 1573-7721, P-ISSN: 1380-7501 (IF: 2.577, Current IF: 3.6 Acceptance Rate: NA) (indexed in SCIE, SCOPUS, etc.)
- Mousomi Roy, Shouvik Chakraborty, and Kalyani Mali, "An optimized image encryption framework with chaos theory and EMO approach", Multimedia Tools and Applications, 16th February 2023, vol. 82, pp.30309-30343, https://doi.org/10.1007/s11042-023-14438-6, Springer, E-ISSN: 1573-7721, P-ISSN: 1380-7501 (IF: 2.577, Current IF: 3.6 Acceptance Rate: NA) (indexed in SCIE, SCOPUS, etc.)
- Shilpi Saha, Kunal Chakraborty, Ayanabha Santra, Krishnaditya Saha, Esha Mallick, 2023, "Transient Analysis of A SEPIC Converter Under Peak Current Mode Control," INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT) Volume 12, Issue 09 (September 2023), ISSN:2278-0181, DOI: 10.17577/IJERTV12IS090052
- Dr. Ankan Bhattacharya of the ECE Dept., published a paper "Design and Analysis of a Low-profile Microstrip Antenna for 5G Applications using AI-based PSO Approach" in Scopus Indexed International Journal of Telecommunications and Information Technology 2023 | nr 3 | 68-73
- Das, Arpita, Rajdip Paul, and Showmen Saha. "Strength Optimization of Nanocomposite Cementitious Materials Using Nanoscale Modifications." Periodica Polytechnica Civil Engineering (SCI indexed) (2024). https://doi.org/10.3311/PPci.22706
- Sannistha Banerjee "Mathematical Morphology based Sensing of Power System Disturbances using PCA aided Support Vector Machine", IEEE Sensors Journal, 24:11, 18035-18042, https://doi.ogg/10.1109/JSEN.2024.3389047, 2024

- Sannistha Banerjee "Power System Disturbance Classification using CWT Guided Customized AlexNet CNN", IEEE Sensors Letters, 8:6, 1-4, doi: 10.1109/LSENS.2024.3400903, 2024
- Dr. Ankan Bhattacharya, Associate Professor & HOD of ECE Department published a journal paper, A Bhattacharya, B Roy, A De, U Chakraborty and S Mallik, "Extended Investigations on a Compact, Isolation Enhanced, Printed MIMO Antenna for Higher Band 5G", Wireless Personal Communications, Springer, ISSN: 0929-6212, Latest Articles, Apr. 2024 [SCIE Indexed Journal] IF: 2.2 Download Link
- Dr. Ankan Bhattacharya, Associate Professor & HOD of ECE Department published a journal paper, A Bhattacharya, "Design, fabrication, and measurement of a miniaturized MIMO antenna applicable for 5G communication", International Journal of Microwave and Wireless Technologies, Cambridge University Press, ISSN: 1759-0787; FirstView, Jan. 2024; [SCIE Indexed Journal] IF: 1.4 Download Link
- Swarup Samanta, Jagadish Bhattacharya and Manish Kumar Singh presented a paper "GreenShield: CNN-Based Real-Time Forest Monitoring and Response" on 10th June 2024 in the Electrical Engineering and Systems Science Journal. https://doi.org/10.48550/arXiv.2406.16917.

#### National Journal

- Dipanwita Biswas, Amit Banerjee, Santanu Das and Prosenjit Das, An investigation on machinability during turning Al-Mg2Si-Si composite in dry condition, Indian Science Cruiser, Vol. 36, No.3, pp.13-21, 2022. [ISSN: 0970-4256] [DOI: 10.24906/isc/2022/v36/i3/213768] [UGC approved Journal in 2022 with Journal No. 20920]
- T. Ghosh, S. K. Roy "Energy Consideration in Urban Traffic Planning of Kolkata City" Journal of the Institute of Town Planners, India, Vol.21, Issue 1, pp. 1-12, ISSN: 0537-9679, January, 2024.

#### **Publications in Conference**

#### International Conference

- Soumya Kanta Ray, Chanchal Majumder, "Effect of organic matter on arsenic removal: A comparative study" 1st International Conference on Sustainable Advanced Technologies for Environmental Management (SATEM)-2023, Organized by Indian Institute of Engineering Science and Technology (IIEST, Shibpur), December 20-22, 2023.
- Arpita Das and Showmen Saha. "Comparative simulation of various nanofiber cement composites." In AIP Conference Proceedings, vol. 3010, no. 1. AIP Publishing, (SCOPUS indexed), 2024. https://DOI: 10.1063/5.0193575
- Dr. Biswajit Halder, 'De-screening low resolution halftone printed portrait' at International Conference on Recent Advances in Information Technology for Sustainable Development, Department of Information and Communication Technology (IEEE, ICRAIS 2023), Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, from 06 - 07 November 2023.

- Debjani Chakraborty, Sujaan Maitra, Sourav Saha, Biswajit Halder, 'A Layout Independent Deep Learning Framework for Recognition of Courtesy-Amount in Bank-Cheque Image' at 23rd International Conference on Intelligent Systems Design and Applications (ISDA 2023), from December 11-15, 2023.
- Dr. Suhas Deb of EE Dept., attended ASPCON 2023 (IEEE CONFERENCE) at Haldia Institute of Technology. The paper is yet to be published on the IEEE website.
- Shilpi Saha and S. Parui, "Dynamical behaviour in a peak ripple based V2 controlled buck converter," 2023 IEEE 5th International Conference on Energy, Power and Environment: Towards Flexible Green Energy Technologies (ICEPE), Shillong, India, 2023, pp. 1-6, DOI: 10.1109/ICEPE57949.2023.10201602.
- Dr. Ankan Bhattacharya, Associate Professor of the ECE Department, published a paper in International Conference: Design and Analysis of Substrate Reliant Slotted Microstrip Patch Antenna for Modern Communication | IEEE Conference Publication | IEEE Xplore
- Dr. Ankan Bhattacharya, Associate Professor of the ECE Department, published a paper in International Conference: Analyzing the Effect of Substrates on a Compact Pentagonal Patch Antenna-A Short Review
   | IEEE Conference Publication | IEEE Xplore
- Dr. Ankan Bhattacharya, Associate Professor, ECE Department-authored a paper in International Conference: IEEE SILCON 2023 (paper yet to be published)
- Dr. Ankan Bhattacharya of the ECE Dept., co-authored a paper in International Conference: iNurture-Conference (icaia.in) (paper yet to be published)
- Mr. Subhojit Malik, Associate Professor, ECE Department, published a conference paper on "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System" in the IEEE Silchar Subsection Conference (IEEE SILCON-2023), held during 03-05 November 2023 at the National Institute of Technology Silchar, India.
- Mr. Subhojit Malik, Assistant Professor, ECE Department, published a conference paper on "RSVM: Promising Approach for Early Heart Disease Prediction" in the IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS-2023) organized by Sharnbasva University, Kalabugari 24 - 25 November, 2023.
- Mr. Subhajit Roy, Assistant Professor, ECE Department, published a conference paper on "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System" at the IEEE Silchar Subsection Conference (IEEE SILCON-2023), held during 03-05 November 2023 at the National Institute of Technology Silchar, India.
- Mr. Subhojit Malik, Assistant Professor of ECE Department and Mr. Subhajit Roy, Assistant Professor of ECE Department published a journal paper, S. Malik, S. Roy, S. Gupta, B. Ram and M. Maitra, "Prediction of Stress Levels using Low-Cost IoT-Based Health Parameters Measuring System," 2023 IEEE Silchar

Subsection Conference (SILCON), Silchar, India, 2023, pp. 1-6, doi: 10.1109/SILCON59133.2023.10405369.

- Mr. Subhojit Malik, Assistant Professor of the ECE Department and Mr. Subhajit Roy, Assistant Professor of ECE Department published a journal paper, S. Roy and S. Malik, "RSVM: A Promising Approach for Early Heart Disease Prediction," 2023 International Conference on Integrated Intelligence and Communication Systems (ICIICS), Kalaburagi, India, 2023, pp. 1-6, doi: 10.1109/ICIICS59993.2023.10421499.
- Mr. Subhojit Malik, Assistant Professor of ECE Department published a journal paper, N. Debabhuti, S. Malik, P. Sharma, B. Tudu, N. Bhattacharyya and R. Bandyopadhyay, "Discrimination of Indian cardamom using an array of QCM sensor," 2024 IEEE 3rd International Conference on Control, Instrumentation, Energy & Communication (CIEC), Kolkata, India, 2024, pp. 85-90, doi: 10.1109/CIEC59440.2024.10468273.
- Mr. Subhajit Roy, Assistant Professor, ECE Department, published a conference paper on "RSVM: Promising Approach for Early Heart Disease Prediction" at the IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS-2023) organized by Sharnbasva University, Kalabugari 24 – the November, 2023.
- Mr. Subhojit Malik, Assistant Professor, ECE Department, presented a conference paper on "Development of a Quartz Crystal Microbalance (QCM) Sensor for the Identification of β-Pinene in Cumin" at the International Conference on Systems and Technologies for Smart Agriculture (ICSTA 2023) on December 20, 2023 at Kolkata, India organized by Centre for Development of Advanced Computing (C-DAC) Kolkata, in association with the University of Calcutta, Ministry of Electronics and Information Technology and technically co-sponsored by IEEE SSCS Kolkata Chapter and IEEE Bangalore section.
- Dipanwita Biswas, Ananya Banerjee, Santanu Das and Prosenjit Das, Exploring Machining Capabilities of Al-Mg2Si-Si Rod with Coated Carbide Insert, in the 9 th International and 30th AIMTDR Conference 2023, Varanasi, India, 8-10th December 2023
- Dr. Subham Ganguly presented a paper entitled "Staging Response and Egalitarian Performance in Badal Sircar's Plays" at the Three-Day International Conference on "In Search of Creative Commons: Crisis, Catastrophe and Responsive Literature in India", funded by the Indian Council of Social Science Research (ICSSR), and jointly organized by Abid Ali Khan Centre for Digital Archive and Translation of Cultures (AAKCDATC), Gour Mahavidyalaya, Malda and Department of English, Dr. Meghnad Saha College, West Bengal, India during 31st August – 2nd September 2023.
- Dr. Subham Ganguly presented a paper entitled "Vernacularism in Badal Sircar's Theatre: Bridging the Gap between Stage and Society" in the One-Day International Seminar on "Politics of Language: Vernacularism and Nationalism in Colonial and Postcolonial Times", organized by the Department of English, Dr. Meghnad Saha College, West Bengal on 23rd December 2023.

- Shilpi Saha presented a paper on "Comparative study of Dynamical Behavior in Capacitor Current Compensated V2-Controlled and Peak Current Mode-Controlled Buck Converters," 2024 IEEE 3rd International Conference on Control, Instrumentation, Energy & Communication (CIEC), Kolkata, India, 2024, pp. 192-197, doi: 10.1109/CIEC59440.2024.10468269.
- Shilpi Saha presented a paper on "Effect of ESR on the bifurcation of Valley V2-modulated Buck Converter," 2024 IEEE 9th International Conference for Convergence in Technology (I2CT), Pune, India, 2024, pp. 1-6, doi: 10.1109/I2CT61223.2024.10543624.
- Sannistha Banerjee presented a paper on "Optimal Placement of Distributed Generation for Minimization of Power Loss, Carbon Emission and Voltage Deviation Considering Demand Uncertainty", International Conference on Computer, Electrical & Communication Engineering (ICCECE) 2024, 2nd-3rd February 2024, WB. India, pp. 1-7, https://doi.org/10.1109/ICCECE58645.2024.10497268.
- Suhas Deb presented a paper on "Effect of Humidity on Overhead Line Insulator based on Boundary Frequency Obtained from Leakage Current Analysis," 2023 IEEE 3rd Applied Signal Processing Conference (ASPCON), India, 2023, pp. 321-324, doi: 10.1109/ASPCON59071.2023.10396484.
- Dr. Ankan Bhattacharya, Associate Professor & HOD of ECE Department co-authored a conference paper,"A miniaturized UWB monopole antenna for sub-6 GHz 5G wireless applications," 2023 IEEE Silchar Subsection Conference (SILCON), Silchar, India, 2023, pp. 1-6, doi: 10.1109/SILCON59133.2023.10405231. Date Added to IEEE Xplore: 30 January 2024 [Scopus Indexed]
- Mr. Subhojit Malik, Assistant Professor of the ECE Department and Mr. Subhajit Roy, Assistant Professor of ECE Department presented a paper "Predictive Power of RKNN Models in Early Detection of Heart Disease: A Promising Approach for Improved Prognosis" in the 10th International Conference on Advanced Computing and Communication Systems (ICACCS) from 14-15 March, 2024, organized by Sri Eshwar College of Engineering, Coimbatore, Tamilnadu, India, Technically Sponsored by IEEE and IEEE Madras Section.
- Mr. Subhojit Malik, Assistant Professor of the ECE Department and Mr. Subhajit Roy, Assistant Professor of the ECE Department presented a paper on "IoT-Enabled Stress Level Classification: Leveraging a Lazy Classifier Approach for Efficient and Real-Time Analysis" in 5th INTERNATIONAL CONFERENCE ON DATA ENGINEERING AND APPLICATIONS -2k24 (IDEA -2K24) from 28-29 June 2024, Organized by Oriental Institute of Science and Technology, Bhopal.

#### National Conference

 Dipanwita Biswas, Ananya Banerjee, Santanu Das and Prosenjit Das, Influence of Machining Parameters on Turning Al-Mg2Si-Si Composite, Abstract Proceedings of the 37th National Convention of Production Engineers and Seminar on "Recent Trends and Future Direction in Production Engineering and Management: Vision 2030", Kolkata, India, 18-19th August, 2023, p.40.  A. Gangopadhyay, L. Das, S. Mondal, T. Ghosh "Detection of pothole using YOLOv9" presented in 14th Inter-University Engineering, Science & amp; Technology Academic Meet, 2024, organized by Forum of Scientists, Engineers & amp; Technologists (FOSET), held at JIS College of Engineering on 12th May, 2024.

## **Book Chapters**

- Dr. Ankan Bhattacharya of ECE Dept., edited a Scopus Indexed Book: Advances in Microwave Engineering | From Novel Materials to Novel Mic (taylorfrancis.com) 2023.
- Dr. Ankan Bhattacharya of ECE Dept., published a Scopus Indexed Book Chapter: Microstrip Antennas |
   1 | Theory, Principles and Review of Literature (taylorfrancis.com) 2023.
- Mr. Subhojit Malik, Assistant Professor of the ECE Dept., published a book chapter on "Optimization of Future Location Prediction in Mobile Sensor Network using Particle Swarm Optimization" in the book named "Artificial Intelligence for Wireless Communication Systems: Technology and Applications" from CRC Press.