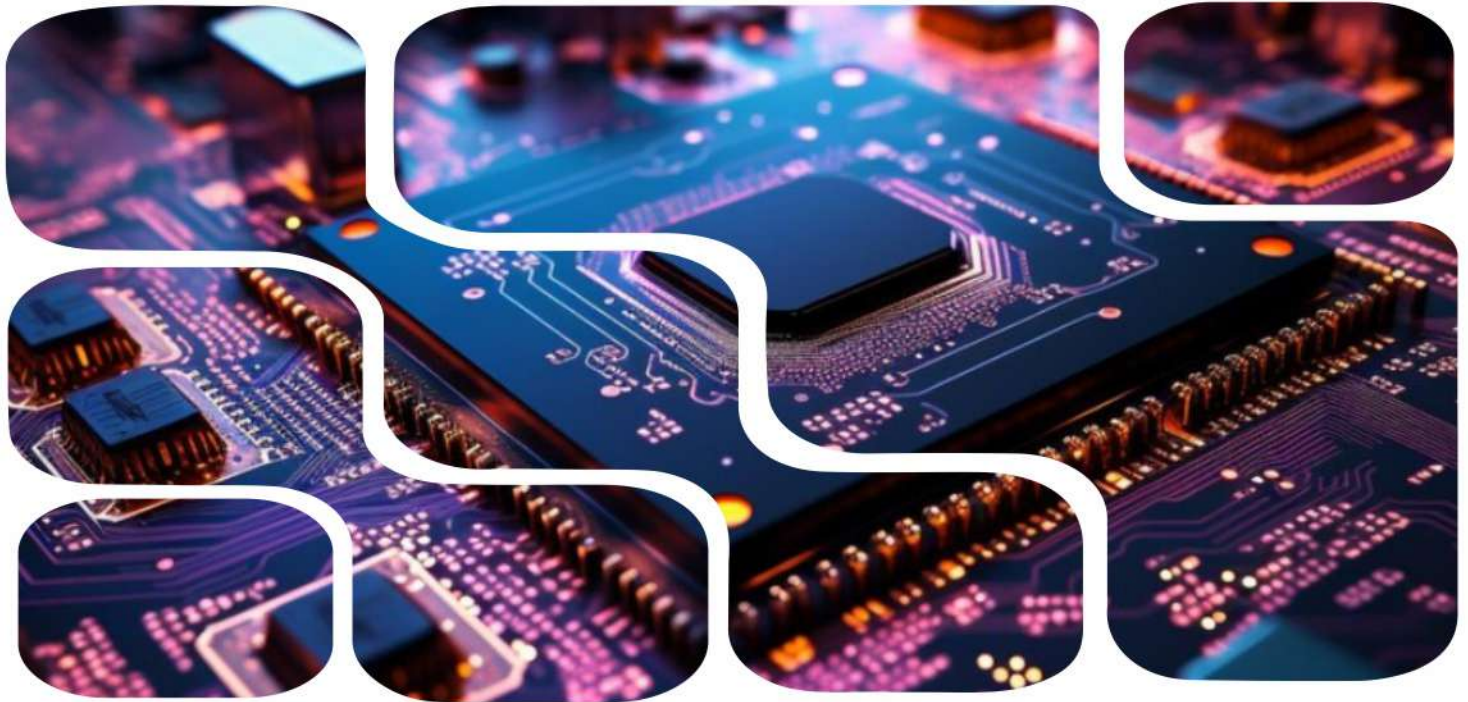


**FUTURE INSTITUTE OF ENGINEERING AND MANAGEMENT**

# **NanoNexus**

**NEWSLETTER || 2023 || VOLUME : 5 || ISSUE : 1**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATIONS ENGINEERING**



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# **-: ABOUT ISSUE :-**



**PROF. (DR.)  
ALOKE KUMAR GHOSH  
EXECUTIVE DIRECTOR  
TEAM FUTURE**

## **Message from the desk of Executive Director**

It is with great pleasure and enthusiasm that I extend my warmest greetings to all the members of the Electronics and Communications Engineering Department as we embark on another exciting edition of our departmental newsletter “NanoNexus”.

Our department has always been at the forefront of innovation and excellence, and this newsletter serves as a testament to the remarkable achievements, groundbreaking research, and collaborative efforts that define us. Let this newsletter serve as a source of inspiration, fostering collaboration and shared knowledge. Our department continues to thrive because of the passion and commitment each of you brings.

I convey my sincere thanks and gratitude to everyone for contributing to the success of our department and I look forward to witnessing our continued growth and achievements.

## **Message from the desk of Principal**

It is a matter of pride and satisfaction to preface the first issue of the newsletter NanoNexus released Electronics and Communications department. This newsletter is meant for apprising all stakeholders about events organized by the department, insights on emerging and allied technologies, student and faculty achievements, message from industry persons, placement success record of the department. The wide gamut of articles in different sections is creative, interesting and stimulating as it provides a platform for students, alumni members and industry experts to share their thoughts on recent trends of technology and nostalgic college memories.

I congratulate the editorial team and HOD of ECE department for their praiseworthy effort in releasing this issue of newsletter within stipulated time.



**PROF. (DR.)  
ANIRBAN CHAKRABARTY  
PRINCIPAL  
FIEM**





**PROF. (DR.)  
ANIRBAN MANDAL  
HOD  
ECE DEPARTMENT**

## **Message from the desk of HOD**

Welcome to Department of Electronics and Communications Engineering. The very ECE is the perfect amalgamation of the Electronics, Communications and Information based Computing Science and Technology. The few revolutionary areas that enhance the impact of this stream are Modern VLSI Technology, Advanced 5G/6G Mobile Communications, Micro and Nano wave technology, IOT, AI and security based challenges etc. In coming days the ECE will be the main junction of the next generations of Industry Revolution i.e. IR 4.0/5.0.

I express my heartfelt gratitude to all my colleagues, students, alumni, respected mentors and those who are directly and indirectly associated to publish this newsletter "NanoNexus" which portrays the colorful events and glorious achievements of the department.

## **Message from the desk of Chief Editor**

Future Institute of Engineering and Management is one of the famous and reputed engineering colleges in West Bengal. The Department of Electronics and Communications Engineering here has earned a solid reputation for education, job opportunities, and technology for more than two decades. As the demand for ECE engineers in both software industry and hardcore industry is equal, the need for studying this branch of engineering will increase from time to time.

The newsletter "NanoNexus" of Electronics and Communications Engineering department is the synergic effort of our current students, alumni, teachers, and industry experts. I pay sincere greetings and gratitude to all the students, esteemed colleagues and my esteemed team members for their unremitting efforts for the successful completion of this newsletter.



**PROF. (DR.)  
KOUSHIK SARKAR  
CHIEF EDITOR  
ECE DEPARTMENT**

# **-: FOREWORD :-**

The history of Electronics can be traced back to the late 19th century when the first electronic device, the vacuum tube, was invented. These developments have led to advanced communication and information processing systems that have transformed human lives and work. The ECE Department moved into its present building in 1951. It was inaugurated by the then Prime Minister; Pandit Jawaharlal Nehru. By the close of the decade of fifties, research had taken roots in the ECE Department in the areas of electronics, acoustics, microwaves and analog computers.

As the time approaches decade after decades the technology becomes smart and advance step by step. The outcome of this technology advancement leads to a huge growth and revolution in industry in electronics and communication sector. A few of the industries that are serving the nation in 21st century are Very Large Scale Integration(VLSI) and Embedded Systems, Microwave and Millimeter wave Technology, Digital Image Processing, Optical Communication, Signal Processing, Robotics and Automation, Internet of Things(IoT), Nanotechnology, Solar Energy, Machine learning, Artificial Intelligence, Python and other programming languages, Web technology, Biomedical signal processing, Cybersecurity and Blockchain, 5G/Wireless communication etc.

In near future the ECE will be the master key to solve the complex puzzles of hardware and software industries.



# :- DEPARTMENTAL EVENTS :-



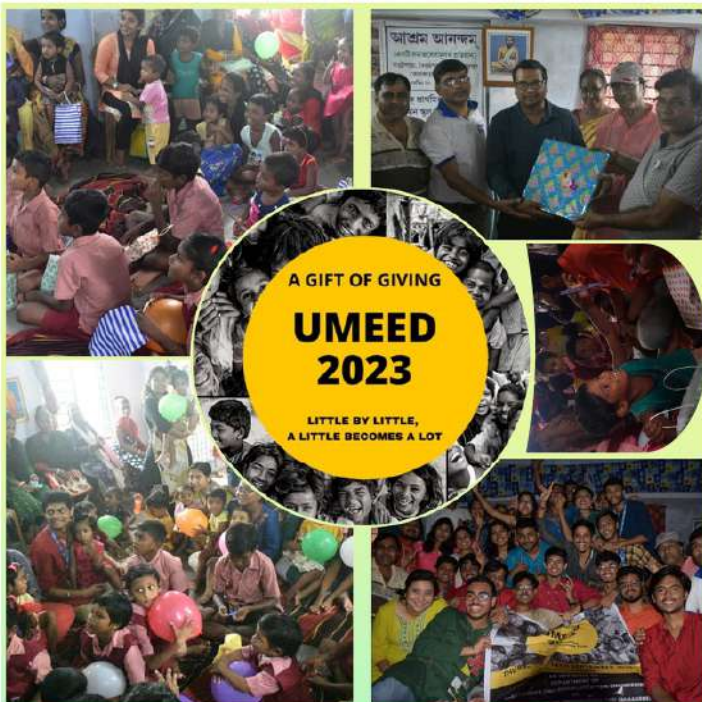
## INCEPTION'23

The annual departmental programme where students showcase their talents by building innovative technical projects, competitive coding, technical quiz, photography, content writing and paintings.



## RUTHVIJ'23

The Teachers' Day celebration of ECE department, where students perform top-notch performances and teachers deliver inspiring speeches. It is a day that fills with gratitude and appreciation in every year.



## UMEED 2023

Donating stationaries and foods along with sharing and spreading happiness by spending sweet time with the underprivileged children.



## ORSUS 2023

The farewell program for the batch 2019-2023. An unforgettable college life of turning tassels and making memories for them.



# :- INDUSTRIAL & PRE-PLACEMENT TRAINING RECORDS 2023 :-

## OUR TRAINING PARTNERS



**AEONIX RESEARCH  
AND INNOVATIONS**



**ARDENT COMPUTECH  
PVT LTD**



**CALCUTTA ELECTRIC  
SUPPLY CORPORATION**



**EUPHORIA  
GENX**



**ARDENT  
COMPUTECH  
PVT LTD**

**AEONIX  
RESEARCH AND  
INNOVATIONS**



**EUPHORIA  
GENX**



## **-: FACULTY ACHIEVEMENTS 2023:-**



**PROF. (DR.) TARUN KUMAR DAS  
AWARDED PHD IN CONVOCATION  
FROM JADAVPUR UNIVERSITY AND  
FELICITATED BY THE DEPARTMENT OF  
ECE FOR DOCTOR OF PHILOSOPHY**

**PROF. (DR.) KOUSHIK SARKAR  
FELICITATED FOR DOCTOR OF PHILOSOPHY BY  
THE DEPARTMENT OF ECE**



**PROF. (DR.) SWAPAN DAS  
AWARDED PHD IN CONVOCATION FROM JADAVPUR  
UNIVERSITY AND FELICITATED BY THE DEPARTMENT  
OF ECE FOR DOCTOR OF PHILOSOPHY**



**PROF. (DR.) SWAPAN DAS  
GRANTED PATENT  
FOR AN INVENTION ON  
DEVICE AND PROCESS FOR LOW  
COST SYNTHESIS OF GRAPHENE**



## **-: RESEARCH ACTIVITIES OF SOME SENIOR FACULTIES :-**



**PROF. (DR.) ANIRBAN MANDAL**

Study of microstrip antennas in 5G/6G applications with superstrate effect.

No. of FDP (2023) - 1  
No. of Publications - 12



**PROF. DEBOJYOTI GHOSH**

Communication, Microcontroller based technology, Medical Instruments.

Entrepreneurship development program on 'Solar Energy' from MSME Government of India.

No. of FDP (2023) - 2  
No. of Publication - 4



**PROF. (DR.) SWAPAN DAS**

Development and Implementation of Graphene - Zinc Oxide Nanohybrid Based Room Temperature Hydrogen Sensor

No. of FDP (2023) - 4  
No. of Publications - 9  
No. of Book Chapter - 2  
No. of Patent = 1



**PROF. (DR.) TARUN KUMAR DAS**

Multispurious harmonics suppression for compact microwave filters applicable for modern wireless communication systems.

No. of FDP (2023) - 15  
No. of Publications - 26



**PROF. (DR.) DIPAK MONDAL**

SAR Radar based on millimeter wave and Microwave.

No. of FDP (2023) - 3  
No. of Publications - 18  
No. of Book - 1



**PROF. ANUPAM PATRA**

Quantum Computing.

No. of FDP (2023) - 2  
No. of Publications - 2



**PROF. DEBABRATA PANDIT**

Microwave Passive Component.

No. of FDP (2023) - 1



**PROF. (DR.) GARGI BHATTACHARYA**

Study of Floating gate Non-volatile Memory device in Nano-meter regime.

No. of FDP (2023) - 3  
No. of Publications - 11



**PROF. (DR.) KOUSHIK SARKAR**

Thin film solar cell

No. of FDP (2023) - 2  
No. of Publications - 31  
No. of Book Chapter - 1  
No. of Book Review - 1



**PROF. DIPANKAR MANDAL**

Detection of adulterations in turmeric powder using machine vision.

No. of FDP (2023) - 4  
No. of Publications - 7



**PROF. ABHIJIT KUMAR PAL**

Spinel Nano Ferrite materials.

No. of FDP (2023) - 3  
No. of Publications - 4  
No. of Book Chapter - 1  
No. of Book - 1



**PROF. MILAN DHARA**

Molecular Imprinted Polymer Based Electrochemical Sensors

No. of FDP (2023) - 1  
No. of Publications - 5  
No. of Book Chapter - 2



## -: PLACEMENT RECORD FOR 2023 BATCH :-

COMPANY	COUNT	COMPANY	COUNT
ACCOPS SYSTEM PRIVATE LTS.	1	HCL TECHNOLOGY	2
AMAZON	4	iB ARTS PVT. LTD	1
ARODEK TECH CONSULTING PVT LTD	1	IBM INDIA PVT LTD	3
CODEYOUNG	1	LOGARHYTHM CONSULTANCY	1
COGNIZANT GenC (DNP – SFDC)	4	LTIMINDTREE	30
COGNIZANT GENC	29	REXNORD ELECTRONICS & CONTROLS LTD	1
CONIZANT GENC ELEVATE	1	ROYAL CONTENT RESEARCH	8
COGNIZANT DNP 2.0 PRO (SFDC)	3	SUTHERLAND GLOBAL SERVICES	8
COGNIZANT DNP 2.0 NEXT	1	TCS DIGITAL	2
DELOITTE	1	TCS NINJA	14
DHOOT TRANSMISSION	2	TEKION INDIA PRIVATE LIMITED	2
DCG DATACORE SYSTEMS	1	VODAFONE IDEA LIMITED	2
GETDEEAFULT AUTOMATION DEVELOPER	1		
TOTAL ::: 124*			

**ECE INTAKE : 120**



**Rexnord Electronics & Controls Ltd.**



# ACADEMIC EXCELLENCE CLASS TOPPERS 2022-23

## 1ST YEAR



**ABHRADEEP PAUL**  
ECE 1, YGPA : 8.36



**DEBOLINA SAU**  
ECE 1, YGPA : 7.53



**PRIYANKA BAL**  
ECE 1, YGPA : 9.27



**HIMESH BHATTACHARYA**  
ECE 1, YGPA : 8.52



**ANWESHA NATH**  
ECE 2, YGPA : 8.03



**MD. SHADAN HOSSAIN**  
ECE 2, YGPA : 7.46



**AGNISHWAR BANERJEE**  
ECE 2, YGPA : 8.71



**RIYA HALDAR**  
ECE 2, YGPA : 8.5

## 3RD YEAR



**SAYAN PAUL**  
ECE , YGPA : 8.92



**PRIYA RANI**  
ECE, YGPA : 8.5

## 4TH YEAR



**MADHUMITA PRADHAN**  
ECE 1, YGPA : 9.20



**PRITHIJIT ROY CHOUDHURY**  
ECE, YGPA : 8.75



**RISHIRAJ BASU**  
ECE , YGPA : 8.80



**ASMITA DUTTA**  
ECE, YGPA : 8.65



# CONGRATULATIONS



# -: STUDENTS' ACHIEVEMENTS :-



## NATIONAL STUDENTS' SPACE CHALLENGE 2023

from left :- **RISHAV DAS (EE 3RD YEAR)**  
**DEBARPITA PRAMANIK (ECE 3RD YEAR)**  
**RATNADEEP MUKHERJEE (ECE 3RD YEAR)**  
**SINJITA SAHA (ECE 3RD YEAR)**  
**PUSHPENDU DEY (IT 3RD YEAR)**

## 3RD POSITION AT HOVERPOD COMPETITION AT IIT KHARAGPUR



## SMART INDIA HACKATHON - 2023

from left :- **RUP PRATIM GHATAK (ECE 3RD YEAR)**  
**BISWARUP CHOUDHURY (ECE 3RD YEAR)**  
**SWARNALI DAS (ECE 3RD YEAR)**  
**TANISHA HALDAR (ECE 3RD YEAR)**  
**ISHAN ATHARTHI (ECE 3RD YEAR)**  
**SWARNAVA CHATTERJEE (ECE 3RD YEAR)**

**NATIONAL  
STARTUP DAY  
CELEBRATION  
BY TEAM OPTIMISTS**



**SIH-23 HARDWARE EDITION FINALIST**



# -: STUDENTS' ACHIEVEMENTS :-



**HACKATHON IN TECH FEST OF  
CIEM CELSIUS  
CHAMPION  
BIHAN BANERJEE(LEADER)  
AYUSH MITRA  
PRIYANKSHU DEY  
PRITHIS DUTTA  
SHREYA BHATTACHARYA**



**ANURAG SINGHA  
ADRIJA BHATTACHARYA  
RAHUL JANA  
PROKRITI KUNDU  
2ND POSITION AT  
EXHIBIT2023,  
ORGANISED BY XPLORICA**



**PRIYANKSHU DEY  
ECE, 3RD YEAR  
2ND POSITION  
INTER COLLEGE CODING COMPETITION  
"CODEDRIFT 3.0"  
IN CELSIUS'23  
THE TECH FEST OF  
CALCUTTA INSTITUTE OF  
ENGINEERING AND MANAGEMENT**



**SUDIPTA PAUL  
SUPRATIK BHATTACHARYA  
SOHAM NATH  
AKASH BISWAS  
OF ECE 4TH YEAR  
1ST RUNNERS UP  
INVITARE, INCEPTION  
2023**



**SOHOM DAS  
BUDHADITYA MUKHERJEE  
RISHITA BISWAS  
KOMAL JHA  
1ST RUNNERS UP  
AT THE  
PROJECT PRESENTATION ON  
THE WORKSHOP ON  
INTELLECTUAL PROPERTY  
RIGHT**



## **-: STUDENTS' ACHIEVEMENTS :-**



**SAYAN SINHA ROY  
(ECE 1ST YEAR)  
(1ST RUNNER-UP)  
ARATRIKA CHATTERJEE  
(ECE 1ST YEAR)  
(2ND RUNNER-UP)  
OF THE EVENT SOLO SONG  
SWAGATAM 2023  
ORGANISED BY CULRAV**



**ANUJA GHOSAL  
ECE , 1ST YEAR  
RUNNER UP OF  
MISS FRESHER'S  
SWAGATAM 2023  
ORGANISED BY  
CULRAV**



**SOHOM DAS  
RISHITA BISWAS  
BUDHADHITYA MUKHERJEE  
KOMAL JHA  
OF ECE 2ND YEAR,  
WINNERS  
INVITARE, INCEPTION  
2023**



**DEBOLINA SAU  
NILESH PAUL  
TANMAYEE GOUDA  
SAYAN DAS  
OF ECE 2ND YEAR  
2ND RUNNERS UP  
INVITARE, INCEPTION  
2023**



**SUMAN KUMAR PANDA  
ECE 4TH YEAR  
1ST RUNNER UP  
PAPYRUS, INCEPTION  
2023**



## **-: ALUMNI ACHIEVEMENTS:-**



**AZAD ALI MUFTI**  
**BATCH : 2010-2014**

**Achieved Degree of International Masters of Science in Electrical Engineering and information technology with major in Communication from Darmstadt college of applied sciences, Darmstadt, Germany.**

**SHRIYA GHOSH**  
**BATCH : 2015-2019**

**Received the degree of Master of business Administration in Operations Management from Symbiosis Institute of Operations Management, Nashik. She also received the gold medal for the girls topper of her institute.**



**DR.BUDHADITYA BHATTACHARYYA**  
**BATCH : 2008-2012**

**Received the VIT research award for excellence in research and currently working as Senior Associate Professor, School of Electronics Engineering, VIT Vellore.**



**DR. SUDIPTA BOSE**  
**BATCH : 2008-2012**

**Achieved Degree of Doctor of Philosophy in Signal Processing Architecture for Real Time Earthquake Early Warning System from Indian Institute of Technology, Kharagpur**





# **:- LABORATORY FACILITIES :-**



**SOME OF THE SENIOR LABORATORY TEACHERS WITH OVER FIFTEEN YEARS OF ACADEMIC AND INDUSTRY EXPERIENCE ARE WORKING TIRELESSLY IN THE RESEARCH AND INNOVATION CELL OF THE DEPARTMENT :**

from left :- **MR. DAYAL DOLUI**  
**MR. ANUP GHOSH**  
**MR. MANASH MUKHERJEE**  
**MRS. KANIKA CHOUDHURY**  
**MR. KHURSHID ALAM**  
**MS. DALIA SANYAL**  
**MR. SNEHAJIT SEN**



**SMART CLASS USING  
DIGITAL BOARD**



**RESEARCH AND INNOVATION  
PROJECT DEVELOPMENT**



**DIGITAL ELECTRONICS  
LAB**



**ANALOG  
ELECTRONICS LAB**



**ANALOG AND DIGITAL  
COMMUNICATION LAB**



**MICROPROCESSOR  
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LANGUAGE LAB**



**MICROWAVE  
LAB**



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*Thank  
You*

REGARDS  
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