

# IcfaiTech Newsletter

April 2024

## From the Director's Desk



With great pleasure, I extend warm greetings to each of you through this edition of our newsletter. It is increasingly essential to stay connected, informed, and supportive of one another. Our newsletter serves as a vital channel for achieving this aim, providing a platform to share updates, celebrate achievements, and foster a sense of belonging within our community. I find myself filled with a sense of pride and gratitude for the resilience and dedication displayed by the faculty members of our school. I would like to acknowledge the invaluable contributions of our esteemed faculty members. I congratulate Dr. Asisia Kumar Panigrahi for his contribution to ECE, publishing two research papers in the Journal “Materials Science in Semiconductor Processing” and IEEE Xplore, and for his best reviewer award from IOP Publishing. Similarly, Dr. Deevana Raju Bandrapalli has kept the Department of DS and AI in the limelight with his three research articles published in various reputed research journals. In addition, Dr. Anjanna Matta

contributed to the research, publishing an outstanding paper in the Bulletin of Computational Applied Mathematics. I also appreciate Dr. Sudheer Hanumanthakari for completing two certificate courses, “Designing an AI & Analytics Curricula” and “Data Mining.” Furthermore, Mr. P. Narsimhulu, a Research Scholar at the Department of CSE, is currently working under the supervision of Dr. Rashmi Sahay, has strengthened the department by presenting a research paper at an international conference. Dr. Kesavarao Sykam's interdisciplinary collaboration in Chemistry highlights our institution's diverse research environment. Last but not least, I wholeheartedly congratulate Dr. N. Prasad and his team members, Dr. P. Akhendra Kumar and Dr. Soumit Samadder Chaudhury, for receiving the IFHE Seed Money Project Grant for the research proposal “Telephone Speech Enhancement for Elderly People.”

Finally, a series of vibrant events on the campus fosters community engagement and celebrates academic excellence. Congratulations to our faculty for their outstanding contributions, which are driving us toward continued innovation and excellence. Looking ahead, I am filled with optimism for the future of our organization. Together, we possess the collective strength, creativity, and determination to overcome any challenges and seize countless opportunities in the future.

**- Dr. K. L. Narayana**  
**Director, IcfaiTech, Hyderabad**

## Publications

**Dr. Asisa Kumar Panigrahy**, Associate Professor, Department of Electronics and Communication Engineering, published a research article titled "Performance Improvement of Spacer-engineered N-type Tree Shaped NSFET towards Advanced Technology nodes," which is available under the "Early Access" area on IEEE Xplore.

IOP Publishing awarded him as the best reviewer.

**Dr. Deevena Raju Bandrapalli**, Senior Assistant Professor, Department of Data Science and Artificial Intelligence, published three research articles: 1. "Safeguarding Privacy and Security in Seamless Connectivity Environment" in the Journal of Propulsion Technology. 2. "New sequential pattern-based rules for aspect extraction" in AIP Conference Proceeding. 3. "Designing Confidential Cloud Computing for Multi-Dimensional Threats and Safeguarding Data Security in a Robust Framework" in International Journal of Intelligent Systems and Applications in Engineering.

**Dr. Anjanna Matta**, Associate Professor, Department of Mathematics,

published a research article titled "Thermal convection in a bi-dispersive porous media with internal heat source" in the Bulletin of Computational Applied Mathematics.

**Mr. P. Narsimhulu**, Research Scholar, Department of CSE, who is currently working under the supervision of Dr. Rashmi Sahay, Assistant Professor, Department of Data Science and Artificial Intelligence, presented a research paper titled "Federated Learning-based Techniques for Healthcare IoV: Challenges and Future Directions - A Knowledge Review" in the 9th International Conference for convergence in Technology (12CT), IEEE Bombay Section, during 5th & 7th April, 2024.

**Dr Kesavarao Sykam**, Assistant Professor, Department of Chemistry, published a book chapter titled "Magnetic polyurethane composites—fabrication and applications" in the book entitled "Magnetic Nanoparticles and Polymer Nanocomposites Fundamentals and Biological, Environmental and Energy Applications" in Elsevier.

# Achievements Page

## Faculty Achievements:

**Dr. Asisa Kumar Panigrahy**, Associate Professor, Department of Electronics and Communication Engineering, reviewed an article entitled “Highly sensitive and label-free detection of naproxen using mixed metal oxide-based field effect transistor as a biosensor for in-vitro analysis of urine” for the Journal' **Materials Science in Semiconductor Processing**'.

He also received the IFHE Seed Money Project for the research proposal “FPGA Implementation of ANN-based Image Encryption with Lower Computational Complexity.” Amount: Rs. 1,90,000/-

**Dr. Sudheer Hanumanthakari**, Associate Professor, Department of Electronics and Communication Engineering, successfully completed a certificate course on “Designing an AI & Analytics Curricula” offered by SAS. He also completed a course on “Data Mining” offered by NPTEL.

**Dr. N. Prasad**, Assistant Professor, Department of Electronics and Communication Engineering, received the IFHE Seed Money Project for the

research proposal “Telephone Speech Enhancement for Elderly People.” Dr. N. Prasad will act as the Principal Investigator, and Dr. P. Akhendra Kumar and Dr. Soumit Samadder Chaudhury will act as Co-Principal Investigators for this project.

- Amount of funding approved: Rs. 1,90,000/-
- Duration of the Project: 12 Months
- Project Code: IFHE/SMP11-8/2024/125.

**Dr. Rashmi Sahay**, Assistant Professor, Department of Data Science and Artificial Intelligence, received the IFHE Seed Money Project for the research proposal “Quantum Resilient Lightweight Cryptography Models for Constrained IoT Devices.” Amount: Rs. 2,00,000. She also published a research article titled “Routing attack induced anomaly detection in IoT network using RBM-LSTM” in Elsevier ICT Express Journal. The journal is a Quartile (Q)-1 journal with an impact factor of 5.4 and is indexed in SCI-E and Scopus.

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This is to certify that

Dr Asisa Kumar Panigrahy

has achieved IOP trusted reviewer status in recognition of an exceptionally high level of peer review competency.

This was achieved in collaboration with  
The Electrochemical Society journals.

Antonia Seymour  
Chief Executive  
IOP Publishing

Adrian T Plummer  
Director of Publications  
The Electrochemical Society

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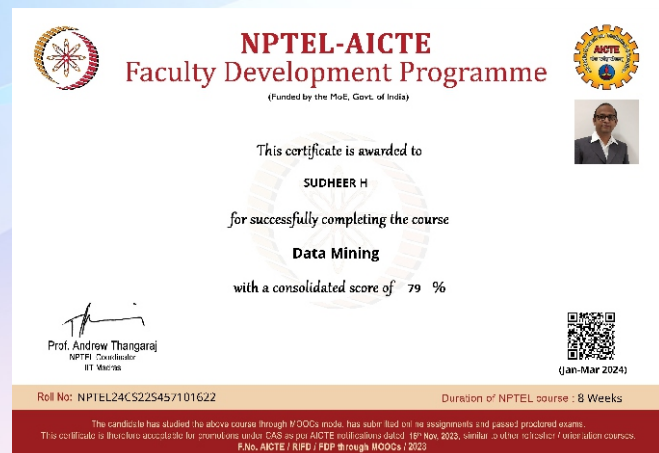
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## Events

### Report on Admissions campaign- New Delhi Tour (21st April 2024)

The marketing and admission team of ICFAI Society participated in an Educational Fair named Mega Career Conclave organized by Collegedunia at Pragati Maidan, New Delhi, from 20th April to 21st April 2024. During the fair, we promoted all the B.Tech and B.Sc courses offered in IFHE- Hyderabad (IcfaiTech), the BBA courses offered in IBS Bangalore, and also the LAW courses offered in ICFAI Law School Hyderabad. Parents and candidates from within and nearby places of Delhi have visited our

stall for counseling and guidance. Our stall was positioned with noticeable visuals and advertising material. Aspirants were given hard copies of brochures and a comprehensive demo of IcfaiTech/IBS/ILS/all based on their interests and concerns. The virtual campus tour is provided through dynamic media and photographs. On the concluding day, we organized a rapid round of quizzes among the fair visitors, where questions related to the ICFAI Foundation for Higher Education, Hyderabad, were asked.

Details of the campaign are given below:

#### Location - Pragati Maidan, New Delhi

Faculty Name	Dr. SOUMIT SAMADDER CHAUDHURY
Event of Participation	Mega Career Conclave by Collegedunia
Date and Time	20th April – 21st April 2024, 10:00 AM to 6:00 PM
Venue	Pragati Maidan, New Delhi
Participation Type	Stall Partner
Co-Participants	Amity University, SRM University, Maharishi University, N L Dalmia University, Apex University , Vidya Joyti University
Number of candidates attended	
20th April-2024	50+
21st April-2024	70+



## Events

### Hand's-on Training Program on Underwater Wireless Communications (23rd April 2024)

The Hands-on Training Program on Underwater Wireless Communications, held on April 23rd, 2024, at the RF & Microwave Lab (R111), was a significant event aimed at providing participants with practical insights into the challenges and techniques associated with underwater communication systems. Dr. V. A. Sankar Ponnappalli led the program, which included designing antennas such as Yagi-Uda, Patch Antenna, Dish Antenna, and Reflector Antenna.

#### Program Overview:

The training program commenced with an introduction to the fundamentals of underwater wireless communications, emphasizing the unique characteristics and challenges the underwater environment poses. Participants gained insights into signal propagation, attenuation, and modulation techniques tailored for underwater scenarios.

#### Hands-on Sessions:

The program's highlight was the hands-on sessions where participants could design and construct antennas commonly used in underwater communication systems. Led by experienced instructors, participants delved into the practical aspects of antenna design, including fabrication, tuning, and testing.



#### Antenna Designs:

1. Yagi-Uda Antenna: Participants learned the principles behind Yagi-Uda antennas and their application in underwater communication. Through practical exercises, they constructed Yagi-Uda antennas optimized for underwater signal propagation.

## Events

**2. Patch Antenna:** The program covered the design and implementation of patch antennas widely used for their compact size and directional radiation characteristics. Participants gained hands-on



experience in fabricating patch antennas suitable for underwater applications.

**3. Dish Antenna:** The design and optimization of dish antennas for underwater communication were explored in detail. Participants learned about the focusing properties of dish antennas and their relevance in long-range underwater communication links.

**4. Reflector Antenna:** The training program also included sessions on

reflector antennas, focusing on their role in enhancing signal strength and minimizing interference in underwater environments. Participants designed and tested reflector antennas tailored to underwater communication scenarios.

The Hands-on Training Program on Underwater Wireless Communications provided participants with valuable practical experience designing antennas for underwater applications. Through hands-on sessions and expert guidance, participants understood the intricacies of achieving reliable communication in challenging underwater environments.



## Events



The program served as a platform for knowledge exchange and skill development, equipping participants with the expertise needed to



contribute to advancements in underwater communication technology. The event was a resounding success, thanks to the dedication of the coordinator, Dr. V. A. Sankar Ponnappalli, and the active

participation of the attendees. Such initiatives play a crucial role in fostering innovation and progress in the field of underwater wireless communications. Finally, the event



ended with valedictory speeches by Mr. Anirudha Kulkarni, Resource



person, Dr. K.L. Narayana, Director-FST, and Dr. Asisa Kumar Panigrahy.

## Events

### National Level Hackathon on IOT Genesis-2024 (18 April 2024)

Dr. U Anil Kumar, Dr. Asisa Kumar  
Panigrahy, and Dr. P Akhendra Kumar



from the ECE Department of FST, IFHE  
Hyderabad, organized the IoT



Hackathon named 'IOT Genesis-2024'.  
It was held on April 18th, 2024, at  
IcfaiTech, IFHE Hyderabad's premises,  
to promote innovation and



cooperation among participants  
within the Internet of Things (IoT)  
field. This exciting event aimed to unite  
individuals throughout India with a  
shared passion for IoT, providing them  
with a platform to display their skills  
and ideas while cultivating an



environment of teamwork and  
innovation. Complementing the  
Hackathon, the IOT Genesis-2024  
commenced as a one-day event. The  
hackathon focused on solving the  
current societal needs, which include  
Agriculture and Rural Development,  
health care and biomedical devices,  
Smart

## Events



systems, Renewable Energy sources for Rural Development, and Waste Management.

It has been shown that the IoT Hackathon Competition stimulates creativity and problem-solving in the field. The event drew a wide spectrum of participants from all over India. It was a resounding success since it demonstrated an astounding array of original ideas and excited everyone in

attendance. New technological developments were sparked by the competition, which also highlighted how crucial teamwork is to success. It demonstrated the Internet of Things limitless potential and encouraged participants to keep pushing the envelope and looking for novel



approaches to difficult problems. IOT Genesis-2024 was an incredible success that surely had a lasting effect on everyone who took part.



## Events

### Blood Donation Camp. (16 April 2024)

The Blood Donation Camp, organized



by the Asana Club in collaboration with the Indian Red Cross Society, was a resounding success. The camp aimed to provide individuals with an opportunity to contribute to the well-



being and health of the community. The event focused on educating participants about blood donation's crucial importance and lasting impact



on saving lives. Encouraging individuals to voluntarily donate blood, emphasizing each donor's role in making a difference in someone's life. There was overwhelming participation from the student community, faculty



members, and students from Business and Law schools (135). Certificates were provided to all blood donors as a token of appreciation for their noble



c o n t r i b u t i o n .

## Events

English Language Day- 2024 (23 April 2024)

IcfaiTech (Faculty of Science



Technology) organized English Language Day on 23rd April 2024 at the FST auditorium. English Language Day is celebrated globally to commemorate renowned playwright William Shakespeare. William Shakespeare has made insurmountable contributions to English literature. The day was celebrated to create awareness among students towards the rich history of the English language. The Department of English conducted various competitions to promote language proficiency and to encourage the skill of creative writing among students. The competitions held for the event are Poetry reading,

Storytelling, Elocution, and Quotation. The event was inaugurated by Associate Dean- Academics of FST - Dr.G.Suresh Kumar, Student Affairs Coordinator Dr. Anjanna Matta, and Faculty Welfare Coordinator Dr. Jyothi Ranjan Nayak by lighting the lamp. Associate Dean- Academics of FST - Dr.G.Suresh Kumar gave an insightful speech on the importance of the day. The winners of the competitions were awarded prizes.

As part of the event, students of FST performed one of the most popular Sitcoms of 1977, "Mind Your Language."



Around 200 students attended the event. ICFAI Tech admin and the Department of English have extended their support for the successful completion of the event.



✉ [admissions.icfaiTech@ifheindia.org](mailto:admissions.icfaiTech@ifheindia.org)

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### Editorial Team

**Dr. K.L. Narayana, Director, IcfaiTech**

**Dr. Rashmi Sahay, Asst. Prof., CSE, IcfaiTech**

**Dr. Swathi Mulinti, Asst. Prof., English, IcfaiTech**

**Dr. Upender Maloth, Asst.Prof., English, IcfaiTech**