

IGNITE 2023



A DAILY NEWSLETTER

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PLACEMENT DIVISION

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CORE PLACEMENTS **CONGRATULATIONS!** **2023 BATCH**
to our students

 Sree Ram U IT	 Ranjith S IT	 Sakthivel S IT	 Pooja S IT
 Akilandeswari A IT	 Nithyakalyani G IT	 Lothi S T CSE	 Arun Vignesh S CSE
 Sudharsan C MHT	 Keerthana A MHT	 Suvetha D R BME	 Sowmiya S ECE

For Being Placed in
Ava Software Pvt. Ltd.
CTC 5 LPA



Around twelve students from the department of CSE, IT, ECE, MHT & BME are the final shortlisted students of **AVA Software Pvt. Ltd.** for the position of Software Developers with CTC of 5 LPA.

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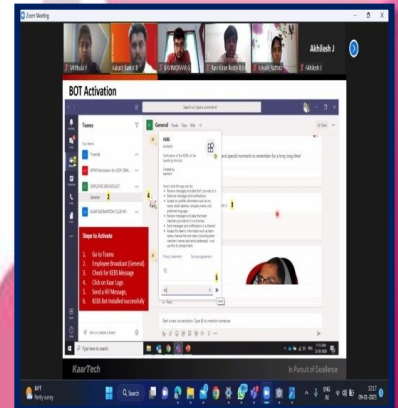
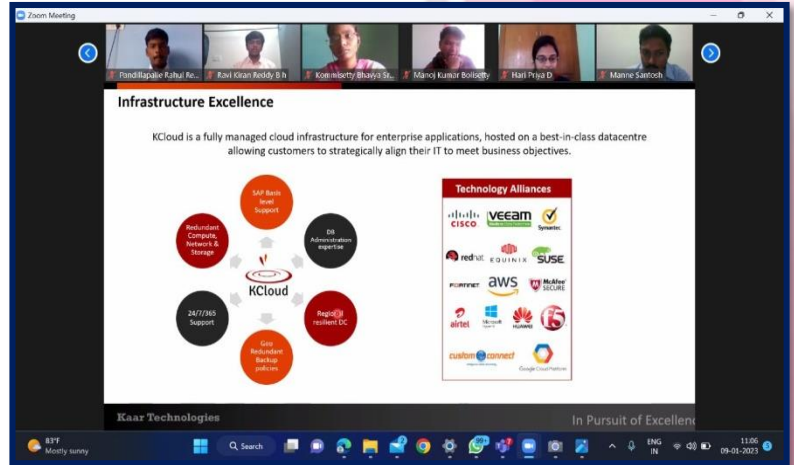




Kaar
In Pursuit of Excellence
Kaar Technologies Induction Program



9th January 2023 (Monday) 10:00 am



Mrithula V, IV year student, Department of CSE virtually on boarded in **KAAR Technologies, Chennai** and attended **Induction Programme** organized by the company on 9th January 2023.

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PLACEMENT DIVISION



The poster for the PPG Asian Paints Placement Drive features the Agni College of Technology logo at the top, along with accreditation details (AICTE, UGC, NAAC, NBA, ISO 9001:2015) and the college's contact information. The PPG Asian Paints logo is prominently displayed in the center, with the tagline 'AUTOMOTIVE, MARINE AND SPECIALITY COATINGS'. Below this, the text 'PPG Asian Paints Placement Drive' is written in red. An illustration shows a group of students in business attire walking towards a meeting table where a representative is seated. At the bottom, a table provides the following details:

Drive Date	Drive Time	Drive Venue
07-01-2023 (Saturday)	10:00 AM	College Premises



The final year students (Boys), Department of Chemical Engineering have attended the **Placement Drive** at **PPG Asian Paints, Chennai** on 9th January 2023.

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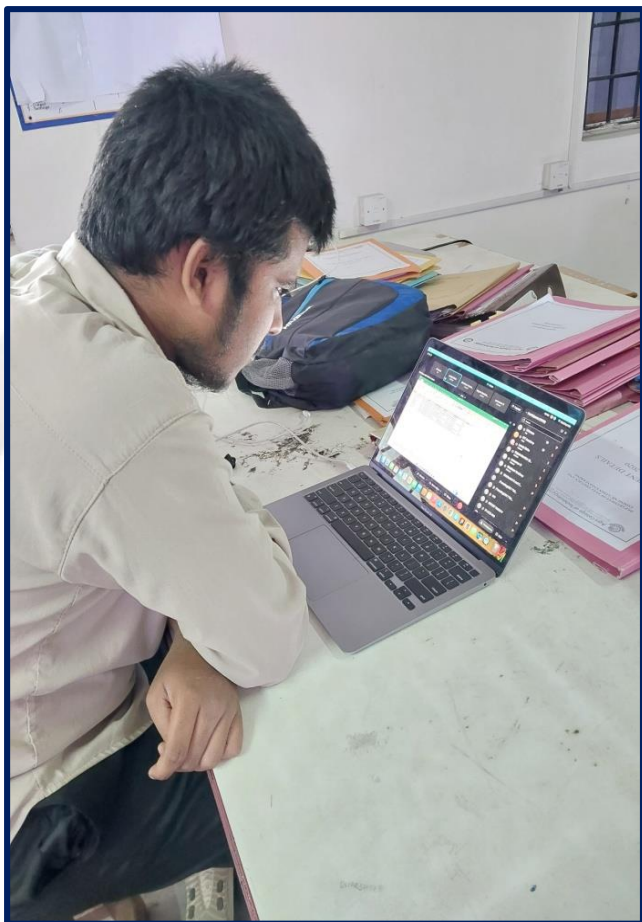


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AGNI PRIDE ACTIVITY



In association with **UiPath Academic Alliance** Hosted by **ICTACADEMY**

UiPath Citizen Developer
SKILL-A-THON 2022

INDUSTRY EXPERT SESSION

10 JANUARY 2023 - 11:00 AM - 12:00 PM

Exclusive for
ICT Academy Member Institutions

SPEAKERS



Shubham Varshney
Solution Architect
Wipro



Lovely Sinha
UiPath MVP & Associate
JPMorgan Chase & Co

www.ictacademy.in/skillathon

UiPath Skillathon Faculty Coordinator Mrs. Kanaga Mythily, AP, Department of CSE along with students have attended the **Industry Expert Session** organized by **ICT academy**. **Bot Building Training** through **Robotic Process Automation (RPA) Tool** was delivered during the session.

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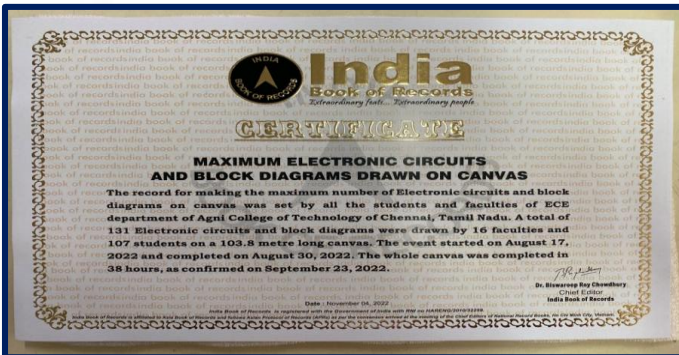


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DEPARTMENT ACHIEVEMENT



The Department of Electronics and Communication Engineering is proud to announce the record that has been established with the **Indian Book of Records** for portraying the **Maximum Electronic Circuits And Block Diagrams Drawn on Canvas** by the faculty members and students under the eminent guidance of Dr. N V S Sree Rathna Lakshmi, Professor and Head, ECE.

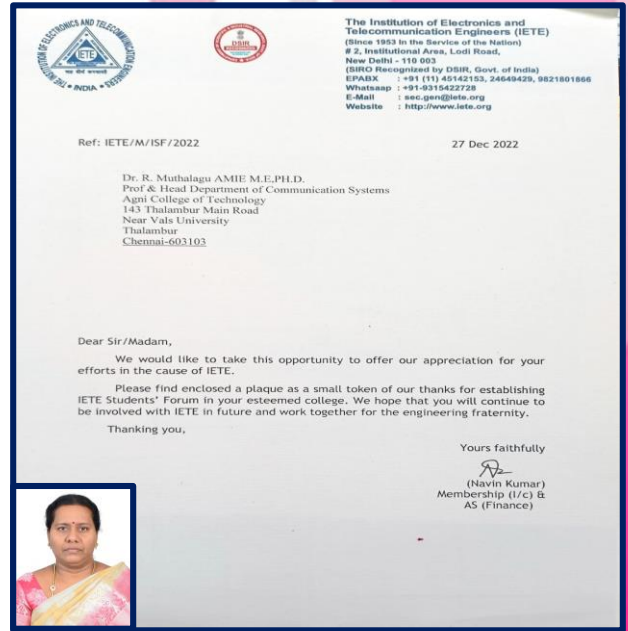
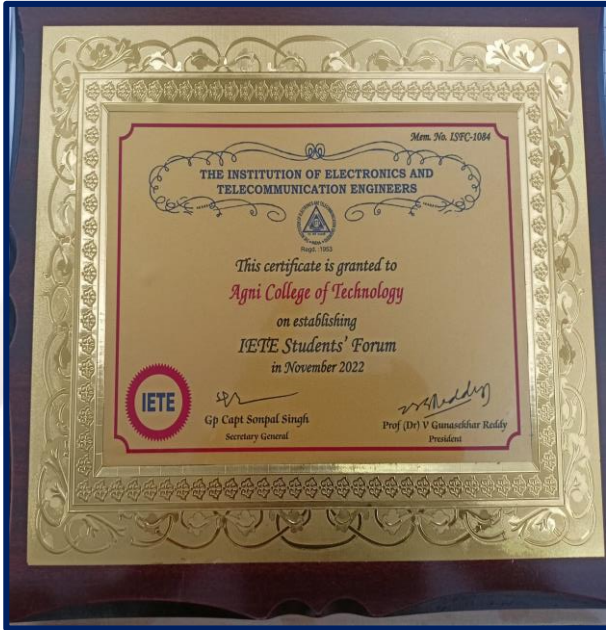
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FACULTY ACHIEVEMENT



Dr. Muthalagu R, Professor, Department of Electronics and Communication Engineering has been appreciated with a **Plaque** for establishing **IETE Students' Forum** at our Institution by the **Technical Society of IETE** (Institution of Electronics and Telecommunication Engineers) on 27th December 2022.

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FACULTY ACHIEVEMENT




Article

Detoxification of Toxic Organic Dye by Heteroatom-Doped Fluorescent Carbon Dots Prepared by Green Hydrothermal Method Using *Garcinia mangostana* Extract

Velusamy Arul ^{*,1}, Kothalam Radhakrishnan ², Natarajan Sampathkumar ³, Jothi Vinoth Kumar ^{4,5}, Natarajan Abirami ⁴ and Baskaran Stephen Inbaraj ^{4,*}



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Abstract: In this work, nitrogen- and oxygen-doped fluorescent carbon dots (NOFCDs) were prepared using a simple green hydrothermal carbonization technique. Aqueous ammonia and the plant extract of *Garcinia mangostana* were used as a source of nitrogen and carbon, respectively. The prepared NOFCDs were examined using a variety of microscopic and spectroscopic techniques for physicochemical characterization. Fluorescence and UV-visible spectroscopy measurements were used to analyze the NOFCDs' excitation-dependent fluorescent emission and absorption nature. It is observed that fluorescence intensity was excited at 320 nm and the strongest emission peak absorbed at 405 nm. The HRTEM imaging revealed NOFCDs to be spherical in shape with particle size at 3.58 nm. Moreover, the amorphous nature of NOFCDs was verified by X-ray diffraction, Raman spectroscopy, and SAED pattern techniques. Through FTIR, XPS, and EDS investigations, the doping of nitrogen and oxygen over the surface of the NOFCDs was evaluated and validated. The presence of carboxylic, amine, hydroxyl, and carbonyl functional groups on NOFCDs' surface was shown by XPS and FTIR investigations. By using NaBH₄, the obtained NOFCDs were demonstrated to possess excellent catalytic activity in the detoxification of methylene blue. Overall, this study revealed that the NOFCDs synthesized from green sources could be a promising material for catalytic and environmental remediation applications.

Keywords: *Garcinia mangostana*; hydrothermal carbonization; fluorescent carbon dots; catalytic activity; detoxification; methylene blue

1. Introduction

Nanoscience and nanotechnology have brought rapid advancements in various fields, including drug delivery, catalysis, sensors, energy storage devices [1–3]. Among various nanomaterials, quantum dots (QDs) have drawn increasing interest due to their distinct electrical and luminous capabilities. By definition, the QDs are semiconductor nanoparticles with ultra-small size (2–10 nm) and are made of 100–10,000 atoms possessing the capability to transport electrons [4]. Despite having unique qualities, the presence of heavy metals makes them exceedingly hazardous, which consequently led to the discovery of brand-new, benign carbon nanoparticles known as “carbon dots” (CDs) [5]. The CDs refer to a recently discovered class of carbon compounds with a diameter <10 nm

Citation: Arul, V.; Radhakrishnan, K.; Sampathkumar, N.; Vinoth Kumar, J.; Abirami, N.; Inbaraj, B.S. Detoxification of Toxic Organic Dye by Heteroatom-Doped Fluorescent Carbon Dots Prepared by Green Hydrothermal Method Using *Garcinia mangostana* Extract. *Agronomy* **2023**, *13*, 205. <https://doi.org/10.3390/agronomy13010205>

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Agronomy **2023**, *13*, 205. <https://doi.org/10.3390/agronomy13010205> www.mdpi.com/journal/agronomy

Mr. J. Vinoth Kumar, Assistant Professor, Department of Science & Humanities (Chemistry) has published a research article on **Detoxification of Toxic Organic Dye by Heteroatom - Doped Fluorescent Carbon Dots Prepared by Green Hydrothermal Method Using *Garcinia mangostana* Extract** in *Agronomy Journal*, Impact factor 3.9.

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FACULTY PARTICIPATION



Mr. P. Karthikeyan, Assistant Professor, Department of Aerospace Engineering has attended the International Webinar on Importance of Preparedness for Educators organized by Bharath Institute of Engineering and Technology, Chennai on 31st December 2022.

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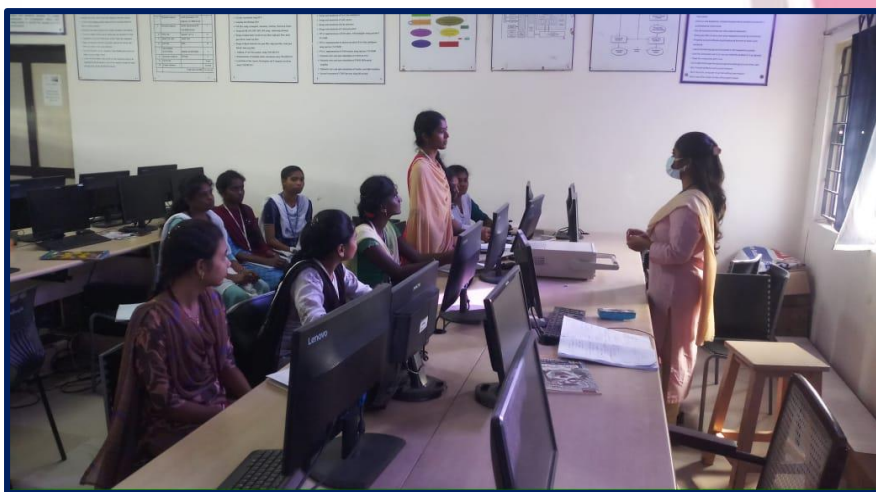
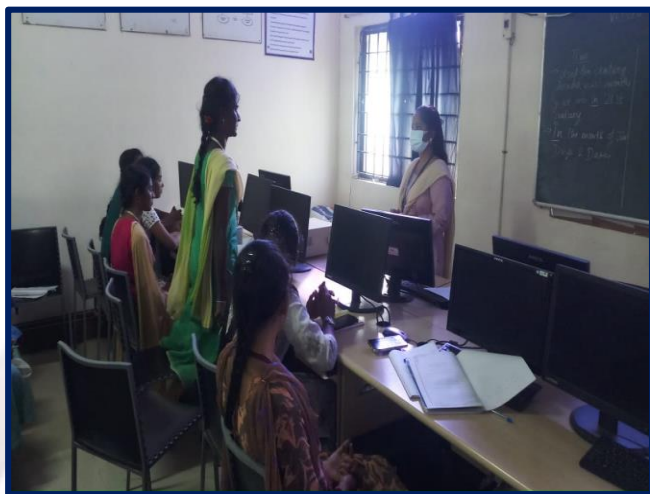
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PEER TRAINING



Harini P & Lokesh V, IV year students, Department of Electronics and Communication Engineering have conducted **Soft Skill Training - Verbal Ability** during GD rounds and Interview preparedness respectively for the III year students on 07th January 2023.

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