



## **Distinct Performance in Research and Innovation at Kumaraguru College of Technology (KCT)**

Kumaraguru College of Technology (KCT) stands out for its robust focus on research and innovation, providing a unique ecosystem for students and faculty to turn innovative ideas into commercially viable products. The institution has established several research centers dedicated to different areas, fostering industry partnerships and promoting applied research.

### **KC.IRI - Kumaraguru Centre for Industrial Research and Innovation**

KC.IRI connects industries with KCT's academia to facilitate research, development, and process improvement. This center supports industry-specific applied research and innovative product development, contributing to KCT's increased research output.

- **iQube** aims to bridge the gap between student skills and industry demands. It helps students build technical expertise to develop practical solutions for real-world problems.
- **Garage** is a student-involved product development research center focused on automotive engineering. It allows students to design, construct, and compete with vehicles in various motorsport events worldwide.
- **Ré (Research and Exploration Cell)** promotes a research-oriented culture, mentoring students and providing engineering solutions to global problems. It includes the Natural Fibre Research Centre (NFRC), focusing on fiber research.
- **Forge** serves as an incubation center, supporting innovation and start-ups, making KCT a hub for entrepreneurial growth.

**Research Achievements:** KCT has made significant strides in research, with 64 patents published in 2023 and 6 design patents granted over the past 5 years. The institution's research paper publications have also seen steady growth:

- **Scopus:** 424 (2019), 261 (2020), 394 (2021), 524 (2022), 538 (2023).
- **Web of Science (WoS):** 99 (2019), 135 (2020), 110 (2021), 168 (2022), 122 (2023).
- **First Indian Team at Monaco Energy Boat Challenge:** Team SEA SAKTHI of KCT-a power-packed team of 15 Engineering Students, of various ingenious talents from different Departments of Kumaraguru College of Technology participated in the international Energy boat Challenge held at Monaco, Italy and secured 6<sup>th</sup> position.
- **Notable Awards:** The achievements of students in the academic year 2022-23 is listed below

NAME	AWARD	EVENT	DATE
Surya Prakash V, Sree Ezhil V R,	Rs.10 Lakhs	NIDHI PRAYAS Program at iTIC Incubator at IIT Hyderabad	01.06.2022
Team Knight Hackers	Finale Winner Rs. 1,00,000	Smart India Hackathon 2022, Ministry of Education , Government of India	25.08.2022 to 28.08.2022
Team Ellergy	Winner- Cash Rs.1,00,000/-	SIH Senior Hardware Edition, Ministry of Education, Government of India	25.08.2022 to 29.08.2022
Vaishnavi K	Final Round	Finals of Smart India hackathon, Government of India, New Delhi	24-08-2022

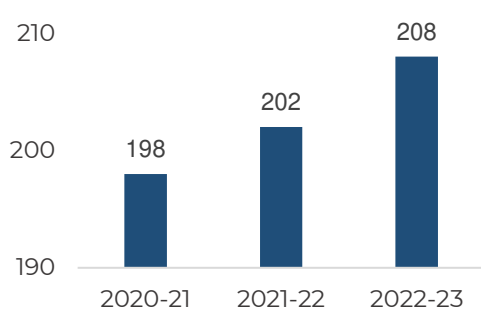
<p>1. Mrs R Sukanya Devi 2. S.D. Jaswanth</p>	<p>Team has secured a grant of Rs 2.00 Lakhs from IIHMR Foundation, Rajasthan to develop Automated foot scrubber device for diabetic patients</p>	<p>Start up grant-IIHMR Foundation, Rajasthan</p>	<p>10-10-2022</p>
<p>1. Lalith H N 2. Ravi Ragul R 3. Harishwaran R 4. Dharanivel D 5. Akash Thanga 6. Rohan R 7. Yaadhav N 8. Kashyap Rajeev 9. Dharun A 10. Jairish R</p>	<p>Runner-up award for Manoeuvrability with a Cash Prize of ₹10000</p>	<p>SAE ISS - Electric Two Wheeler Design Competition 2022 held at SRM Institute of Science and Technology, Kattankulathur, Chennai</p>	<p>17.10.2022- 18.10.2022</p>
<p>1. Lalith H N 2. Ravi Ragul R 3. Harishwaran R 4. Dharanivel D 5. Akash Thanga 6. Rohan R 7. Yaadhav N 8. Kashyap Rajeev 9. Dharun A 10. Jairish R</p>	<p>Overall 3rd place with a cash prize of ₹25000/- in the SAE ISS - Electric Two Wheeler Design Competition 2022</p>	<p>SAE ISS - Electric Two Wheeler Design Competition 2022 held at SRM Institute of Science and Technology, Kattankulathur, Chennai</p>	<p>17.10.2022- 18.10.2022</p>

1. Ms. Srinithi J 2. Ms. Sriharshitha P	KCT team has won Third place in Manipal Medtech Hackathon 2022 with cash award 20,000/- and eligible for a seed grant of 25 Lakh from Manipal Gok bio incubators.	Manipal Medtech Hackathon 2022	21-10-2022
R. Jairish	Overall Winner, Cost Evaluation 1st and Endurance 1st (Cash Prize 60,000)	FMAE Moto Student India	04-02-2023 to 06-02-2023
Sharan Kirthik S, Priyanka R	Cash Prize 10000 Best team award	Texathon 2.0 organized by AIM , Startup TN and AIC-NIFT TEA, Tirupur	01-06-2023

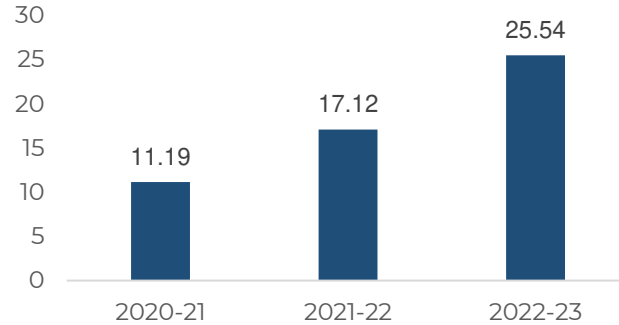
These achievements highlight KCT's commitment to fostering a research-driven environment that encourages innovation, industry collaboration, and continuous improvement.

# Faculty Quality and Research

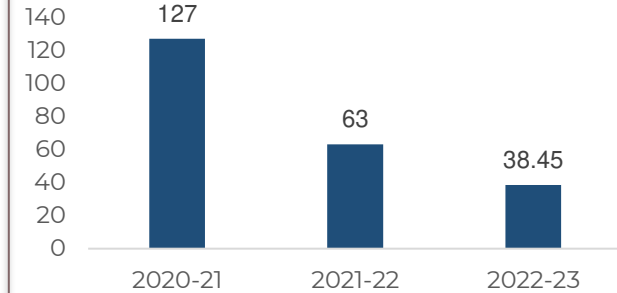
## No. of Ph.D.s



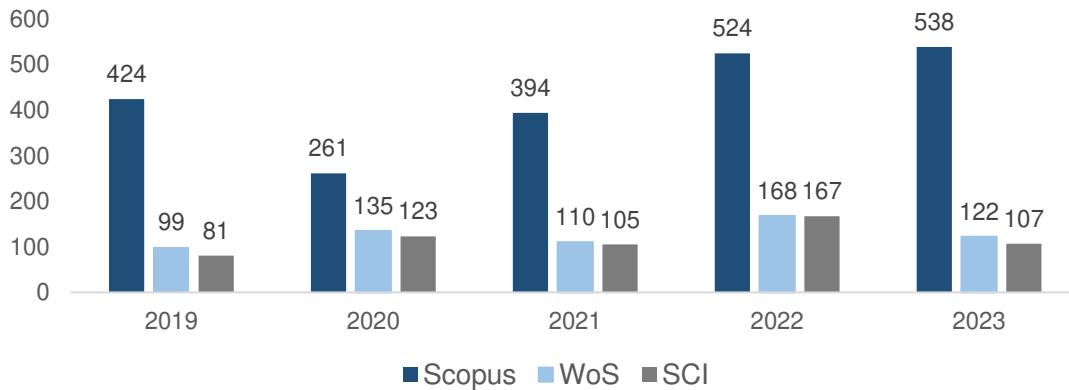
## Seed Grants (Rs. in Lakhs)



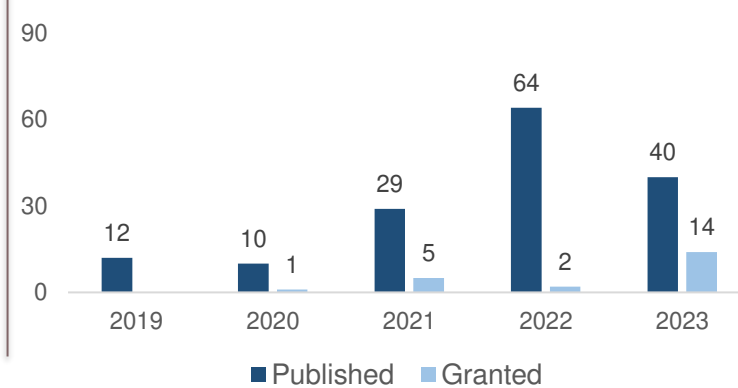
## Consultancy (Rs. in Lakhs)



## Publications (Nos.)

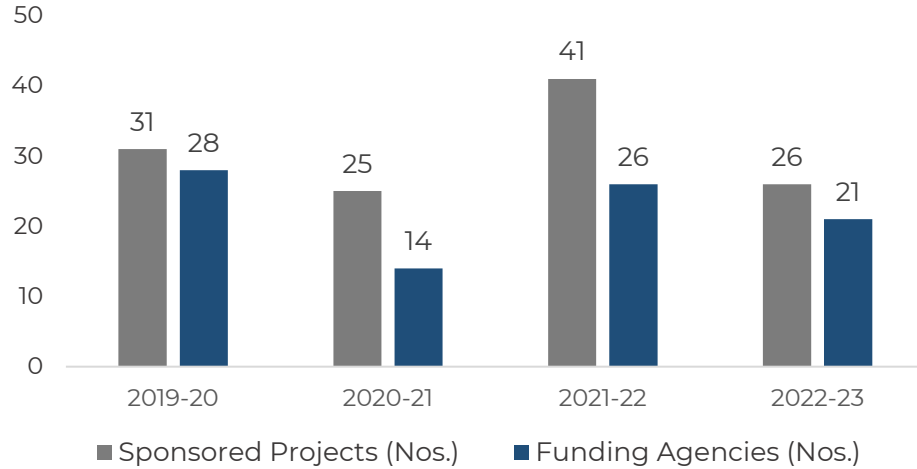


## IPR (Nos.)

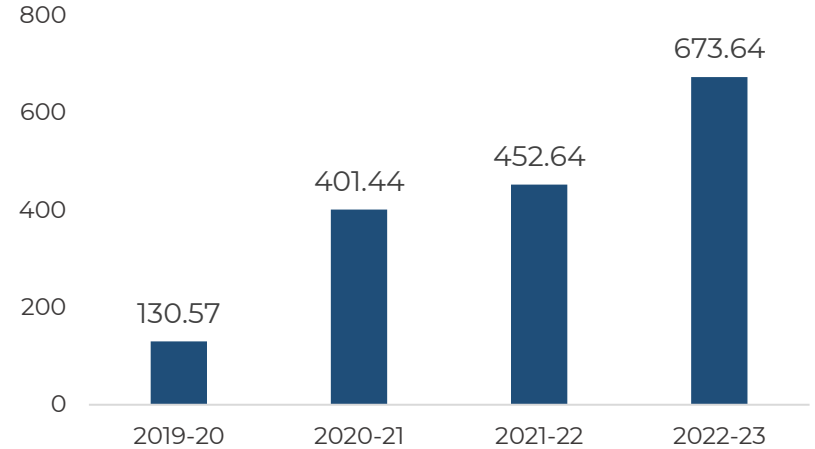


# Faculty Quality and Research

## Sponsored Projects



## Amount Received (Rs in Lakhs)



AICTE, DRDO, DST, TNSCST, MHRD, ICSSR and DBT

# Research Support and Systems ...

- KCT - UB Chem Tech NDT Lab
- KCT - EMC Dell Lab for Analytics and Cloud
- KCT - Bosch Centre for Automotives
- KCT - Rieter Lab
- KCT - Keysight Centre for Wireless Technologies
- KCT - TI Lab for Signal Processing and Embedded Systems
- KCT - LoRaWAN Academy
- KCT - Yokogawa Centre for DCS
- KCT - Fluke Centre for Calibration
- KCT - Siemens Centre for Automation
- KCT - Lectra - Speed Step Centre for Design

# Faculty Research - KCIRI

Kumaraguru Centre for Industrial Research and Innovation (KC.IRI), was launched on 27<sup>th</sup> July 2017 on Dr. APJ Abdul Kalam memorial day, focused on Research & Innovation ecosystem at KCT

## Current Ongoing Projects (DRDO / DRDL)

- Structural and Mechanical Properties of electroplated steel
- Design of Trisonic Section for Trisonic wind tunnel



## Retired Defense Officers – Rear Admiral, Commodore and Director (DRDO) on Roll





# Students Support - RiG



- Re, iQube and Garage
- Started moderately to guide students
- Learning through Projects
- Moving towards research / consultancy / incubation/ funding



# Forge - Innovation and Incubation Centre



- **3 Centres** – Coimbatore, Chennai & Hosur
- With Coworking, Seating & Tech Infrastructure Capacity
- Number of **Startups Incubated** – 100 (last 3 years)
- Number of **Startups Graduated** – 69
- 25+ Startups received awards & recognition
- **22 Patents, 1 Copyright & 33 Trademarks**
- In Partnership with **Govt Sponsored & Industry Sponsored Open Innovation Programs**



# Sea Sakthi

## A New Boat in the Bay!

A power-packed team of 15 Engineering Students, of various ingenious talents from different Departments of Kumaraguru College of Technology, Coimbatore.



20 Teams with more than 20 nationalities at Monaco !!

**We are the First Indian Team at Monaco Energy Boat Challenge!**

# Student-led Start Up

Ms. Niveda Ravikumar, Founder, Green Delight Innovations & PhD Scholar, KCT start-up idea of plastic-free sanitary napkins was recognized as **one of the top 10 socially impactful business innovations** (out of 244 Ideas from 23 States) in the Swachhata Startup Challenge – 2022 announced by the **Ministry of Housing and Urban Affairs (MoHUA)**, Swachhata Start-up Conclave under the Swachh Amrit Mahotsav.

