



PAAVAI ENGINEERING COLLEGE
(Autonomous)
Annual Report 2023-2024



About IIC Institute

**Vision / Mission of IIC established at the
Institute Vision:**

To inculcate, develop and enhance the entrepreneurial potential of the budding professionals for producing ethical, innovative and successful entrepreneurs by creating an entrepreneurial ecosystem for individuals with creative minds and ideas for substantial business opportunities.

Mission:

To dispense opportunity and encourage innovative ideas for transforming them into start-up establishments.

To become the centre of excellence, inspire, and enable the students to become entrepreneurs by providing platforms for developing novel technologies catering to current market stipulations and developing their own enterprises.

To produce socially responsible, economically viable, legally bound and ethically sound young entrepreneurs.

Journey of IIC established at the Institute

IIC was established in 2018 at Paavai Engineering College. Right from its establishment till date we are regularly,

Regular execution of IIC, MIC, Self-Driven and Celebration activities.

For the academic year **2022-2023** we have received **3.5-star rating** and selected in the Consortium college and contributed as Mentor for other colleges.

Received a fund of **Rs.2,25,000** to act as a mentor under **AICTE MENTOR MENTEE scheme 2023-2024.**

Received a fund of Rs.13 lakhs under MSME 3.0 Women Hackathon – Preparation of bioplastic using sterculia foetida leaves.

Our college team received a fund of **Rs.2,00,000/-** under the **YUKTI Innovation** contest for 23-24 - Adjustable drum seeder.

Acted as **Nodal centre for Smart India Hackathon 2022.**

We have received appreciation certificate for NIPAM KAPILA.

Actively participating in the **Smart India Hackathons** and **Regional Meets** organised by AICTE. Organizing workshops every quarter to motivate the students to become

Entrepreneurs.

Established Paavai PreIncubation and Incubation Centre to support IIC activities.

Conducting regular **online and offline activities** in association with **Entrepreneurship Development Cell** promoting Entrepreneurship, IPR and Innovation.

Arranging **interactive sessions** with successful Entrepreneurs and Innovation Ambassadors periodically.

Conducting **competitions** in every quarter to exhibit their Entrepreneurial talents, creativity and innovation.

Organizing **industrial visits**, at least once a year.

Arranging **special lectures** on topics like design thinking and creativity, innovation, IPR, start-ups, business planning, team building, generation of resources and other business-related concepts.

Diversified representation in the IIC established at the institute from industry, Interdisciplinary & Departments/ Units etc.

We have representatives from industries, Colleges (Incubation Centre Head), the banking sector, and alumni from our Institute who participates in our Quarterly meetings and give suggestions for the growth and improvement of entrepreneurship, start-up and innovation activities throughout.

Brief mention of key functionaries at the IIC Institute

President - Dr.M.Premkumar, President of IIC, Paavai Engineering College. His role involves motivating the faculty members and students to adopt innovative methods of teaching, and learning and encouraging them in doing innovative projects that may end in start-ups.

Vice President - Dr.K.Sundaramurthy, Vice-President of IIC, Paavai Engineering College. His role involves guiding both the Convenor and Coordinators in conducting various events and functions in IIC and motivating the students to start the new business in their areas.

Convenor - Dr.R.Mohana Priya, Convenor of IIC, Paavai Engineering College. Her role involves in guiding and giving key points to various departments to organize events and workshops related to IIC for developing the student's skills related to entrepreneurship. In addition, to monitor the execution of various calendar activities and reports to the President. **Coordinators** - The role of the coordinators is to organize various seminars, workshops and events regarding IIC. In addition, to guide the student's projects related to their innovative ideas.

Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

Total No. of IIC Members	49 +70
Total No. of IAs	39 (Basic and Advanced Level)
Total No. of faculty Mentors from Portal	35

Pre-Incubation Units, If any	Paavai Incubation Centre
Incubation Units, If any	Paavai MSME Incubation Centre
IP Facilitation Unit, If any	Nil

Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Studentbodies/clubs engaged in the promotion of Innovation and Entrepreneurship on the campus.

Paavai Pre-Incubation centre
 Paavai Incubation centre
 Paavai Soft Innovation Centre
 Entrepreneur Development cell
 Software development and information management club
 Microbytes innovative club
 Resource club
 TVS Harita centre
 Google Developer Students club
 Bootcamps and activities through EDII

Highlight Achievements (Narrative/Graphical/tabular representation)


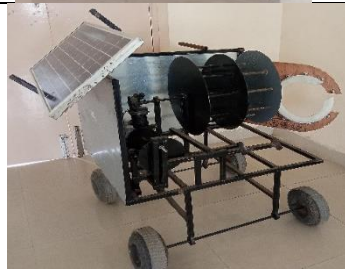
Number and Different types of I&E and IPR activities Conducted	80
No. of student's & faculty ideas generated	85
No. of students & faculty Innovation/prototypes developed	45
No. of IPs generated, published and granted	58 + 6
No. of Student & Faculty Start-ups/Ventures established.	21
Amount spent on promotion and awareness generation on Innovation Entrepreneurship on the campus	Rs.5,00,000
Amount grant or fund supported to student & Faculty lead Innovations, start-upsand IPR	Rs.5,50,000
No. of Technology Transfer and Commercialization happened	03






Highlight a few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum





[Profile of few faculties with 2-lines of their achievements]




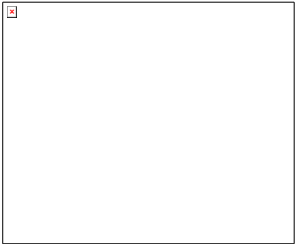
S.No	Name of the faculty/ Student	Award/Achievement	Organised /Event Name	Date
	Ms.Swathi	MSME 3.0 Women Hackathon	AICTE	AY 2023-2024
2	Dr.A.Vivekanandhini / Balamurugan M (Agri)	MSME 2.0 Solar Insect Trapper	AICTE	AY 2023-2024
3.	A.Vivekanandhini / Ajay K (Agri)	YUKTI Innovation Challenge 2023	Institution's Innovation Council (IIC), Ministry of Education's Innovation Cell	AY 2023-2024
4.	Vishwa (MCT) .Prem (MCT) .Kavin Kumar	Participated in the “ 3 day Boot – Camp for EDII's Hackathon- 2023-24”	Knowledge institute of technology/ EDII(Bootcamp)	3.9.2024 - 5.9.2024
5.	urya Raja AP(Civil)	Got grants 13.35 lakhs from MSME 2.0	MSME 2.0 Hackathon	08.08.2023
6	M. S.Swathi (III-CSE-C) R.Dhivyasri (III-CSE-A) S.Thilagan (III-CSE-C)	3 rd Prize	AGRI Hackathon	26.06.2024
7	l. Amarnath	3 rd Prize	AGRI Hackathon	31.05.2024

Highlight selected best Innovations & images with mention of inventor/innovation name

S.No	Innovations	Inventors	Images
1.	Smart system for stock management	Staff Dr.D.Boopathi ASP / EEE Student A.Sasi prakash III / EEE	
2.	Drip Lateral Pipe Winding Machine with Bunching	Staff Dr A Vivekanandhini Student Sandheesh .K. R IV –Agri	

3.	Design And Fabrication of Rechargeable Electronic Pruner	<p>Staff Mr B Mano</p> <p>Student Ramkumar. R (Agri)</p>	
4.	Non Destructive Testing of Pesticides in Horticultural Products	<p>Staff Dr .T. Arun kumar, Prof./Biomedical</p> <p>Students Arihara. V and Jayasri A / IV BME</p>	
5.	Menstrual Pain Relief Pad with Integration of IR	<p>Staff Dr. S.Rajasekaran, ASP/Biomedical</p> <p>Students Ariharan V and Jayasri A / IV BME</p>	
6.	Wireless EV - vehicle charging	<p>Staff Dr.D.R.P. Rajaratham (MCT)</p> <p>Students J.vishwa L.Prem R.kavin Kumar (3rd year MCT)</p>	
7.	Agricultural soil nutrition Autosprayer	<p>Staff S. Manikandan (MCT)</p> <p>Students S.V.Thamaraiselvan S.Srikanth (3rd year MCT)</p>	

8.	<p>Rapid Decomposition of solid waste</p>	<p>Students Surya Raja (Civil)</p>	  
9.	<p>Topic Automated Irrigation and Soil Nutrients Management system based upon crops</p>	<p>Staff Santhanalakshmi. K AP/CSE</p> <p>Student Udhayarasu E / III / CSE</p>	
10.	<p>AeroRevive - Next Generation Aerial Reforestation System for High-Altitude Ecosystem Restoration</p>	<p>Staff Raj kumar D (AERO)</p> <p>Students Kokila G (Aero) Dharani Sri V (Aero)</p>	

11.	Design and fabrication of electric go-kart rear wheel drive	Staff R. Meiyazhagan AP/Mechanical Student S. Gowtham S.Pradeepkumar M.Siva sakthi S.Jayasurya (III Mech)	
14.	Manual drive of bicycle using solar energy along with dynamo and battery for easy ride	Staff Dr.V.SenthilKannan ASP/Mechanical Student Aakash.S Anbarasan.A Gopalakannan.M Sasidharan.V IV Mech	
15.	Formulation of herbal health drink	Staff Mr.M.Ponmanian, M.Tech., Student B. Karishma V. Jansirani (IV Pharma)	
16.	Robotic Solar Grass Cutter	Staff Dr. R. Mohana Priya Student Adhilabanu A (IV ECE)	

Highlight selected start-ups established by students/faculties with mention of founder/cofounder name

List of any breakthrough Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation).

RAPID DECOMPOSITION OF SOLID WASTE

We use special microbes, like Actinomycetes and fungi, to break down fruit and vegetable waste. Waste turns into compost in just 30 days instead of 90 days. This method cuts down on bad smells and keeps pests away. The end result is valuable compost that helps plants grow. It works fast and doesn't need much space. Suitable for waste from places like hostels, canteens, municipalities, hotels, and businesses. The compost keeps the right pH, moisture, and

temperature, making it effective. This method makes waste management easier and supports a sustainable environment.

WIRELESS EV -VEHICLE CHARGING

In this project we develop, the wireless EV dynamic charging system represents a ground breaking innovation in electric vehicle (EV) technology, enabling vehicles to charge while in motion. This system consists of two key components: the car unit, which is installed in the vehicle, and the surface unit, embedded in the road to provide continuous wireless charging as the vehicle drives over it. This technology addresses one of the most significant barriers to widespread EV adoption—range anxiety—by offering seamless, on-the-go charging.

SMART SYSTEM FOR STOCK MANAGEMENT

This is a smart weight measurement system. It help to know the exact weight of stock in a store. The stock and purchased weight is informed to person through a mobile application. This system comprises of Arduino, IOT, LED, and Load cell.

FORMULATION OF HERBAL HEALTH DRINK

The Anthelmintic potential of *Cissus Quadrangularis* due to its tannin content, emphasizing the efficacy of the herbal health drink formulated from its aqueous extract. Medicinal plants have become an indispensable source of new pharmaceutical, because of their functionally relevant secondary metabolites extracted from microbial and plant species.

Participation of IIC-institute in various programs of Central and State Govt. Highlighting specially for the schemes or programs

AICTE Internshala Rank - Ranked Number 1 in Internshala ranking among all the colleges in India for 23-24.

Participated in **MSME 3.0 Women hackathon** and one batch from Paavai Engineering College **have received a grant of Rs.13 lakhs - Preparation of bioplastic using**

ARIIA – Positioned in the band of **101-150 in the Innovation Category** under National Institutional Ranking Framework 2023.

CII Innovation award

Has applied for patents under **KAPILA** scheme.

Detail of Social Media & Connections of IIC institute

Instagram: <https://www.instagram.com/paavaipecprincipal/?hl=en>

Twitter: <https://twitter.com/paavaipecprinc1>

Facebook: <https://www.facebook.com/pecprincipal.pecprincipal/>

YouTube: <https://bit.ly/3BvEYA>

Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell.

Testimonial YouTube Link: President IIC-

<https://www.youtube.com/watch?v=S6okGNHCi2o> **Testimonial YouTube Link:**

Convener IIC- <https://www.youtube.com/watch?v=XvM1bl-quMY>

<https://youtu.be/sh-sy3irF0U?si=V2a1IMW1TZVcJBGC> (MECH)
https://www.youtube.com/watch?v=XtI8sR_mP_w - **Mentees Institution Feedback**

Testimonial by Vice President, IIC

IIC plays a major role in Paavai Engineering College to nurture young minds to become entrepreneurs. IIC helps us to set up a strong innovation and entrepreneurial ecosystem in our institution and provides a platform to organise various activities related to entrepreneurship, innovation and IPR. It helps the students to participate in many events like idea contests, project exhibitions, Smart India Hackathon etc. Our faculty members who have completed innovation ambassador training have gained awareness of IPR, innovation, entrepreneurship, startups, and design thinking, guiding and supporting aspiring young entrepreneurs. IIC is an excellent initiative by the Ministry of Education, Government of India to encourage the student community to come up with innovative ideas and promote them to create start-ups and entrepreneurial ventures.

Dr.K.Sundaramurthy,
Vice President, IIC

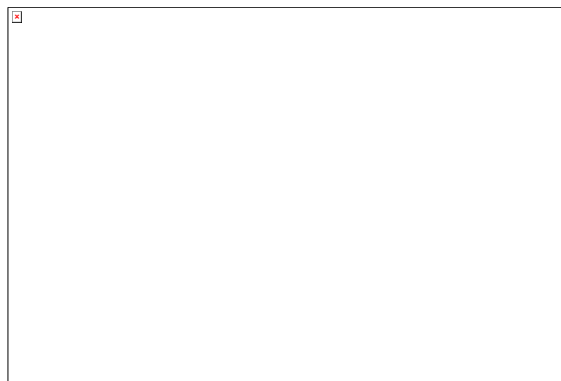
Paavai Engineering College

Testimonial by Vice President, IIC

Images



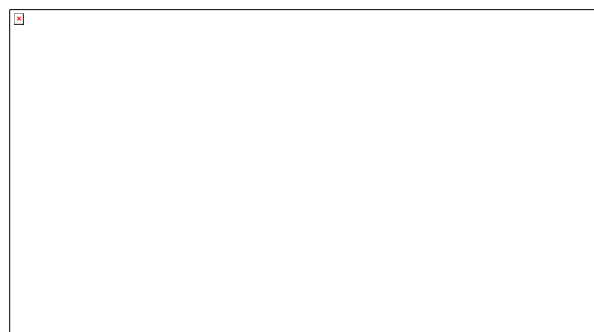
Motivational Session – Entrepreneurs



MIC – Viksit Bharath



IIC 6.0 - Achieving Problem solution Fit.



ATAL School Activities

Contact

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