



# COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution)  
(Affiliated to Anna University, Chennai & Approved by AICTE, New Delhi) Established in  
1956, A Unit of V.Rangasamy Naidu Educational Trust **CIVIL AERODROME POST,**  
**COIMBATORE-641 014, TAMILNADU, INDIA**

## Criterion III – Research Innovation and Extension

### Key Indicator - 3.3 Innovation Ecosystem

*3.3.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident*

#### Contents

- Reports of Institution's Innovation Council

# Coimbatore Institute of Technology

(Government Aided Autonomous Institution Approved by AICTE and Affiliated to Anna University)

## REPORT

### SELF DRIVEN ACTIVITY:

#### PM Modiji Launches 5G Service in India (Pragati Maidan, New Delhi)

To launch the 5G services in India the Mobile Congress has initiated the EXPO of leading Mobile Technology providers such as Jio, Qualcomm, Ericsson, Airtel, Vodafone etc., followed by LAUNCHING of 5G services in India by HON.PM MODIJI.

PM visited the various stalls of 5G cellular Service providers and allied hardware and software industrial companies. He was briefed about the various cellular technologies such as 3G, 4G and 5G and its impact on society.

The launch of 5G will boost the Digital Economy of India with respect to Education, Agriculture, Health care, Manufacturing and other Sectors. It is possible with latest technologies such as AI, Big Data, Robotics, IoT and AR as told by expert members to our PM by showing their company Demo.

Most of the demo focuses on Mobile Technology pertaining to 5G and its importance in modern world with respect to data security, digital transformation, digital payment gateways and its impact as that of leading countries like USA, China, Finland, Korea etc.,

Sri. Mukesh Ambani (JIO) shares the view that India will become a developed nation by the year 2047 and propel the latest technologies. He then spoke on 5G technology and how it is helpful in Education, Agricultural sector with foundation technology.

Sunil Bhatia Mittal (AIRTEL) in his speech brief on the bridging of rural and urban sector with 5G technology. Also shared the digital technology usage during pandemic period. He finally thanked the initiative of TRAI, DOT for 5G REALIZATIONS in India.

Kumar Mangalam Birla brief on how with the support of these new technologies will lead India to 05 Trillion economies. He spoke on Smart city, Industry 4.4 and various application areas of 5G Technology.

Finally our Prime Minister Hon. Modiji launched the 5G Technology in India and shared the following points in his address.

- Technology for Education, Healthcare, Agricultural and other areas cater to the need of people of India.
- How Digital India helpful in the form of UPI, Digital Transaction, Design, Manufacturing, Sensor Technology.
- He briefed on 04 pillars of Technology namely Device, Connectivity, Data Security and Digital Technology. Also spoke about the visionary scheme of India and its role in the universe.

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-  Contact us

All Quarter ▾

All Activity ▾

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### My Activity

S.No.	Activity	View Details	Report	Status	Comment	Review Request	Download Report
1	<b>Name:-</b> National Education Day <b>Quarter:-</b> Quarter I <b>Type:-</b> Celebrations		UPLOAD REPORT	Not Submitted		NA	NA
2	<b>Name:-</b> Launch of 5G services <b>Quarter:-</b> Quarter I <b>Type:-</b> MIC driven Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
3	<b>Name:-</b> Mentoring Event: Demo Day/Exhibition/Poster Presentation of Ideas/PoC & linkage with Innovation Ambassadors/Experts for Mentorship Support - Manage through YUKTI-NIR <b>Quarter:-</b> Quarter I <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
4	<b>Name:-</b> My Story - Motivational Session by Successful Entrepreneur/Start-up founder <b>Quarter:-</b> Quarter I <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
5	<b>Name:-</b> My Story - Motivational Session by Successful Innovators <b>Quarter:-</b> Quarter I <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
6	<b>Name:-</b> Workshop on Entrepreneurship Skill, Attitude and Behaviour Development <b>Quarter:-</b> Quarter II <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
7	<b>Name:-</b> Organise an Inter/Intra Institutional Innovation Competition/Challenge/Hackathon and Reward Best Innovations - Manage through YUKTI-NIR <b>Quarter:-</b> Quarter II <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
8	<b>Name:-</b> Session on Problem Solving and Ideation Workshop <b>Quarter:-</b> Quarter I <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
9	<b>Name:-</b> Workshop on Design Thinking, Critical thinking and Innovation Design <b>Quarter:-</b> Quarter II <b>Type:-</b> IIC Calendar Activity		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	

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		Details				Report	
10	<p><b>Name:-</b> Industrial Applications of Engineering Analysis</p> <p><b>Quarter:-</b> Quarter I</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Approved	NA	NA	N/A
11	<p><b>Name:-</b> Startup -How to Tame the Restless Mind</p> <p><b>Quarter:-</b> Quarter II</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Approved	NA	NA	N/A
12	<p><b>Name:-</b> THINK AND ACT LIKE ENTREPRENEURS</p> <p><b>Quarter:-</b> Quarter I</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Disapproved	This activity is not based on IIC guidelines.	REQUEST FOR REVIEW	N/A
13	<p><b>Name:-</b> National Science Day</p> <p><b>Quarter:-</b> Quarter II</p> <p><b>Type:-</b> Celebrations</p>		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
14	<p><b>Name:-</b> "IOT EXPO"</p> <p><b>Quarter:-</b> Quarter III</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Approved	NA	NA	N/A
15	<p><b>Name:-</b> Awareness on the Climate Change</p> <p><b>Quarter:-</b> Quarter IV</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Disapproved	This activity is not based on IIC guidelines.	REQUEST FOR REVIEW	N/A
16	<p><b>Name:-</b> Session/ Workshop on Business Model Canvas (BMC)</p> <p><b>Quarter:-</b> Quarter III</p> <p><b>Type:-</b> IIC Calendar Activity</p>		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
17	<p><b>Name:-</b> Field/Exposure Visit to Incubation Unit/Patent Facilitation Centre/ Technology Transfer Centre such as Atal Incubation Centre etc</p> <p><b>Quarter:-</b> Quarter III</p> <p><b>Type:-</b> IIC Calendar Activity</p>		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
18	<p><b>Name:-</b> Exposure and field visit for problem identification</p> <p><b>Quarter:-</b> Quarter I</p> <p><b>Type:-</b> IIC Calendar Activity</p>		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
19	<p><b>Name:-</b> Workshop on Sustainable Architecture and building practices</p> <p><b>Quarter:-</b> Quarter III</p> <p><b>Type:-</b> Self-driven Activity</p>		UPLOAD REPORT	Disapproved	This activity are not based on as per IIC guidelines	REQUEST FOR REVIEW	N/A
20	<p><b>Name:-</b> Demo Day/Exhibition/Poster Presentation of Business Plans &amp; linkage with Innovation Ambassadors/Experts for Mentorship Support – Manage through YUKTI-NIR</p> <p><b>Quarter:-</b> Quarter III</p> <p><b>Type:-</b> IIC Calendar Activity</p>		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	

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-  Innovation & Start-up Support ▾
-  Referral & Linkage ▾
-  Help Desk ▾
-  Information Dissemination ▾
-  Contact us

		Details				Report	
21	<b>Name:-</b> National Energy Conservation Day(India) <b>Quarter:-</b> Quarter II <b>Type:-</b> Celebrations		UPLOADED/EDIT YOUR REPORT	Submitted	NA	NA	
22	<b>Name:-</b> Organise an Inter/Intra Institutional Idea Competition/Challenge/Hackathon and Reward Best Ideas - Manage through YUKTI-NIR <b>Quarter:-</b> Quarter I <b>Type:-</b> IIC Calendar Activity		UPLOAD REPORT	Not Submitted		NA	NA

#### QUICK LINKS

- ▶ Home
- ▶ Innovation Council
- ▶ SIH
- ▶ ARIIA

#### SOCIAL MEDIA LINKS

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-  Youtube
-  Instagram

#### CONTACT US

-  www.mic.gov.in
-  iic.mhrd@aicte-india.org
-  011 2958
- 1226/1513/1517/1326/1235/1240



# COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution

Affiliated to Anna University, Chennai)

COIMBATORE – 641 014, TAMILNADU



## INTERNAL HACKATHON REPORT

SMART INDIA HACKATHON 2023





## 1. About The Event

The internal Hackathon review for “Coimbatore Institute of Technology” all the department was conducted in the campus at various seminar halls from 19<sup>th</sup> September, 2023 to 26<sup>th</sup> September, 2023 on various themes suggested by SIH-2023. Nearly 1000 Students have been participated in the internal Hackathon conducted by Eight Engineering departments, Four computing department and department of MBA & MCA.

Internal Hackathon was conducted by the department of Computer Science and Engineering for the academic year 2023-24 which served as a pivotal platform to select our best teams for Smart India Hackathon 2023 (SIH '23).

### Overview of the Internal Hackathon

The Internal Hackathon was organized to provide an opportunity for students from the II, III, and IV years of our department to showcase their skills and ideas for SIH 2023

### Selection Process:

- **Internal Review:** The first round of internal review took place on **19th September 2023**, where teams had the chance to refine their ideas further and present their novelty towards the problem statement.
- **Expert Review:** Our expert members carefully reviewed on **25th September 2023** for all submissions to identify promising teams for SIH 2023. Their evaluations aimed to gauge innovation, problem-solving abilities, and technical process.
- **Final Review:** The final review, conducted on **26th September 2023**, marked the culmination of our selection process, with a focus on identifying teams with the potential to excel at SIH '23.

### Alumni Involvement:

We are immensely grateful to our dedicated alumni who generously offered their time and expertise to evaluate team members. Their valuable insights and suggestions played a significant role in shaping our teams for success at SIH '23.

### Alumni Details

1. Mr. Vishnu Prasath, Senior software engineer, Bosch Global Software Technologies Technologies, Coimbatore
2. Ms. JeyaPriya, Senior software engineer, Bosch Global Software Technologies, Coimbatore
3. Mr. Ashwin Rajarajan, Associate Software Engineer, Tekion India Private Limited, Bangalore



**COIMBATORE INSTITUTE OF TECHNOLOGY**  
(Govt. Aided Autonomous Institution Affiliated to Anna University)

COIMBATORE – 641014, TAMIL NADU

**DEPARTMENT OF CIVIL ENGINEERING**

**CIRCULAR**

**21.09.2023**

The following Internal and external members are appointed as reviewers for selecting III year Civil Engineering student's project idea for Smart India Hackathon (SIH) 2023. The reviewers are requested to review the project idea and recommend three best projects to be submitted for SIH 2023.

S. No	Reviewers	Year	Date	Time	Venue
1	Er. N.S.NivethaSri, Assistant Engineer, Planning and Design Sub Division, PWD Campus, Coimbatore	III Year B.E. Civil Engineering	22.09.2023	2.00 PM Onwards	Civil Engineering Department Seminar Hall
2	Dr. Dr.V.G.Kalpna (Sr.Gr.) Assistant Professor Department of Civil Engineering CIT - Coimbatore				
3	Dr. N. Saranya Assistant Professor Department of Civil Engineering CIT - Coimbatore				

N. P. 21/9/23  
Copy to:

1. Reviewers
2. Department Notice Board
3. III Year Civil Engineering lass NB
4. Staff Circulation
5. File

V. G. L. 21/09/2023  
Head, Department of Civil Engineering  
**H.O.D., (CIVIL)**  
C.I.T., Coimbatore - 14



## 2. About the Problem Statement

Team no.	SNo	Roll no.	Name	Year & Section	Problem Statement
1	1	71762105001	Adhithya Laxman R G	III Year & Sec 1	1433 -Mental health and well-being surveillance, assessment and tracking solution among children.
	2	71762105004	Akshaya Ashok	III Year & Sec 1	
	3	71762105061	Adhiyamaan C	III Year & Sec 1	
	4	71762105028	Karthikeyan A	III Year & Sec 1	
	5	71762105024	Jefrina A P	III Year & Sec 1	
	6	71762105049	Radhesh Rathnam J	III Year & Sec 1	
2	1	71762205201	Harshal Ram R V	III Year & Sec 1	1284 - Developing a Blockchain-Based eVault for Legal Records
	2	71762105002	Ajai Prasath R K	III Year & Sec 1	
	3	71762105006	Aniruthan M	III Year & Sec 1	
	4	71762105039	Mukilan S	III Year & Sec 1	
	5	71762105043	Nivedha R	III Year & Sec 1	
	6	71762105013	Dharani Jayam D	III Year & Sec 1	
3	1	2005010	Diwaakar Adinathan	IV Year & Sec 1	SIH1417 AI-ML based intelligent de-smoking/de-hazing algorithm
	2	2005003	Ashwanthram K L	IV Year & Sec 1	
	3	2005001	Anil Surriya MK	IV Year & Sec 1	
	4	2005043	Sarveshkumar K	IV Year & Sec 1	
	5	2005020	Ishwarya S	IV Year & Sec 1	
	6	71762105029	Karthikeyan P	III Year & Sec 1	
4	1	71762105041	Muthu Jawahar K	IV Year & Sec 1	SIH1401: App-based solution to identify and solve disease in plants/crops
	2	2005044	Siddharth G	IV Year & Sec 1	
	3	71762105038	Monisha S	III Year & Sec 1	
	4	71762105009	Bhuvana K	III Year & Sec 1	
	5	71762105026	Karthigaiselvi V	III Year & Sec 1	
	6	71762105025	Kamali M	III Year & Sec 1	
5	1	71762105100	Sakithyan A	III Year & Sec 2	A unified portal for developing a model Curriculum for all the AICTE Approved Institutes
	2	71762105066	Arunkumar S	III Year & Sec 2	
	3	71762105106	Siddarth S	III Year & Sec 2	
	4	71762105077	Kalaiselvan MPS	III Year & Sec 2	
	5	71762205207	Balakumaran M	III Year & Sec 2	
	6	71762105093	Priyadarshni S	III Year & Sec 2	

Ba tch No	Name of Students in abatch	Sex	Problem Statement (PS)	PS Number	Category (Hardware /Software)
1	<b>Nikitha M (L)</b>	F	Use of digital technology to calculate water Footprints For Different Daily Use Items	SIH1287	Software
	Nithiskannan P	M			
	Gomathi Shankar M	M			
	Karthikeyan M	M			
	Mohamed Aaqil Khan N	M			
	Loshini S	F			
2	<b>Agalya P (L)</b>	F	Estimation of inflow to a reservoir from the rainfall considering soil moisture in its catchment and releases from upstream reservoirs and automatically opening of reservoir gates for moderately releasing the water to avoid the flooding in a basin.	SIH1294	Hardware
	Dinesh M	M			
	Harish E	M			
	Ahilesh raj A	M			
	Abishek RS	M			
	Priyadarshini J	F			
3	<b>Vigneshvaran.S (L)</b>	M	Education ecosystem for speciallyabled student need provision and improvement to take care of compliance, governance and conduct.	SIH1500	Software
	Gokul R	M			
	Shapnaa S	F			
	Praveen Kumar M	M			
	Sabarish V	M			
	Bleslin Achsah J	F			
4	<b>Vignesh Shankar T (L)</b>	M	Estimation of inflow to a reservoirfrom the rainfall considering soil moisture in its catchment and releases from upstream reservoirs and automatically opening of reservoir gates for moderately releasing the water to avoid the flooding in a basin.	SIH1294	Hardware
	Promoth R	M			
	Sudhindharan S	M			
	Robino Jijin R	M			
	Ragasudha V	F			
	Varshini S	F			
5	<b>Sandhya.R (L)</b>	F	Smart and effective real time management of street parking	SIH1515	Software
	Gayathri.S.N	F			
	Mukesh.S	M			
	Priyadharshini.N	F			
	Roshan Saffeha.J	F			
	Devaguru S	M			

### 3. Photos of the Event Organized

Internal Review 1: First round of review by SIH 2023 Coordinators on 20<sup>th</sup> September, 2023





Internal Review 2: Second round of review by Internal and External Reviewers on 22<sup>nd</sup> September, 2023



#### 4. Participating Teams





## 5. Judging Process

The concepts and idea of each batch of students are evaluated based on the following rubrics

**Coimbatore Institute of Technology, Coimbatore**

**Assessment for INTERNAL HACKATHON FOR  
SMART INDIA HACKATHON 2023**

B.E. Civil - III Year

Academic Year: 2023-2024

Batch: \_\_\_\_\_ Date: \_\_\_\_\_

Team Leader (1) \_\_\_\_\_  
Team Members (2) \_\_\_\_\_  
(3) \_\_\_\_\_  
(4) \_\_\_\_\_  
(5) \_\_\_\_\_  
(6) \_\_\_\_\_

Problem Statement:

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Sl. No	Item	Marks Awarded	Max. Marks
1	Problem Definition		20
2	Ideas for the Selected Problem		20
3	Methodology		30
4	Suggested Solution		30
	<b>Total Marks (out of 100)</b>		

Signature of the Jury

## 6. Jury Panel Photo And Relevant Details

<b>Jury Panel Members</b>	
<p><b>Name:</b>Mr. Ashwin Rajarajan  <b>Designation:</b> Associate Software Engineer  <b>Organization:</b> Tekion India Private Limited, Bagamane Solarium City, Kundalahalli Colony, Brookefield, Bengaluru  <b>Mail-id:</b>arajarajan@tekion.com  <b>Mobile Number:</b>8870662626</p>	
<p><b>Name:</b> Ms.JeyaPriya  <b>Designation:</b>Senior software engineer, <b>Organization:</b>Bosch Global Software Technologies, Coimbatore  <b>Mail-id:</b> Thirumalaisamy.JeyaPriya@in.bosch.com  <b>Mobile Number:</b>9952172619</p>	
<p><b>Name:</b> Mr.Vishnu Prasath  <b>Designation:</b> Senior software engineer, Bosch Global Software Technologies, Coimbatore  <b>Mail-id:</b> m.vishnuprasath@in.bosch.com  <b>Mobile Number:</b>8675971377</p>	



**Jury Panel**



## 7. Nominated Top Teams

Batch. No	Team	Name	Gender (M/F)	Email id	Mobile No.	Stream	Year
1	<b>Leader</b>	<b>Nikitha M</b>	<b>F</b>	71762101027@cit.edu.in	93615 54959	<b>Civil Engineering</b>	<b>III</b>
		Gomathi Shankar M	M	71762101014@cit.edu.in	73396 46257		
		Karthikeyan M	M	71762101020@cit.edu.in	98948 90224		
		Loshini S	F	71762101022@cit.edu.in	88709 53282		
		Mohamed Aaqil Khan N	M	71762101023@cit.edu.in	9597863103		
		Nithiskannan P	M	71762101030@cit.edu.in	94898 93302		
2	<b>Leader</b>	<b>Vignesh Shankar T</b>	<b>M</b>	71762101053@cit.edu.in	8778621646	<b>Civil Engineering</b>	<b>III</b>
	<b>Members</b>	Promoth R	M	71762101034@cit.edu.in	6380084202		
		Ragasudha V	F	71762101035@cit.edu.in	9345492773		
		Robino Jijin R	M	71762101036@cit.edu.in	9080963768		
		Sudhindharan S	M	71762101049@cit.edu.in	7667867554		
		Varshini S	F	71762101052@cit.edu.in	8946067473		
3	<b>Leader</b>	<b>Sandhya.R</b>	<b>F</b>	71762101039@cit.edu.in	9080088926	<b>Civil Engineering</b>	<b>III</b>
	<b>Members</b>	Devaguru S	M	71762101008@cit.edu.in	8072538876		
		Gayathri.S.N	F	71762101012@cit.edu.in	9486782473		
		Mukesh.S	M	71762101024@cit.edu.in	9789129128		
		Priyadharshini.N	F	71762101033@cit.edu.in	9003653937		
		Roshan Saffeha.J	F	71762101037@cit.edu.in	9003322608		

### 8. Judges Photos and Details

S. No	Reviewers	
1	Er. N.S.NivethaSri, Assistant Engineer, Planning and Design Sub Division, PWD Campus, Coimbatore	External Reviewer
2	Dr. Dr.V.G.Kalpana (Sr.Gr.) Assistant Professor Department of Civil Engineering CIT - Coimbatore	Internal Reviewer
3	Dr. N. Saranya Assistant Professor Department of Civil Engineering CIT - Coimbatore	
<p>The resource person external member Dr.N.V. Dhandapani, Chief Operating officer, MIN OORTHI India Pvt Ltd, Coimbatore.mail id : <a href="mailto:coo@mimoorthi.com">coo@mimoorthi.com</a> phone no : 9790059306 The internal resource person Dr.T.N. Sugumar, Assistant Professor, Department of Software Systems, Coimbatore Institute of Technology, Coimbatore . mail id <a href="mailto:tnsugumar@cit.edu.in">tnsugumar@cit.edu.in</a> phone no : 9994312272</p>		



**Jury Panel**

### 9. Total Teams and Students Participated

The internal Hackathon review for “Coimbatore Institute of Technology” all the department was conducted in the campus at various seminar halls from 19th September, 2023 to 26th September, 2023 on various themes suggested by SIH-2023. Nearly 1000 Students have been participated in the internal Hackathon conducted by Eight Engineering departments, Four computing department and department of MBA & MCA. List of Teams for Internal Hackathon

Bat ch No	Name of Students in a batch	Sex	Problem Statement (PS)	PS Number	Category (Hardware /Software)
1	<b>Nikitha M (L)</b>	F	Use of digital technology to calculate water Footprints For Different Daily Use Items	SIH1287	Software
	Nithiskannan P	M			
	Gomathi Shankar M	M			
	Karthikeyan M	M			
	Mohamed Aaqil Khan N	M			
	Loshini S	F			
2	<b>Agalya P (L)</b>	F	Estimation of inflow to a reservoir from the rainfall considering soil moisture in its catchment and releases from upstream reservoirs and automatically opening of reservoir gates for moderately releasing the water to avoid the flooding in a basin.	SIH1294	Hardware
	Dinesh M	M			
	Harish E	M			
	Ahilesh raj A	M			
	Abishek RS	M			
	Priyadarshini J	F			
3	<b>Vigneshvaran.S (L)</b>	M	Education ecosystem for specially abled student need provision and improvement to take care of compliance, governance and conduct.	SIH1500	Software
	Gokul R	M			
	Shapnaa S	F			
	Praveen Kumar M	M			
	Sabarish V	M			
	Bleslin Achshah J	F			
4	<b>Vignesh Shankar T (L)</b>	M	Estimation of inflow to a reservoir from the rainfall considering soil moisture in its catchment and releases from upstream reservoirs and automatically opening of reservoir gates for moderately releasing the water to avoid the flooding in a basin.	SIH1294	Hardware
	Promoth R	M			
	Sudhindharan S	M			
	Robino Jijin R	M			
	Ragasudha V	F			
	Varshini S	F			
5	<b>Sandhya.R (L)</b>	F	Smart and effective real time management of street parking	SIH1515	Software
	Gayathri.S.N	F			
	Mukesh.S	M			
	Priyadharshini.N	F			
	Roshan Saffeha.J	F			
	Devaguru S	M			



**Social Media Links:**

[https://twitter.com/mohanpus/status/1704006256929751496?t= uPJEBenzciL\\_1GvOG6DaQ&s=19](https://twitter.com/mohanpus/status/1704006256929751496?t= uPJEBenzciL_1GvOG6DaQ&s=19)

[https://m.facebook.com/story.php?story\\_fbid=pfbid02ZHCMMBmM8gbSSjS3CMP2SoXz121yqQ2d2CtEiqp3R6ZY GZMo8T5TFEpdn7Nxz7Dpl&id=1563754729&mibextid=Nif5oz](https://m.facebook.com/story.php?story_fbid=pfbid02ZHCMMBmM8gbSSjS3CMP2SoXz121yqQ2d2CtEiqp3R6ZY GZMo8T5TFEpdn7Nxz7Dpl&id=1563754729&mibextid=Nif5oz)

**Hashtags :**



[https://www.linkedin.com/posts/karthikeyan-nk-b57595293\\_activity-7112693155539341312-tYbv?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/karthikeyan-nk-b57595293_activity-7112693155539341312-tYbv?utm_source=share&utm_medium=member_desktop)

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COIMBATORE 641014



**Institution's Innovation Council**  
**Annual Report for Academic Year 2021- 2022**



## A. About IIC Institute

The mission of Institution Innovation Council of Coimbatore Institute of Technology is to develop an ecosystem at the institute which will inspire and motivate the students and support them to work with new ideas which will lead to the development of innovative products.

The vision of the Institution Innovation Council is to have an education system in the institution which will develop an entrepreneurship culture in the minds of the students and faculty.

In ATAL ranking of Institutions on Innovation Achievements (ARIIA) – 2020 – Coimbatore Institute of Technology was Ranked Third in category of Government and Government Aided Institutes and Colleges

The Institution Innovation Council was established in our Institute during 2018 and is working towards the motive of creating awareness among students and faculty about innovation and startup and catering to their needs to develop prototype working models and innovative commercial products. Seminars, workshops and talk by entrepreneurs related to idea generation, innovation and entrepreneurship were organized regularly. This has led to the establishment of few startups by our students with the help of mentoring by our faculty members.

## B Brief mention of key functionaries at the IIC Institute

The Institution Innovation Council established in our Institute comprises of 28 faculty members of our Institute, 2 Entrepreneurs from Industry, one patent lawyer and 108 students with various responsibilities and also many other students of our institute are actively involved in IIC activities. The students and faculty members are from all programmes of Engineering and Science. The IIC member details for the academic year 2020-21 are as follows:

S. No.	Name	Designation	Department	Roles
1.	Dr.N.Muthukumarasamy	Professor & HoD	Physics	President & ARIIA coordinator
2.	Dr.N.K.Karthikeyan	Professor & HoD	Information Technology	Vice - President
3.	Dr.M.Poongothai	Associate Professor	Electronics and Communication Engineering	Convener
4.	Dr.A.S.Krishnan	Associate Professor	Mechanical Engineering	Convener
5.	Dr.M.Kaarthik	Assistant Professor	Civil Engineering	Member
6.	Dr.V.G.Kalpana	Assistant Professor	Civil Engineering	Member
7.	Mr.M.Karthikeyan	Assistant Professor	Mechanical Engineering	Member

8.	Mr.H.Sivarathinamoorthy	Assistant Professor	Mechanical Engineering	Internship activity coordinator
9.	Dr.G.Manavalan	Associate Professor	Electrical and Electronics Engineering	Member
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11.	Dr.G.Puvaneswari	Assistant Professor(SG)	Electronics and Communication Engineering	Member
12.	Ms.K.M.Priya	Assistant Professor	Electronics and Communication Engineering	NIRF coordinator
13.	Dr.K.Amshakala	Associate Professor	Computer Science and Engineering	Member
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17.	Dr.A.Gnanaprakasam	Assistant Professor	Chemical Engineering	Member
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21.	Dr.H.V.Hemalatha	Assistant Professor	Chemistry	Innovation activity coordinator
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23.	Dr.R.Maheswari	Assistant Professor	Humanities	Startup activity coordinator
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26.	Ms.V.Vishu	Assistant Professor	Computing	Member
27.	Dr.M.Suchitra	Assistant Professor	Computing	Member

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

Total No. of IIC Members : 113

Total No. of innovation Ambassadors : 10

Total No. of faculty Mentors : 6

Pre-Incubation Units : 1. Entrepreneurship Development Cell  
2. Innovation Cell

Incubation Units : CIT Incubation unit

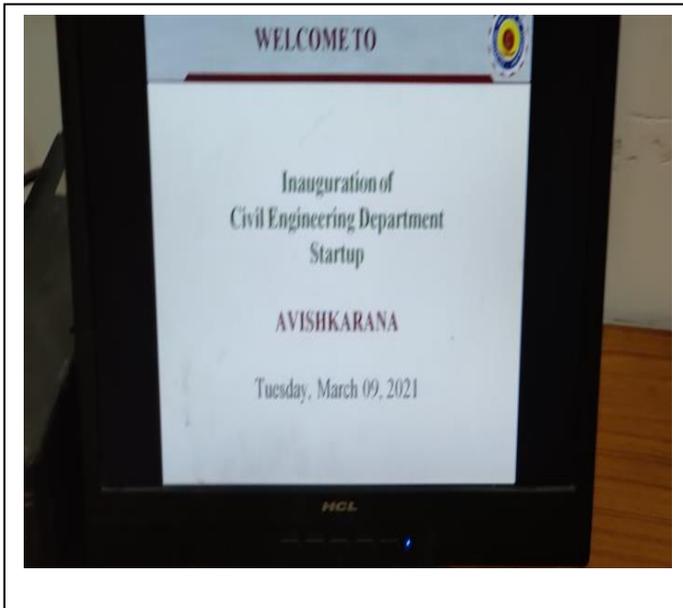
IP Facilitation Unit : Intellectual Property Rights Cell

**D Highlight Facilities, Infrastructure of PreIncubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.**

The Institute has the following infrastructure/facilities/student bodies which are actively involved in the promotion of innovation and entrepreneurship in the campus.

1. Entrepreneurship Development Cell
2. Institute Industry Partnership Cell
3. Pre incubation unit
4. Incubation unit
5. Institutions Innovation Council
6. Intellectual Property Rights Cell
7. Centre for AI and IOT
8. 5G Innovation Centre
9. Research and Development Laboratory
10. Automation Research Laboratory
11. Nanotechnology - Centre of Excellence
12. Smart Manufacturing Centre
13. Structural Engineering Laboratory
14. Environmental Engineering Laboratory
15. Datalytics (Idea club(Students club))
16. FOSS-CIT (Idea club(Students club))
17. Inspire club - Innovative solutions platform for Industry related Engineering (Innovation club(students club))
18. Kalam Knowledge Club (Idea club(Students club))
19. SPEED- Self learning platform for Excellence in Engineering Development (Idea club(Students club))
20. All engineering and science departments have well established laboratories which can provide the necessary support for faculty and students to transform their innovative idea into a prototype model or a product.

Sample photographs for Start-up initiative are as below:



### **E Highlight Achievements (Narrative/Graphical/tabular representation)**

Innovation, entrepreneurship and patent related activities conducted in the institute is 30 and the type of activities Include

- Entrepreneurship and Innovation as Career Opportunity Why IP is important in academia?
- Developing Online Repository of Ideas Developed and Way forward plan
- Session on Problem Solving and Ideation Workshop
- My Story - Motivational Session by Successful Entrepreneur/Start-up founder. How to plan for Start-up and legal & Ethical Steps
- Exposure and field visit for problem identification
- CIT Quantum Hackathon
- India Startup Day , World Environment Day, National Pollution Control Day celebration - invited talk by experts
- E-Symposium on Building Innovation Ecosystem in Educational Institutions
- Expert talk on "Process of Innovation Development & Technology Readiness Level (TRL)" & "Commercialisation of Lab Technologies & Tech-Transfer
- Field/Exposure Visit to Pre-incubation units such as Fab lab, Makers Space, Design Centres, City MSME clusters, workshops etc.
- Session/ Workshop on Business Model Canvas (BMC)

Number of ideas generated - 6

Number of prototypes developed - 1

Number of patents published - 4

Number of start-ups established - 1

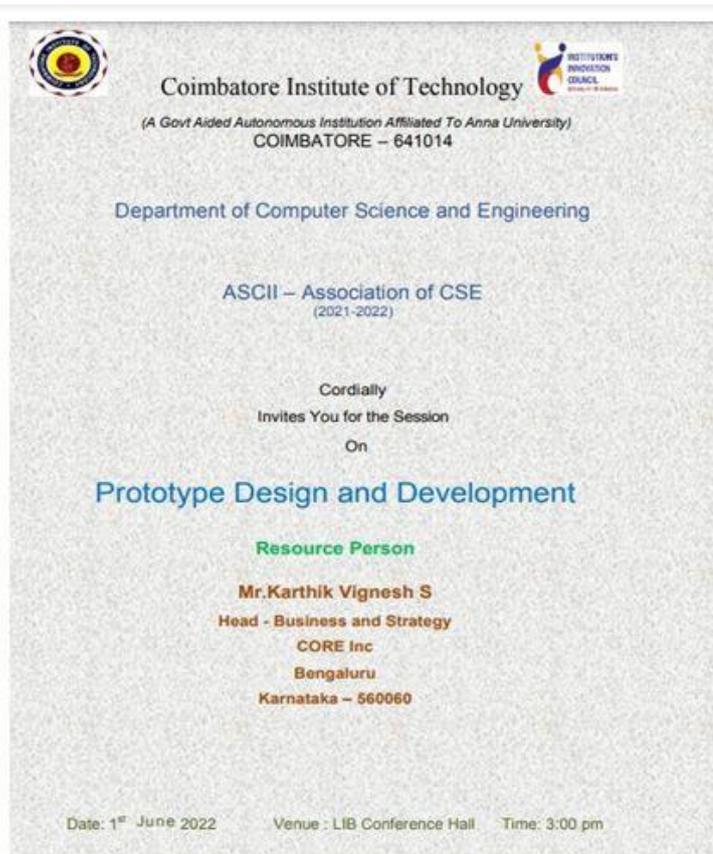
Amount spend on promotion and awareness generation on Innovation

Entrepreneurship in the campus - Rs. 1Lakh

Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR - Rs.2 Lakhs

**Sample photographs for the events conducted are as below:**

Session Screen shot of **“WORKSHOP ON PROTOTYPE/PROCESS DESIGN AND DEVELOPMENT - PROTOTYPING”**



Session Screen shot of **“Workshop on Intellectual Property Rights (IPRs) and IP management for start up”**



### National Technology Day celebration - Events poster

 **Coimbatore Institute of Technology**  
Government-Aided Autonomous Institution Approved by AICTE  
New Delhi and Affiliated to Anna University, Chennai - 600 025

**DEPARTMENT OF COMPUTER SCIENCE**  
organize and webinar on

**AR-VR**  
Augmented Reality & Virtual Reality

  Resource Person  
**DR SURENDRAN D**  
Founder & CEO,  
SKS Skill Fasteners Pvt Ltd  
Coimbatore.



 April 6, 2022 | Wednesday | 3:00 PM | Auditorium

Feedback Form : <https://biturl.top/bqjljf>

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

1. Nikaran K - Developed FARMLAND - Supply chain management and analytical tool for Agricultural product distribution
2. JayakrishnaSS - Developed Instrument To Maintain Social Distancing And Solution To Rehabilitate From COVID-19, Identification and rehabilitation of fungal disease affected banana plants
3. Gokul R - Developed Abnormality Scanner
4. Ajay. Akshita & Shivani - won II place in CSI National Product Hackathon 2021.
5. E - YANTRA team(Gugan, Nithya priya, Balaji,Jayaprakash) of our Institute has bagged the second place in the Finale of e- yantra robotics competition 2019 - 2020 organized by MHRD, Government of India.
6. Nikaran and Arul KARTHICK have won the consolidation prize in the International level PDA Anti covid - 19 online code Hackathon conducted by PDA college of Engineering.

The Institution's Innovation council of MHRD's Innovation Cell organised a series of training programs exclusively for IIC members. During the current academic year, fifteen of the faculty members have completed these training sessions and are designated as "IIC - Innovation Ambassador". They are trained to play a role of mentor or guide for young minds in their pursuit of innovation and entrepreneurship.

**The Faculty Innovation Ambassadors at advanced level are:**

- Dr.A.S.Krishnan - Design thinking & Innovations
- Dr.R.Azarudeen - IPR & Technology Transfer
- Dr.E.Arul - Pre- Incubations & Incubation Management
- Sam Solomon D P - General
- Punidha A - General

**The Faculty Innovation Ambassadors at Foundation Level are**

- Dr. V. Vishu
- Dr.V.G.Kalpana
- Dr.A.Gnanaprakasam
- Mr.H.Sivarathinamoorthy-
- Dr.M.Kaarthik
- Mr.B.Vasanthan
- Dr.C.Stanly Felix
- Dr.G.Puvaneswari
- Dr.N.Anitha devi
- Dr. P.Balraju

A sample certificates provided to the IIC members are as below:



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

### (i) ARIIA - participation and Rank Smart India Hackathon etc.

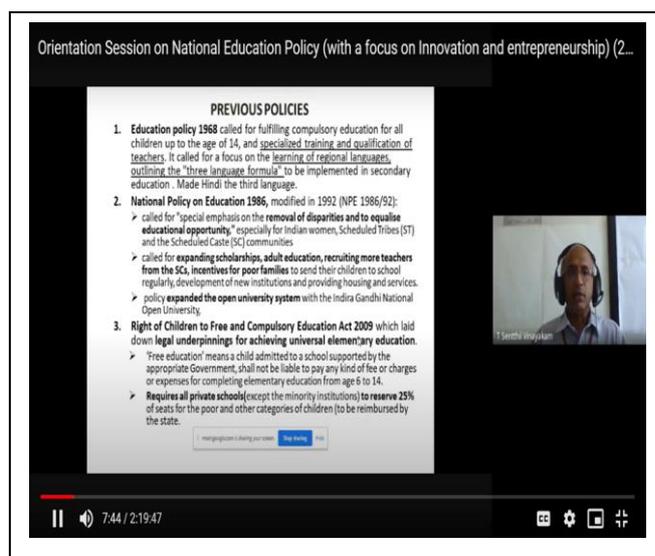
- **Atal ranking of Institutions on Innovation Achievements (ARIIA) - 2020 - Ranked Third in category of Government and Government Aided Institutes and Colleges**



**(ii) NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation**

NISP - Innovation and Start-up policy document of the institute has been framed and its implementation has been initiated through training of faculty members and developing an ecosystem which will push the students towards innovation and start-up.

CIT IIC organized Online Session on “NATIONAL EDUCATION POLICY” on 18th January 2021 which covered all the details of the new education policy starting from kinder garden school to higher education. During the session the faculty and students discussed the pros and cons of the national education policy with the speaker. The resource person said that the policy has been framed with a view towards make in India, skill India and start-up India. The speaker also discussed about the challenges faced in higher education in India today, and how national education policy 2020 is going to address the challenges and provide a robust ecosystem for the teaching learning process



### (iii) Smart India Hackathon (to be entered by Dr.Arul)

Teams from our Institute have participated in Smart India Hackathon. They have also participated in Hackathons and other similar events organized by private enterprises and have won prizes .

The following teams from MSc. AI& ML I- Year and II Year participated in the Toy Hackathon conducted by MHRD,IIC,GOI in the month of Jan 2021. A presentation of the idea was submitted and two teams got selected for the Grand Finale held in July 2021.

Roll No.	Members Name	IDEA ID - TEAM NAME	Status
EEE	TEAM 1 ID: 15187		
20ee28	Ramalingam M	17891 - Geotagging of Educational Institutions	SELECTED for Grand Finale
20ee68	KephaRhenie S E		
20ee46	venkatesan A		
20ee39	Syed Abdul Haq S		
20ee49	Vijeandrrah N L		
20cs41	Sanjay JY		
<b>Chemical</b>	TEAM 2 ID: 15107		
1906004chem	P. Anisha	17076 - Conversion_of_Excess_Milk_into_Skimmed_Milk	SELECTED for Grand Finale
1906005chem	S. Anitha		
1906048chem	L. Selvakeerthana		
1906017chem	J. Hemanth		

1906034chem	M. Palani		
<b>ECE</b>	<b>TEAM 3 ID: 15854</b>		
1904012ece	Sathish P	17091 - Sustainable_Contact_Attend ance_System	SELECTED for Grand Finale
1904001ece	Anuja V		
1904004ece	Mythily A		
1904020ece	PriyaDharshini C		
1904021ece	Sherjeel Amin		
1904038ece	Sujitha R		
<b>EEE</b>	<b>TEAM 4 ID: 15857</b>		
1903113eee	VIGNESHWAR LU	19052 - Consensus_hourly_visibility_ forecast_airports_ NWP	SELECTED for Grand Finale
1903084eee	Jotheeswaran N		
1903063eee	Aravind M		
1905096cse	Murugalakshmi M		
1905115cse	Soundarya M		
1905121cse	Vigneswari G		
<b>CIVIL</b>	<b>TEAM 5 ID: 15129</b>		
1901003c	AMEER SULTHAN I	20472 - Smart_Bin _Waste_Management	SELECTED for Grand Finale(Online
1901022c	HEMA S		
2001208ce	VISWA J V M S		
	GOKULA SARAVAN AN S		
1901067c			
1901101c	SHIDDESHWAR R		
1901097c	RISHWANTH A V K		

#### IR 4.0 - PERPETUAL FEST

CIT IIC organized “the Perpetual Fest” for our second and third year students. Mini hackathon was conducted with the base idea of Smart India hackathon(SIH). The problems for mini hackathon were selected from the real world problems listed in the SIH website. Students for a team based on their interest work on it to develop a prototype. The mini hackathon for the academic year 2021- 2022 was carried out on 22rd August 2022. The purpose of the fest was to display the IR4.0 themed projects that the Department of AI and DS students spent three months working on. The 55 students from the departments of AI and DS were separated into 13 batches for Perpetual Fest. 13 batches performed 13 projects in a unique manner that involved both hardware and software. Dr. Muthukumaraswamy and Dr. Muthu Subramaniam served as evaluation panel for the IR 4.0 - PERPETUAL FEST. The 13 projects that were presented to the guests/panels which were assessed based on various factors, including technical skills, problem-

solving abilities, and learning. The panels evaluated the projects, made recommendations for their improvement, and instilled fresh thinking and innovation to advance them in the future.

No of Students: 55 No of staffs: 15



### **K. Detail of Social Media & Connections of IIC institute**

Facebook Link : <https://www.facebook.com/cit.innovation.3>

Twitter Link: <https://twitter.com/DrEArul1/status/1320224987203026946/photo/1>

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

#### **FEEDBACK - Dr Vishu V, Department of Computer Applications**

The basic level ambassador training was very useful and the training program enables us to obtain real insight on entrepreneurships development, consultancy works, and different start up policies, Integration of Research, Innovation and Entrepreneurship in Academic Institutions and Economic Growth of Country, Attaining Market-Product Fit: Prototype Designing Process and Tools for Development of Minimum Viable Product etc. Roles and Responsibility of Faculty Innovation Ambassadors were clearly explained

#### **FEEDBACK FROM FACULTY MEMBERS**

- IIC Cell Encourages students and faculty to come up with new ideas. Conducting Webinar/ Workshop under IIC encourages both faculty and students to gain knowledge up to date. IIC cell has given guidelines for a set of activities for each quarter at the start of every academic year. These guidelines are very helpful for

planning the activities during each quarter of the academic year, which are beneficial for the students – *Dr.M.Poongothai, Associate professor, Dept of ECE.*

- The IIC's calendar events motivate the faculty members to conduct events under different categories in their own department which benefit the faculties and students. The webinar conducted by IIC cell was in a Structured and Organized manner. Minutes of every meeting which is shared by IIC Co-ordinator is very useful for staff and they can improve their activities related to IIC - *Dr.E.Arul, Assistant professor, Dept of IT.*
- The Main aim of IIC is to mentor and spread awareness on fostering innovation at Institute level. The cell encourages all faculty members to do research and also motivates student to do research and go for publications. Supports to work with new ideas and to develop prototype. Many Webinars conducted through IIC Cell, have improved our thought process and also the cognitive system. IIC cell strongly motivates to move towards product conversions and patent generations – *Dr.V.G.Kalpana, Assistant professor, Dept of Civil Engineering*
- Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). It helps, prepare Institute for Atal Ranking of Institutions on Innovation Achievements. Need to give importance on Global network with Entrepreneurship Development Organisation to strengthen the multidisciplinary innovation among the students community by conducting workshops, seminars and HR meet at Institution Level - *Dr.R.Maheshvari, Staff Advisor – ENTREPRENEURSHIP DEVELOPMENT CELL, Coimbatore Institute of Technology*

#### **FEEDBACK FROM STUDENT MEMBERS**

- IIC cell of CIT conducts quarterly meetings in every quarter to plan the quarterly activities and review quarterly conducted activities. Due to these activities, we get chance to participate in various innovation related initiatives and competition organized by MHRD- *Ananthi.K.S, IV year, Dept of EEE.*
- CIT IIC helps students to experiment latest technologies to develop a prototype which builds their confidence. Overall we get extremely healthy environment right from ideation to startup – *P.L.Vairavan , IV year, Dept of ECE*

- CIT IIC is leading towards creating an innovation promotion eco-system in the campus. Innovative activities have been conducted by our council under guidelines given by IIC-Ministry of Education. I hope institute will be able to produce innovative products and entrepreneurs in future -*Illakya, III Year, MSc Software Systems.*
- The webinars and activities were very interactive, which profited all the participants enormously! We had the opportunity to present our ideas and discuss our doubts. Many ideas that were said during the webinar were effective and also helped us to leverage our innovative ideas. The activities help out to know the entrepreneurial experience of campus Entrepreneurs - *Srinidhi S T, Secretary of EDC*

### **N. Contact**

**Name :** Dr.N.Muthukumarasamy

**E-Mail:** muthukumar@cit.edu.in

**Contact Number:** 9442954202

# COIMBATORE INSTITUTE OF TECHNOLOGY

(A Government Aided Autonomous Institution Affiliated to Anna University & Accredited by NBA & NAAC)

## Institutions Innovation Council

A Report of

### “IIC Regional Meet 2023 at Nehru College of Engineering”

#### Objectives:

- 1. Knowledge Sharing:** Facilitate exchange of knowledge and ideas among innovators and entrepreneurs.
- 2. Networking:** Create a platform for networking among industry professionals, researchers, and students.
- 3. Innovation Promotion:** Showcase innovative projects and solutions to inspire and encourage innovation.
- 4. Collaboration:** Foster collaborations between academia, industry, and government bodies.
- 5. Skill Development:** Provide workshops and sessions to enhance participants' skills in various domains.
- 6. Entrepreneurship:** Promote entrepreneurship and startup culture among students and young innovators.
- 7. Research Promotion:** Encourage research initiatives and collaborations among researchers and academics.
- 8. Community Engagement:** Engage with the local community to address social challenges through innovation.

#### Benefits:

- 1. Knowledge Exchange:** Participants gain insights into the latest trends and innovations in various fields.
- 2. Networking Opportunities:** Connect with peers, industry experts, and potential collaborators.
- 3. Skill Enhancement:** Attend workshops and sessions to develop practical skills relevant to their fields.
- 4. Exposure:** Showcase innovative projects and gain recognition for contributions to their fields.
- 5. Career Development:** Explore career opportunities and pathways in innovation and entrepreneurship.
- 6. Collaboration Potential:** Identify potential collaborators for future projects and initiatives.
- 7. Inspiration:** Get inspired by success stories and impactful projects presented during the event.
- 8. Feedback:** Receive valuable feedback from peers and experts on ongoing projects or ideas.

- 9. Visibility:** Increase visibility and recognition within the innovation ecosystem.
- 10. Learning:** Learn from experienced speakers and panelists about best practices and lessons learned.
- 11. Ideation:** Generate new ideas and perspectives through interactions with diverse participants.
- 12. Problem Solving:** Collaborate on solving real-world challenges through innovative solutions.
- 13. Recognition:** Gain recognition through awards and accolades for outstanding contributions.
- 14. Partnership Opportunities:** Explore potential partnerships with industry leaders and stakeholders.
- 15. Access to Resources:** Discover resources and funding opportunities for further development.
- 16. Cultural Exchange:** Experience and learn about different cultures and perspectives.
- 17. Community Impact:** Contribute to addressing local and global challenges through innovative solutions.
- 18. Personal Growth:** Enhance personal and professional development through new experiences.
- 19. Leadership Skills:** Develop leadership and teamwork skills through participation and engagement.
- 20. Sustainability:** Promote sustainable practices and solutions in innovation and entrepreneurship.
- 21. Inclusivity:** Foster an inclusive environment that encourages participation from diverse backgrounds.
- 22. Digital Transformation:** Explore the role of technology in transforming industries and society.
- 23. Policy Dialogue:** Engage in discussions on policy frameworks and regulations affecting innovation.
- 24. Future Trends:** Gain insights into future trends and emerging technologies shaping various sectors.
- 25. Celebration:** Celebrate achievements and milestones in innovation and entrepreneurship.

## **About the Event**

The IIC Regional Meet 2023 hosted at Nehru College promises to be a pivotal event in the realm of innovation, entrepreneurship, and academia. Scheduled from [dates], the event aims to bring together a diverse array of stakeholders including innovators, entrepreneurs, researchers, students, industry leaders, and policymakers. With its theme of [Theme Name], the meet endeavors to foster collaboration, inspire creativity, and showcase cutting-edge innovations that address both local and global challenges.

At its core, the IIC Regional Meet 2023 aims to facilitate extensive knowledge sharing through a series of keynote addresses, panel discussions, and workshops. Renowned speakers and thought leaders will deliver insights on emerging trends, technological advancements, and sustainable practices, empowering attendees with actionable knowledge and strategies. The event will feature

interactive sessions where participants can engage in lively discussions, exchange ideas, and explore opportunities for collaboration.

A highlight of the meet will be the Innovation Showcase, where innovators from across disciplines will present their projects and prototypes. This platform not only celebrates innovation but also provides visibility and recognition to pioneering solutions that have the potential to make a significant impact. Furthermore, the meet will include a startup pitch competition, offering budding entrepreneurs the chance to pitch their ideas to a panel of investors and mentors, fostering an ecosystem conducive to entrepreneurial growth.

Networking forms a crucial component of the event, providing attendees with ample opportunities to forge meaningful connections. Whether through structured networking sessions, informal interactions, or social events such as a gala dinner, participants can build relationships that may lead to future collaborations, partnerships, or mentorship opportunities.

Moreover, the IIC Regional Meet 2023 is designed to promote academic-industry partnerships and research collaborations. It serves as a platform for universities and research institutions to showcase their contributions to innovation and discuss avenues for translating research into real-world applications. By bridging the gap between academia and industry, the meet aims to accelerate the adoption of innovative solutions and drive economic growth.

In addition to its academic and professional focus, the event embraces cultural diversity and inclusivity. Participants will have the opportunity to experience the local culture through cultural performances, exhibitions, and guided tours, creating a rich tapestry of experiences that enhances the overall event atmosphere.

Ultimately, the IIC Regional Meet 2023 at Nehru College aspires to be more than just a gathering—it aims to be a catalyst for positive change, inspiring a new wave of innovation, entrepreneurship, and collaboration. By fostering a conducive environment for learning, networking, and creativity, the meet seeks to empower participants to shape a brighter future through innovation-driven initiatives.





# Coimbatore Institute of Technology

(Government Aided Autonomous Institution Approved by AICTE and Affiliated to Anna University)

## REPORT

To proliferate the information of Design Thinking concepts and its importance in modern world IIPC cell of Coimbatore Institute of Technology and IT department, CIT has conducted an event on 15<sup>th</sup> Feb 2023, 2.30pm to 4.30pm. Resource person Mr.Guruprasad Chellaiah CEO, M/S Dreamguys Technologies has spoken on “ Design Thinking, Critical Thinking and Innovative Design “.

IIC cell Student Coordinator IT Dept has welcomed the gathering and the functioning of IIC cell and its activities. He introduced the chief guest and his area of interest and domain knowledge. Mr.Chellaiah starts with concepts and applications of Design Thinking. He then added various steps of Design thinking and how it resolves user problem effectively. The various examples such as ZOMATO, NETFLIX, GE healthcare etc., also discussed briefly. The various steps Define, Ideate, Prototype and testing with user experience design concepts also deliberated.

The user experience with innovative idea on Web page Design, Mobile APP development was also mentioned. His innovative idea on Micro service based Architecture, JIRA Software which helps teams across financial, retail, life sciences and many more verticals stay and organized effectively and efficiently. Speaker’s point on Full Stack Development, DevOps – Combination of practices and tools that increases organizations ability to deliver applications and services at high velocity. It facilitates creative thinking process in coding and scripting.

Finally he deliberated on the G-20 initiative of Government Digital Technology and rise of Cloud Technologies, Security aspects and comparing design thinking and Creative thinking which need answers solutions and ideas that can be unexpected unique and unorthodox. His speech and example of using various web page design tools and concepts related to innovative design welcomed by student community.

**COIMBATORE INSTITUTE OF TECHNOLOGY**  
(Government Aided Autonomous Institution)  
COIMBATORE 641014



**Institution's Innovation Council**



## A. About IIC Institute

The mission of Institution Innovation Council of Coimbatore Institute of Technology is to develop an ecosystem at the institute which will inspire and motivate the students and support them to work with new ideas which will lead to the development of innovative products.

The vision of the Institution Innovation Council is to have an education system in the institution which will develop an entrepreneurship culture in the minds of the students and faculty.

In ATAL ranking of Institutions on Innovation Achievements (ARIIA) - 2021 - Coimbatore Institute of Technology was ranked in the band Excellent in category of Government and Government Aided Institutes and Colleges

The Institution Innovation Council was established in our Institute during 2018 and is working towards the motive of creating awareness among students and faculty about innovation and startup and catering to their needs to develop prototype working models and innovative commercial products. Seminars, workshops and talk by entrepreneurs related to idea generation, innovation and entrepreneurship were organized regularly. This has led to the establishment of few startups by our students with the help of mentoring by our faculty members.

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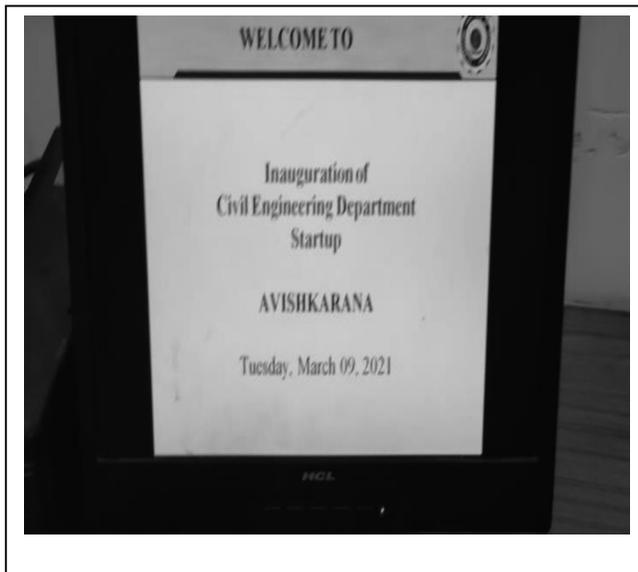
IP Facilitation Unit : Intellectual Property Rights Cell

**D Highlight Facilities, Infrastructure of PreIncubation& Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.**

The Institute has the following infrastructure/facilities/student bodies which are actively involved in the promotion of innovation and entrepreneurship in the campus.

1. Entrepreneurship Development Cell
2. Institute Industry Partnership Cell
3. Pre incubation unit
4. Incubation unit
5. Institutions Innovation Council
6. Intellectual Property Rights Cell
7. Centre for AI and IOT
8. 5G Innovation Centre
9. Research and Development  
Laboratory
10. Automation Research Laboratory
11. Nanotechnology - Centre of  
Excellence
12. Smart Manufacturing Centre
13. Structural Engineering Laboratory
14. Environmental Engineering  
Laboratory
15. Datalytics (Idea club(Students club))
16. FOSS-CIT (Idea club(Students club))
17. Inspire club - Innovative solutions  
platform for Industry related Engineering (Innovation club(students club))
18. Kalam Knowledge Club (Idea  
club(Students club))
19. SPEED- Self learning platform for  
Excellence in Engineering Development (Idea club(Students club))
20. All engineering and science  
departments have well established laboratories which can provide the necessary  
support for faculty and students to transform their innovative idea into a prototype  
model or a product.

Sample photographs for Start-up initiative are as below:



#### E Highlight Achievements (Narrative/Graphical/tabular representation)

Innovation, entrepreneurship and patent related activities conducted in the institute is 30 and the type of activities Include

- Entrepreneurship and Innovation as Career Opportunity Why IP is important in academia?
- Developing Online Repository of Ideas
- Developed and Way forward plan
- Session on Problem Solving and Ideation Workshop
- My Story - Motivational Session by Successful Entrepreneur/Start-up founder. How to plan for Start-up and legal & Ethical Steps
- Exposure and field visit for problem identification
- CIT Quantum Hackathon

- India Startup Day , World Environment Day,National Pollution Control Daycelebration - invited talk by experts
- E-Symposium on Building Innovation Ecosystem in Educational Institutions
- Expert talk on "Process of Innovation Development & Technology Readiness Level (TRL)" & "Commercialisation of Lab Technologies & Tech-Transfer
- Field/Exposure Visit to Pre-incubation units such as Fab lab, Makers Space, Design Centres, City MSME clusters, workshops etc.
- Session/ Workshop on Business Model Canvas (BMC)

Number of ideas generated - 16

Number of prototypes developed - 11

Number of patents published - 25

Number of start-ups established - 1

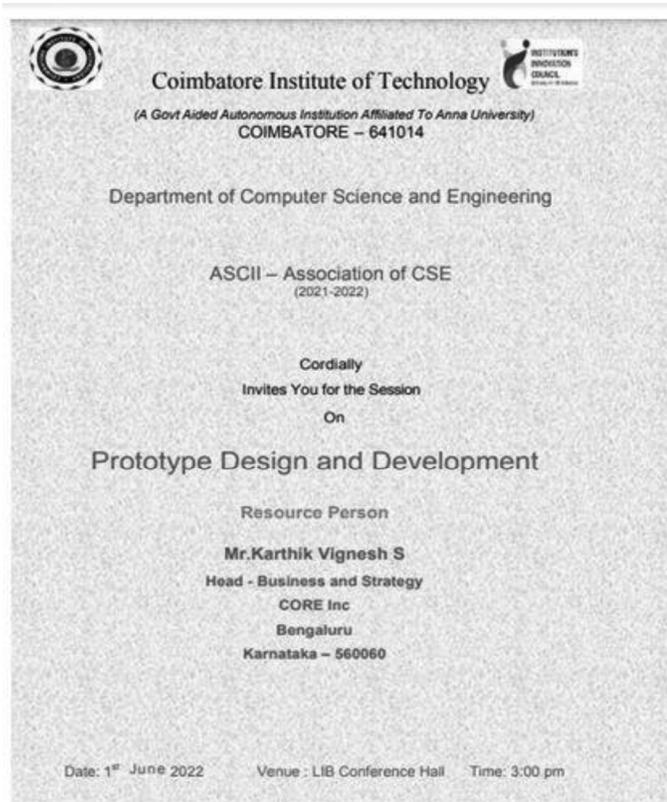
Amount spend on promotion and awareness generation on Innovation

Entrepreneurship in the campus - Rs. 1Lakh

Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR - Rs.2 Lakhs

**Sample photographs for the events conducted are as below:**

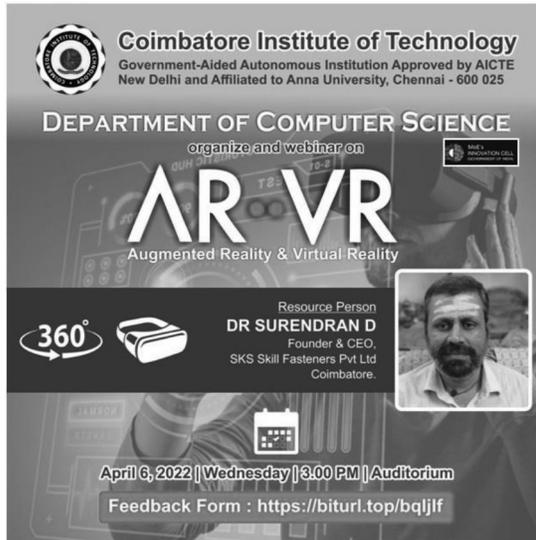
Session Screen shot of **“WORKSHOP ON PROTOTYPE/PROCESS DESIGN AND DEVELOPMENT - PROTOTYPING”**



Session Screen shot of “Workshop on Intellectual Property Rights (IPRs) and IP management for start up”



## National Technology Daycelebration - Events poster



### F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded forthe innovations at different forum

1. Participated in Automobile Hackathon organized by NEC and Mitsubishi Corporation, India on 19th and 27th February 2022  
Project Title: IoT based driver assistance and safety system  
Team Members  
Dr.M.Poongothai , Associate Professor , Dept of ECE  
JayasuryaM , III year ECE  
Pavithran KB, III year ECE  
Loganathan D, III year CSE
2. Sustainable\_Contact\_Attendance\_System developed by ECE students which has been implemented in IoT lab
3. Nikaran K - Developed FARMLAND - Supply chain management and analytical tool for Agricultural product distribution
4. JayakrishnaSS - Developed Instrument To Maintain Social Distancing And Solution To Rehabilitate From COVID-19, Identification and rehabilitation of fungal disease affected banana plants
5. Gokul R - Developed Abnormality Scanner
6. Ajay. Akshita&Shivani - won II place in CSI National Product Hackathon 2021.
7. E - YANTRA team(Gugan, Nithyapriya, Balaji,Jayaprakash) of our Institute has bagged the second place in

the Finale of e- yantra robotics competition 2019 -2020 organized by MHRD, Government of India.

8. Nikaran and Arul KARTHIK have won the consolidation prize in the International level PDA Anti covid - 19 online code Hackathon conducted by PDA college of Engineering.

The Institution's Innovation council of MHRD's Innovation Cell organised a series of training programs exclusively for IIC members. During the current academic year, fifteen of the faculty members have completed these training sessions and are designated as "IIC - Innovation Ambassador". They are trained to play a role of mentor or guide for young minds in their pursuit of innovation and entrepreneurship.

**The Faculty Innovation Ambassadors at advanced level are:**

- Dr.A.S.Krishnan - Design thinking & Innovations
- Dr.R.Azarudeen-IPR & Technology Transfer
- Dr.E.Arul- Pre- Incubations & Incubation Management
- Sam Solomon D P-General
- Punidha A -General

**The Faculty Innovation Ambassadors at Foundation Level are**

- Dr. V. Vishu
- Dr.V.G.Kalpana
- Dr.A.Gnanaprakasam
- Mr.H.Sivarathinamoorthy-
- Dr.M.Kaarthik
- Mr.B.Vasanthan
- Dr.C.Stanly Felix
- Dr.G.Puvaneswari
- Dr.N.Anithadevi
- Dr. P.Balraju

A sample certificates provided to the IIC members are as below:



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

(i) **ARIIA - participation and Rank**  
Smart India Hackathon etc.

- Atal ranking of Institutions on Innovation Achievements(ARIIA) - 2021 - Ranked Third in category of Government and Government Aided Institutes and Colleges



- (ii) NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation  
NISP - Innovation and Start-up policy document of the institute has been framed and its implementation has been initiated through training of faculty members and developing an ecosystem which will push the students towards innovation and start-up.
  
- (iii) Smart India Hackathon

Teams from our Institute have participated in Smart India Hackathon. They have also participated in Hackathons and other similar events organized by private enterprises and have won prizes .

The teams from MSc. AI& ML I- Year and II Year participated in the Toy Hackathon conducted by MHRD,IIC,GOI in the month of Jan 2021. A presentation of the idea was submitted and two teams got selected for the Grand Finale held in July 2021.

**SMART INDIA HACKATHON 2022:**

Smart India Hackathon SIH 2022 supported by AICTE, MoE and Innovation Cell ,GOI was conducted by IIC of Coimbatore Institute of Technology, Coimbatore to inculcate the knowledge on Hackathon.

As per the direction of SIH 2022 rules and regulations, students were given the privilege of selecting various problem statements and team them up accordingly. As per the suggestions of SIH 2022 the students were advised to take up the problem statement which was not attempted earlier.

Students were enthusiastically participating in SIH with true spirit and zeal. Various teams were participated in Hardware/Software and try to come out with proven results.

We invite the Juries from both Industry and Academic with high calibre for evaluation process and various parameters such as innovative idea, social relevance, Implementation etc ., were considered for final team selection. The internal HACKATHON 2022 was conducted and totally 15 teams were selected. Many young faculty members as coordinators also involved in the event is also noteworthy.

Finally the following 05 teams were selected for final presentation at various locations of India.

Roll No.	Members Name	IDEA ID - TEAM NAME	Status
EEE	TEAM 1 ID:15187		
20ee28	Ramalingam M	17891 - Geo tagging of Educational Institutions	SELECTED for Grand Finale
20ee68	KephaRhenie S E		
20ee46	venkatesan A		
20ee39	Syed Abdul Haq S		
20ee49	Vijeandrrah N L		
20cs41	Sanjay JY		
<b>Chemical</b>	TEAM 2ID:15107		
1906004chem	P. Anisha	17076 - Conversion_of_Excess_Milk_into_Skimmed_Milk	SELECTED for Grand Finale
1906005chem	S. Anitha		

m			
1906048che m	L. Selvakeerthana		
1906017che m	J. Hemanth		
1906034che	M. Palani		
<b>ECE</b>	<b>TEAM 3ID:15854</b>		
1904012ece	Sathish P	17091 - Sustainable_Contact_Attend ance_System	SELECTED for Grand Finale
1904001ece	Anuja V		
1904004ece	Mythily A		
1904020ece	PriyaDharshini C		
1904021ece	Sherjeel Amin		
1904038ece	Sujitha R		
<b>EEE</b>	<b>TEAM 4ID:15857</b>		
1903113eee	Vigneshwar Lu	19052 - Consensus_hourly_visibility_ forecast_airports_ NWP	SELECTED for Grand Finale
1903084eee	Jotheeswaran N		
1903063eee	Aravind M		
1905096cse	Murugalakshmi M		
1905115cse	Soundarya M		
1905121cse	Vigneswari G		
<b>CIVIL</b>	<b>TEAM 5ID:15129</b>		
1901003c	AmeerSulthan I	20472 - Smart_Bin _Waste_Management	SELECTED for Grand Finale
1901022c	Hema S		
2001208ce	Viswa J V M S		
1901067c	GokulaSar avanan		
1901101c	Shiddeshwar R		
1901097c	Rishwanth A V K		

#### IR 4.0 - PERPETUAL FEST

CIT IIC organized “the Perpetual Fest” for our second and third year students. Mini hackathon was conducted with the base idea of Smart India hackathon(SIH). The problems for mini hackathon were selected from the real world problems listed in the SIH website. Students for a team based on their interest work on it to develop a prototype. The mini hackathon for the academic year 2021- 2022 was carried out on 22rd August 2022. The purpose of the fest was to display the IR4.0 themed projects that the Department of AI and DS students spent three months working on. The 55 students from the departments of AI and DS were separated into 13 batches for Perpetual Fest. 13 batches performed 13 projects in a unique manner that involved both hardware and software. Dr.Muthukumaraswamy and Dr.MuthuSubramaniam served as evaluation panel for the IR 4.0 - PERPETUAL FEST. The 13 projects that were presented to the guests/panels which were assessed based on

various factors, including technical skills, problem-solving abilities, and learning. The panels evaluated the projects, made recommendations for their improvement, and instilled fresh thinking and innovation to advance them in the future.

No of Students: 55 No of staffs: 15



#### K. Detail of Social Media & Connections of IIC institute

Facebook Link :<https://www.facebook.com/cit.innovation.3>

Twitter Link: <https://twitter.com/DrEARu1/status/1320224987203026946/photo/1>

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

##### **FEEDBACK - Dr Vishu V, Department of Computer Applications**

The basic level ambassador training was very useful and the training program enables us to obtain real insight on entrepreneurs development, consultancy works, and different start up policies, Integration of Research, Innovation and Entrepreneurship in Academic Institutions and Economic Growth of Country, Attaining Market-Product Fit: Prototype Designing Process and Tools for Development of Minimum Viable Product etc. Roles and Responsibility of Faculty Innovation Ambassadors were clearly explained

##### **FEEDBACK FROM FACULTY MEMBERS**

- IIC Cell Encourages students and faculty to come up with new ideas. Conducting Webinar/ Workshop under IIC encourages both faculty and students to gain knowledge up to date. IIC cell has given guidelines for a set of activities for each quarter at the start of every academic year. These guidelines are very helpful for

planning the activities during each quarter of the academic year, which are beneficial for the students – *Dr.M.Poongothai, Associate professor, Dept of ECE.*

- The IIC's calendar events motivate the faculty members to conduct events under different categories in their own department which benefit the faculties and students. The webinar conducted by IIC cell was in a Structured and Organized manner. Minutes of every meeting which is shared by IIC Co-ordinator is very useful for staff and they can improve their activities related to IIC - *Dr.E.Arul, Assistant professor, Dept of IT.*
- The Main aim of IIC is to mentor and spread awareness on fostering innovation at Institute level. The cell encourages all faculty members to do research and also motivates student to do research and go for publications. Supports to work with new ideas and to develop prototype. Many Webinars conducted through IIC Cell, have improved our thought process and also the cognitive system. IIC cell strongly motivates to move towards product conversions and patent generations – *Dr.V.G.Kalpana, Assistant professor, Dept of Civil Engineering*
- Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). It helps, prepare Institute for Atal Ranking of Institutions on Innovation Achievements. Need to give importance on Global network with Entrepreneurship Development Organisation to strengthen the multidisciplinary innovation among the students community by conducting workshops, seminars and HR meet at Institution Level - *Dr.R.Maheshvari, Staff Advisor – ENTREPRENEURSHIP DEVELOPMENT CELL, Coimbatore Institute of Technology*

#### **FEEDBACK FROM STUDENT MEMBERS**

- IIC cell of CIT conducts quarterly meetings in every quarter to plan the quarterly activities and review quarterly conducted activities. Due to these activities, we get chance to participate in various innovation related initiatives and competition organized by MHRD- *Ananthi.K.S, IV year, Dept of EEE.*
- CIT IIC helps students to experiment latest technologies to develop a prototype which builds their confidence. Overall we get extremely healthy environment right from ideation to startup – *P.L.Vairavan , IV year, Dept of ECE*

- CIT IIC is leading towards creating an innovation promotion eco-system in the campus. Innovative activities have been conducted by our council under guidelines given by IIC-Ministry of Education. I hope institute will be able to produce innovative products and entrepreneurs in future -*Illakya, III Year, MSc Software Systems.*
- The webinars and activities were very interactive, which profited all the participants enormously! We had the opportunity to present our ideas and discuss our doubts. Many ideas that were said during the webinar were effective and also helped us to leverage our innovative ideas. The activities help out to know the entrepreneurial experience of campus Entrepreneurs -*Srinidhi S T, Secretary of EDC*

#### **N. Contact**

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**Contact Number: 9442954202**