

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

A. About Vision / Mission of IIC established at the Institute

Vision

- To develop an innovation ecosystem and to encourage the creative energy of students and faculty to work on innovative ideas and stimulate them towards entrepreneurial ventures.

Mission

- Developing an ecosystem with required infrastructure that would enable students and faculty to ideate, innovate, prototype and convert into useful products of functional and commercial value.
- Conducting various innovation and entrepreneurship-related activities like periodic workshops/seminars/interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.
- Organize Hackathons, Ideathons and Business model competition with Industry involvement.

Journey of IIC established at the Institute

Innovation Institution Council was established in the year 2018 and since then lot of activities were carried out in the institution involving faculty and students for the benefit of them. The main motto of establishing IIC at CIT is to bring out the entrepreneurial acumen and mind-set in students and faculty through our programmed ecosystem so that aspiring students would plunge into entrepreneurial ventures.

In the first year, 2018-19, we obtained 3 Star rating from innovation cell, MoE and in the subsequent year, 2019-20, we were awarded with a 5 Star rating in recognition of our

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

extraordinary activities showcasing our strength, potential and willingness in adopting and implementing IIC activities as stipulated by IIC-MoE. This year, 2020-21, though we were barricaded with COVID19 pandemic, we could conduct various programs on IPR, Innovation and entrepreneurship through virtual mode as suggested by IIC-MoE. We were rated 4 star for this year. We were assigned 5 mentee institutes with funding support of Rs 2,25,000/-. Our IIC journey has so far been successful and useful for all our stakeholders, students and faculty in particular, as a well-established ecosystem has been provided in the campus to scale up their potential in pursuit of their entrepreneurial ventures. We have organised ample of programs the current year 2021-2022 on various aspects of IIC requirements.

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

We do have representations from all the branches / departments / programmes - various engineering courses like Mechanical, Civil, CSE, ISE, ECE, AI/ML and EEE disciplines, PG programmes like MBA, MCA and M.Tech. We have representation of our School, our sister concern located adjacent to our campus to be part of our innovation ecosystem. In addition, our established IIC-CIT has representations from Industry, IPR attorney and a financial Institution.

- Mrs. Komala, Manager, Federal Bank, Bengaluru
- Dr. M G Anantha Prasad, COE-AIC, Jyothi Institute of Technology, Bengaluru
- Dr. Rajesh Kumar, Siemens Industry software computational dynamics India pet. Ltd, Bengaluru
- Mr. Kiran Bettadapur, Advocate and IPR attorney, Bengaluru.

B.Brief mention of key functionaries at the IIC Institute

President

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

Dr. Muralidhar Reddy : has been designated as the president of IIC-CIT constituted at Cambridge Institute of Technology in 2021. He is a professor in Department of MBA . He is an active member for NISP and EDP programs and the following are the key functionaries :

- Delivering expert talks
- Planning the events schedule
- Motivating and encouraging students in idea generation
- Mentoring various institutes on IIC
- Co-ordinating and organising various events at Institutional level
- Directing and leading the IIC team
- Executing the events in a systematic manner

Vice President

Dr. Josephine Prem Kumar: has been designated as the vice president of IIC-CIT constituted at Cambridge Institute of Technology in 2021. She is a professor in Department of Computer Science engineering.

Convenor

Prof. Arthi Meena Assistant professor department of MBA. The key functions are

organizing events, executing the schedule events , coordinating with other departments for the developments of IIC activities .

Coordinators

Dr.Antony - Dean R & D

Dr.Cyril - Head, Cambrian Innovation Centre

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

Prof .Gupta	- Dept of Electrical Engineering
Prof .Jayaprakash	- Department of Electronics & Communication
Prof.Sunil Kumar	- Department of Master of Computer Application
Prof.Nagendra	- Department of Civil Engineering
Prof. Priyanka	-Department of Information science
Dr.Sagar .K.G	- Department of Mechanical
Prof. Chetan Naik	- Department of Electronics & Communication
Prof. Veerappa	- Department of Electronics & Communication
Dr.Varalatchoumy	- Department of Computer science
Dr.Ravi Shankar	- Department of Basic Science
Dr. Pushpalatha	- Department of Physics

The following are the student co-ordinators

Sl.No	Student Name	Department
1	Arun , Subhash , Praveen ,Kavya, Supriya , Vijay	MBA
2	Meghana,Monica, Nanditha ,Nishanth , Shrinidhi , chandana ,Sekhar sahu	ECE
3	Panchami Mahendran , Prajna, Rakshita,Ramya.Ragna VS, Sharvani	CSE
4	Prem Kumar, Fazle Umar ,Syed Avaiz , Sai Danush , Varun Reddy	Civil

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

5	Ashwith , Deelip kumar, Sanjana, Sanjay , Prajwal	Mechanical
6	Surendra Reddy , Darshana, Chandana B, Modak Vignesh , Pavan Sharma	ISE
7	Tinu ,Parikshith .K, Tarun Tej , Chandru , Naveen ,Usha , Gagana	Basic Science
8	Anisha, Baskar , Jeevan , Divya, swetha, Geetha	MCA

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

Sl. No	Name	Dept	Designation	Mail ID	Contact details	Exp in year	Roles
1	Dr. Indhumati .G	HOI	Principal	principal@cambridge.edu.in	9880411116	15	HOI & Mentor
2	Dr.Muralidhar Reddy	MBA	Professor	Muralidhar.mba@cambridge.edu.in	9986220824	20	President
3							Vice President
4	Prof.Arthi Meena	MBA	Assistant Professor	arthi.mba@cambridge.edu.in	9008276188	8	Convenor
5	Dr. Josephine Prem Kumar	CSE	Professor	d_prem_k@yahoo.com	9916347795	27	IPR coordinator

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

6	Dr.Antony Periya Kumar	R&D	Dean	Deanr&d@cam bridge.edu.in	9845925132	20	IPR coordinator
7	Dr.Cyril Prasanna Raj	R&D	Head	cyril@cambridg e.edu.in	9448686332	16	Entrepreneu rship activity coordinator
8	Dr.Sagar K G	Mech	Associate Professor	sagar.mech@ca mbridge.edu.in	7353822506	13	Innovation Activity Coordinator
9	Prof. Priyanka R	ISE	Assistant Professor	Priyanka.ise@ca mbridge.edu.in	9606694391	8	Startu p Activit y Coordinato r
10	Prof. Veerappa S Chikkagoudar	ECE	Assistant Professor	veerappa.ece@ cambridge.edu.i n	9902096087	17	ARIIA Coordinato r
11	Prof.Sunil Kuma N	MCA	Assistant Professor	Sunilkumar.mca @cambridge.ed u.in	8892556463	8	Entrepreneu r activity coordinator
12	Dr. Varalatchoum y M	CSE	Associate Professor	varalatchoumy.c se@cambridge.e du.i n	9740978830	17	SIH , start up activity coordinator
13	Prof .Gupta	Mech	Associate Professor	Gupta.mech@ca mbridge.edu.in	8453324510	15	Innovation coordinator

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

14	Prof .Jayaprakash	ECE	Assistant Professor	Jayaprakash.ece@cambridge.edu.in	9036058240	7	Entrepreneurship activity coordinator
15	Prof. Chetan Naik	ECE	Assistant Professor	Chetannaik.ece@cambridge.edu.in	8851994467	8	Entrepreneur activity coordinator
16	Prof. Nagendra	Civil	Assistant Professor	Nagendra.civil@cambridge.edu.in	7892462217	12	Design thinking activity coordinator
17	Dr.Ravi Shankar	Basic Science	Associate Professor	Ravishanker.bs@cambridge.edu.in	9449191908	13	Celebration activity coordinator
18	Dr.Pushpalatha	Basic Science	HoD	Hod.phy@cambridge.edu.in	9945890111	4	Celebration activity coordinator
19	Prof.Sushma.B	MBA	Assistant Professor	Sushma.mba@cambridge.edu.in	9845269039	13	Social media coordinator
20	Mr.Krishna Kumar	Admin	Registrar	registrar@cambridge.edu.in	9900000480	20	Member
21	Prof.Suhas	Mech	Assistant Professor	Suhas.mech@cambridge.edu.in	9738234609	8	Member

- Total No. of IIC Members - 21 Faculty & Students – 47 Total Members.
- Total No. of IAs – 7IAs – 3 in Advanced Level and 9 in Foundation Level
- Total No. of faculty Mentors - 12
- Pre-Incubation Units - 7 units

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- IP Facilitation Unit, If any – A separate IP cell is available in campus.
- IIC cell has all infrastructure facility like computers, Internet, Printers, LCD, PA system, mini-Library, smart board and sufficient furniture's.
- A well-established state of the art incubation facility is available in the area of 5000 Sqft.
- 12 start-ups are operated from our premises

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

CIT INCUBATION

Incubation

The Cambrian Innovation Lab helps early-stage start-up businesses grow to stand alone companies by providing mentorship, expertise, and access to investors in a contemporary, collaborative workspace. These services along with a specially designed programme enable early-stage founders operate at a lower cost, improve focus, network and develop relevant business acumen and technical skills.

Services

Upon incubation, founders move through a tailor made, three stage in-house programme. Starting with the launchpad, how to effectively enter the market and finally standing independently. A broad range of complementary professional and business services are offered ranging from legal and taxation support to project management. In parallel, mentorship will be provided on an ad-hoc basis through an extensive network of experienced academic professionals and industry experts.

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

Infrastructure

Contemporary and open plan, sitting on the top floor with panoramic views of the city. The workspace boasts a mix of long work benches, private meeting rooms and an informal space to unwind. Crafted from sustainable materials with plants scattered throughout, the space was specifically designed to encourage collaboration, expertise sharing and the exploration of new ideas.

What's in it for start-ups

Time is finite, incubates will be able to spend as much of it as they can solving their problem, focusing on what's important as the Cambrian Innovation Lab picks up on administrative, legal and compliance related tasks.

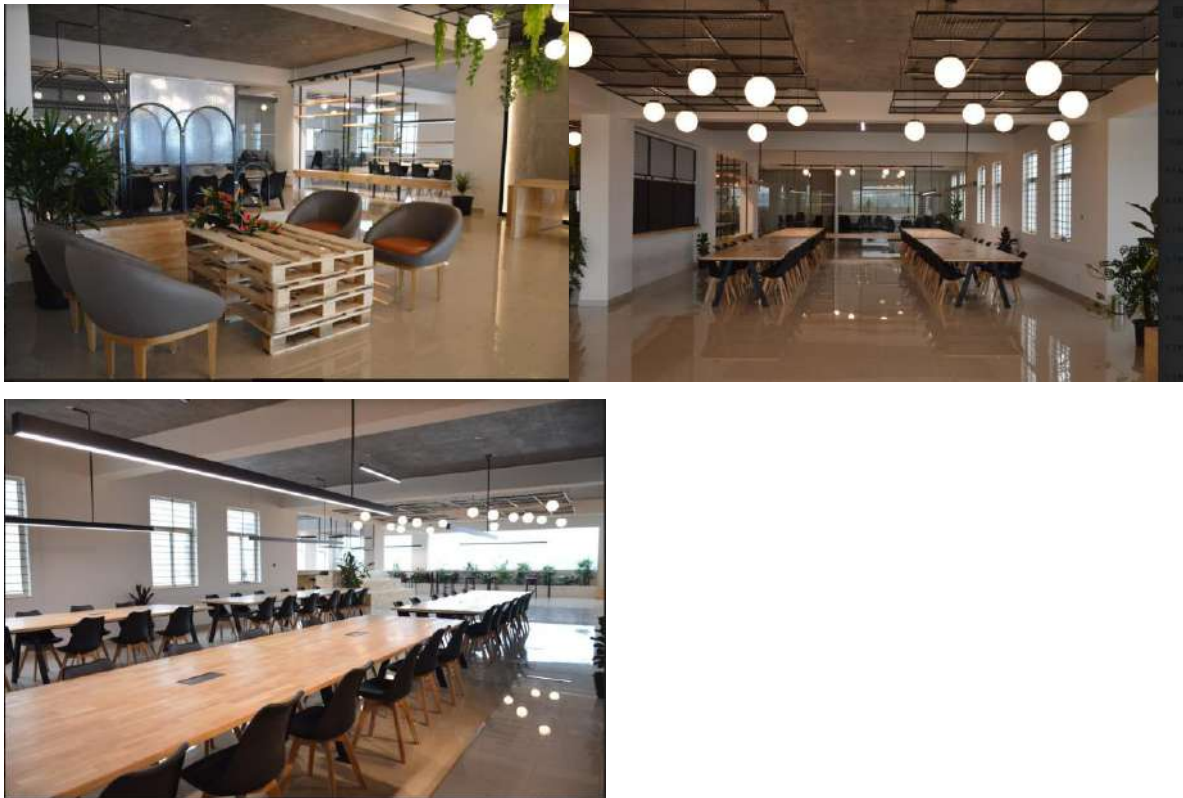
Funding is crucial, not only does it facilitate the transition from ideation to development, it builds credibility, essential for attracting future investors. The incubator will help start-ups identify available grants, potential investors, prepare proposal submissions and rehearse investor pitches.

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22



CIT has 12 startups currently operating from the campus. One of the startups is Per Sapien ([Persapien in News](#)). CIT has provided such a conducive environment that they plan to shift the whole operations to CIT.

About the start-up:

A team of scientists, engineers, medical professionals and designers have come together to create this unique family of empathetic sapiens who use the power of fundamental science to create meaningful inventions to save and transform lives.

It was the year 2015 when the duo - Dr Shashi Ranjan and Debayan Saha were flying back to India to start their innovation journey at AIIMS, Delhi from Stanford University, the USA after completing their coveted Bio design innovation fellowship with a determination to contribute to the healthcare system to India.

Highlights of PerSapien technologies:

Minus 2.5

Air pollution is omnipresent. So we need a tool that can reach every corner of a city.

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

What can be better than vehicles? Seriously, after decades of polluting now it is automobile's turn to clean up our air. The magnet like property induced by our technology, works best on concentrated sources of pollution. Hence mounting the device on exhaust tailpipe of cars etc. will create the biggest impact.

Airlens Car Air Sanitizer

The air pollution inside your car can be 2-5 times more than that of the outside. To combat this problem our scientists came up with a revolutionary technology called AMT which brings the WHO Air Quality inside your car and protects you from PM2.5, PM10, germs, bacteria, odour and pollen. All this with more ease, efficiency and effectiveness as compared to a conventional air purifier.

Airlens Mask

This mask is built with India made World's 1st Active Molecular Technology by scientists from IIT, AIIMS and Stanford University which makes the quality and efficiency of an expensive mask, comparable to INR 1000-2000 in the market with a sub 400 pricing.

Work at CIT

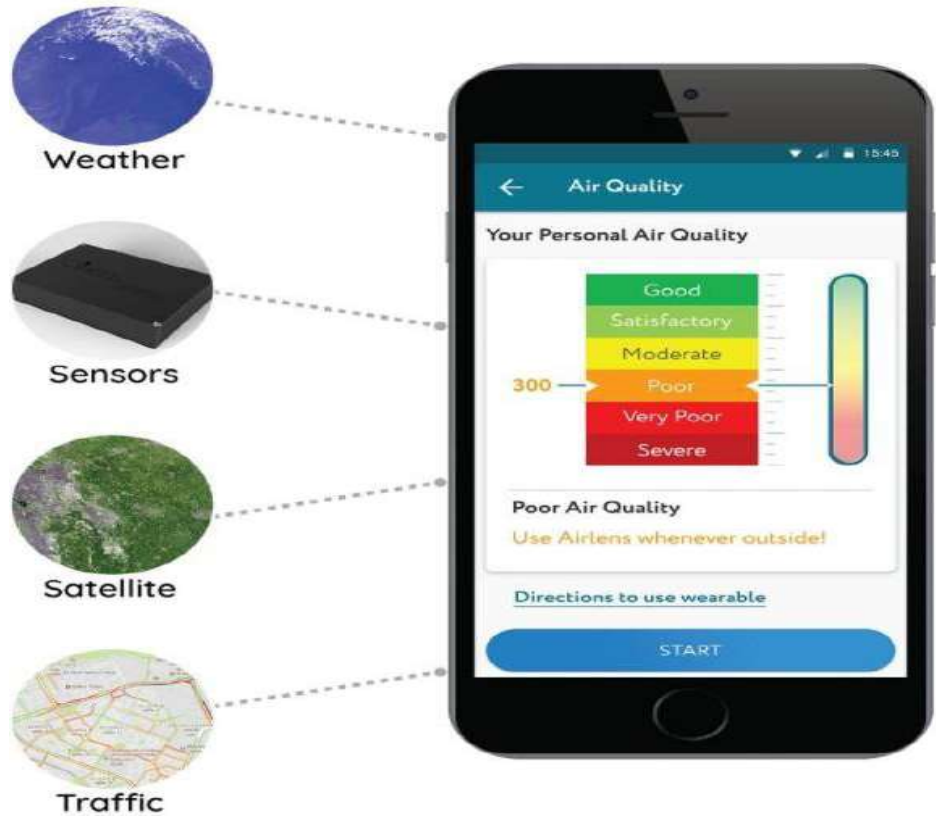
Along with 3 engineers, Mr. Debanyan Saha developed solution which has now been tested and certified by ICMR (Indian Council of Medical Research) which can kill corona also.

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22



CIT Incubator



CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

clubs engaged in promotion of Innovation and Entrepreneurship in the campus.

1. Cambrian House of Student Startup (CHOSS) a wing of Cambridge Institute of Technology, aspires to provide the right set of tools for students who strives to become Entrepreneurs in the future. CHOSS provides the platform to Ideate, Develop and Incubate student start-ups. CHOSS enables aspiring students by mentoring, training, connecting with leaders from industry and infrastructure to convert an Idea to Product/Service.

Vision

To provide a platform for students to grow professionally and personally to meet societal needs, and cherish their entrepreneur dreams, through effective engagement, Industrial connect and practical exposure.

Mission

- To inspire and transform students into entrepreneurs through various skill development programs, Interdisciplinary connect and Industry collaboration.
- To accelerate young minds and provide appropriate training and support from ideation to prototype development.
- To enable knowledge exchange, bridge the gap between youngsters and International Industrial world, ease and stimulate research opportunities between countries

Objectives

- Foster entrepreneurship and start-up culture among students
- Focus on solving societal needs and create employment
- Promote interdisciplinary/multidisciplinary/transdisciplinary innovation
- Technical mentoring via industrial connects, research organization, Government agencies, NGOs and funding agencies
- Train Mentors to guide students to provide sustainable solutions across domains

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- Provide Mentoring, training and Infrastructure to mature the idea into a Minimum commercially viable Products/Service
- Build a sustainable environment for the future via self-employment and sustained growth.



ANNUAL REPORT 2021-22

2. SEEDBRAINS

Objectives

As a member of the INBCB and in accordance with INBCB's mission, Cambridge Institute of Technology has planned to host an innovation challenge event "SEEDBRAINS" through its innovation arm Cambrian on the 21st of January 2022.

The main purpose of the event is to recognize and award innovations that are in alignment with UN's Sustainable Development Goals 2030. Several Objectives are expected to be met by the event.



Objectives of Seed brain

- Creating a platform to recognize & award the innovation & creativity in product development among young professional undergraduates
- Promote interdisciplinary, multidisciplinary and trans disciplinary innovation
- Elevate the national event to global innovation challenge involving students from national & international universities, over years

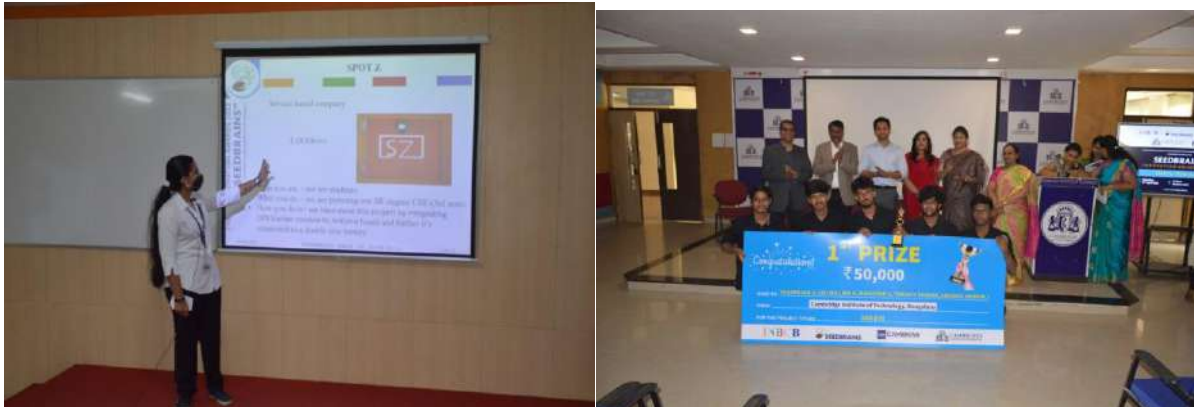
CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- Associate with industries, research organization, Government agencies, NGOs and funding agencies for technical, mentoring and sponsorship support



Outcomes

- SEEDBRAINS is considered to be the stepping stone for establishing Interdisciplinary connect and industry collaboration.
- Mentors guide their students in developing sustainable projects pertaining to several thrust areas and by exhibiting the same, they get an opportunity to get connected to experts of various thrust areas. This enables them to strengthen their research work as well generate a lot more ideas. This way, start-ups and industry experts would spot talents and plan for incubation.
- SEEDBRAINS would set a platform to enable knowledge exchange, bridge the gap between youngsters and international industrial world, ease and stimulate research opportunities between countries.

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

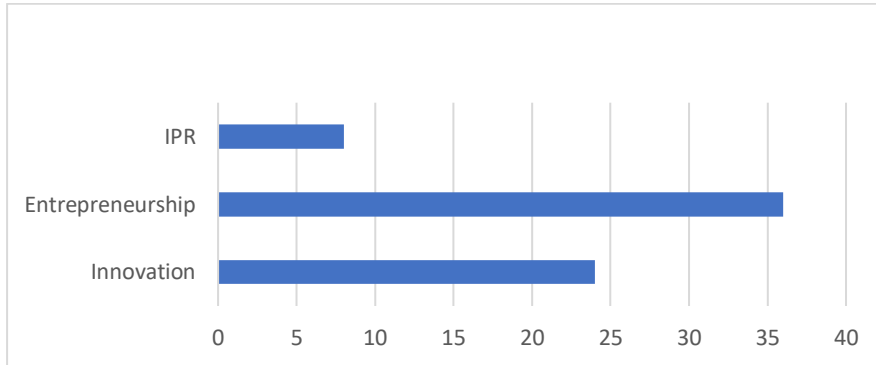
- Number and Different types of I&E and IPR activities Conducted

CAMBRIDGE INSTITUTE OF TECHNOLOGY

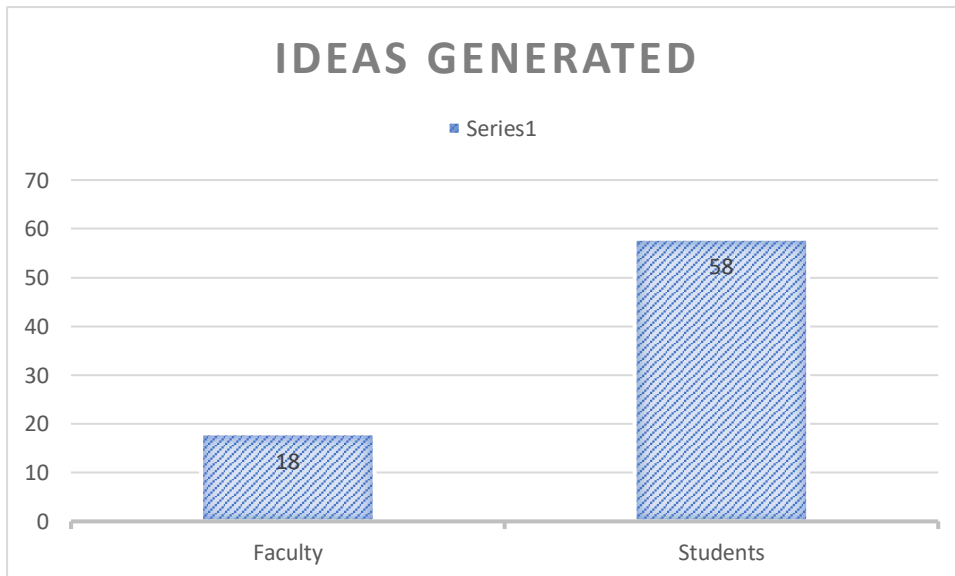
K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22



- No. of student's & faculty ideas generated



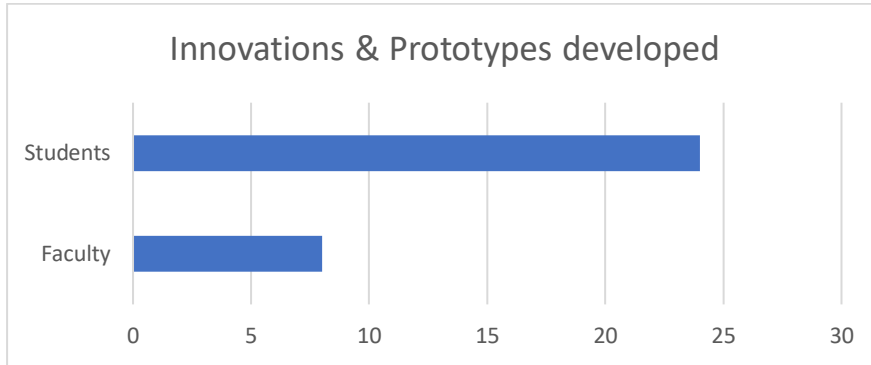
- No. of student's & faculty Innovation/prototypes developed

CAMBRIDGE INSTITUTE OF TECHNOLOGY

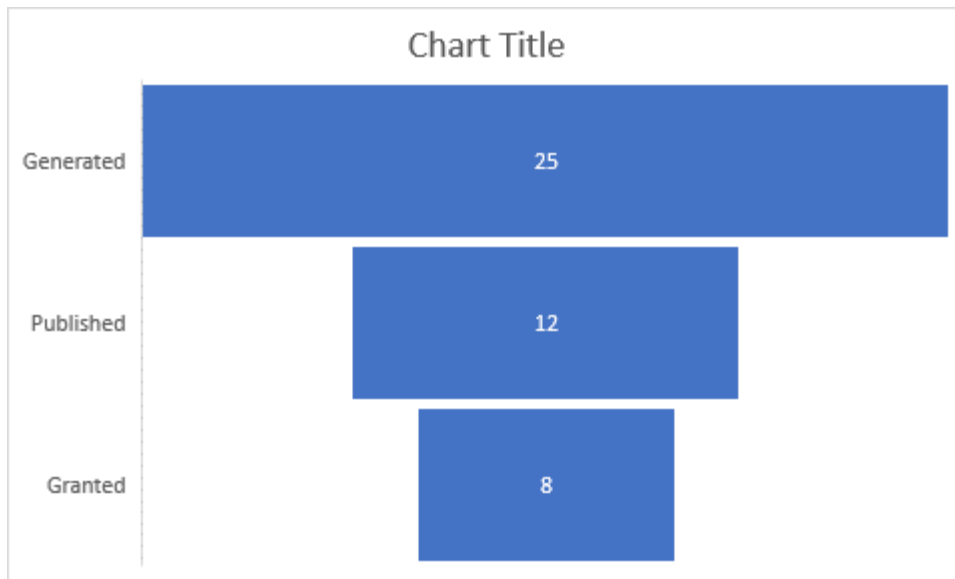
K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22



- No. of IPs generated, published and granted



CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- No. of Student & Faculty Start-ups/Ventures established.

Faculty Ventures – 5

Student - 2

- Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus

Rs – 1.65,000/-

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

Rs 3,60,000/-

No. of Technology Transfer and Commercialisation happened

2

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

Dr. S. Shankar, developed an innovative design, a patentable product called UIT machine to be used in manufacturing industries.

Dr. Jayanthi, an automatic sanitizer dispenser that dispenses sanitising liquid for handwashing controlled by sensors.

Dr. Girish developed a IOT enabled device for detection of cancer in the human body at the early stage

Dr. Antony Louis piriya Kumar, developed an apparatus and method for blood clot detection using non-invasive method

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

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

Ultrasonic Impact Test Machine – Dr. Shankar. S, Professor Mechanical & President IIC-CIT

Non-Contact Human Temperature Detection system – Dr. Varalatchoumy. M, Professor – CSE

Hospital Management System, Dr. Aruna Devi, HOD-MCA

Sanitation Tunnel, Dr. Antony Louis piriyakumar, Dean (R&D)

Smart Trolley with IOT, Dr. Aruna Devi, HOD-MCA

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

I. List if any break through Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation

- Non-Contact Human Temperature Detection system: A portable unit to read the temperature on palm of a human being, on daily basis. Data read by the sensor is displayed on the LCD with the help of its GUI.
- Fabrication of an Ultrasonic Impact Test Machine is used to relieve residual stresses on welded metals by non-destructive means for better fatigue performance.
- Fabrication of a 3D printer using e-waste materials a low cost 3D printer developed for printing three-dimensional plastic components for different applications.

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

ARIIA – participation and Rank

This Year (2020-21) we have applied for ARIIA ranking

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

NISP

Adoption status - Trained Faculty, Policy Formulation, Policy Implementation

NISP has been adopted in our campus and the coordinator of NISP at CIT is Dr.Suneel Kumar Kulkarni, Professor and Head of Mechanical Engineering.

Status:



FUTURE ACTION PLAN



Smart India Hackathon – We were one of the 75 nodal centres for SIH 2022 Grand finale

H. Detail of Social Media & Connections of IIC institute



- Twitter: <https://twitter.com/citechbengaluru>
- Facebook: <https://www.facebook.com/citech.official/>

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- Instagram: <https://www.instagram.com/cit.bengaluru/?hl=en>

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

- **Dr. Cyril:** IIC established at CIT, Bengaluru has been in the forefront in promoting and supporting innovation activities in the campus since the formation of IIC. I am proud to be a part of IIC-CIT.
- **Pooja Melvanki, KLE Science college, Belgaum (Mentee Institute):** The facility and infrastructure for the start-ups in Cambridge is fantastic and we loved being here to learn about the incubation centre. I have been inducted into IIC and undergone Innovation Ambassador training conducted by AICTE which was very useful for faculty and students. I would strive to uplift the credentials of my students as future entrepreneurs.
- **Sunil Kumar:** I as a member of IIC and an Innovation ambassador have the responsibility of conducting various programs for faculty and students in promoting a start-up culture in the institution. I myself being a small entrepreneur feel it an honour in bringing about a change in the minds of aspiring students to become entrepreneurs.
- **Dr. Pushpalatha:** Contributing on IIC activities have been a learning experience since I involved into it. After my induction into IIC, I conducted many programs in my department, basic science and was well received by faculty and students.
- **Priyanka R:** IIC at CIT has given me a lot to learn and reinforced my organising skill apart from being a mentor for selected students. Thanks to IIC-CIT for the opportunity.
- **Dr. M G Anantha Prasad, COE-AIC, Jyothi Institute of Technology, Bengaluru:** I happened to be at CIT for a session on the formation of Atal Incubation Centre at CIT and felt happy and impressed to know that CIT is performing at its best on various IIC activities, particularly on Innovation. I could see many students showing interest and aspiring to become entrepreneurs and were taking guidance from in-house mentors. Kudos to CIT for their exemplary work.

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22

- **Mr. Kiran Bettadapur:** I find CIT as one of the high profile institution, has a mind-set as innovators, and work a lot towards product development, innovation and patenting. I was a key speaker on few occasions at CIT and was impressed with their commitment towards excellence.

M.Images

N. Contact

Dr. Y. Muralidhar Reddy
Associate Professor,
Department of MBA,
President, IIC-CIT,
Cambridge Institute of Technology
K R Puram,
Bengaluru 560036
Ph: 9986220824
Email:
muralidhar.mba@cambridge.edu.in
Website: www.cambridge.edu.in

CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036



ANNUAL REPORT 2021-22