

Dear Reader,

Greetings from the Gopalakrishnan-Deshpande Centre for Innovation & Entrepreneurship (GDC), IIT Madras.

Welcome to the second issue of our newsletter, I-NFORM, which brings to you the key developments at GDC.

The past two months – October and November – were vibrant with lots of action at GDC. On 6th October 2021, GDC conducted a webinar on Evidence-based Entrepreneurship as part of a two-credit Entrepreneurship for Development course offered for students of the M-Des program at IIT Hyderabad. The program is being organized by IIT Bombay under the aegis of the Ministry of Education.

One of our founding donors, Mr. 'Kris' Gopalakrishnan, was felicitated by IIT Madras on 12th October 2021 as an "Impact Ambassador" for IIT Madras, one of the twelve eminent persons so recognized. Impact Ambassadors are alumni, who have contributed generously to improving the education and innovation infrastructure of IIT Madras. GDC's work in the startup ecosystem was showcased at the event through a [video](#).

Professor BS Murty, Director of IIT Hyderabad, was the Chief Guest for the FINALE of Cohort 17 of I-NCUBATE, held on 30th October 2021. Nine participating startup teams of the Cohort (details below) shared their learnings, and how those learnings have transformed their thought process and impacted their startup journey.

Cohort 18 of I-NCUBATE began on 13th November with eleven teams from diverse domains – ranging from agricultural biotechnology to artificial intelligence to environmental technology - commencing their Customer Discovery journey.

As part of an initiative to develop the startup entrepreneurship ecosystem, Vellore Institute of Technology (VIT) has introduced an Innovation & Startup Policy that allows faculty members to start their own ventures. GDC was invited by VIT on 24th November 2021 to address its faculty members. Mr. Raghuttama Rao conducted a sensitization program for the faculty on the way forward for converting their research ideas into startups, the challenges involved in this, and how GDC could help faculty and researchers of VIT in this journey. The program was well-received by the faculty of VIT. A recording of the session can be [viewed here](#).

Preparatory work on identifying startup teams for Cohort 19 of I-NCUBATE kicked off on 17th November 2021 with an Open House session. The Cohort is set to begin on 8th January 2022 and will end on 9th March 2022.

After holding eight cohorts of its I-NSPIRE program at specific incubators (all participant teams in a cohort are from one incubator only), GDC has decided to invite participant teams for the 9th cohort of I-NSPIRE from across India. The I-NSPIRE program is aimed at entrepreneurs of early-stage startups who have already committed themselves to the entrepreneurial journey. The Cohort 9 of I-NSPIRE will run concurrently with Cohort 19 of I-NCUBATE in February 2022. Details about the I-NSPIRE cohort and the application procedure are available on the last page of this newsletter.

GDC looks forward to your support and collaboration as we move forward in our journey of strengthening the Indian university ecosystem for innovation and entrepreneurship. We hope you enjoy reading this issue of I-NFORM.

Sincerely,
Team GDC

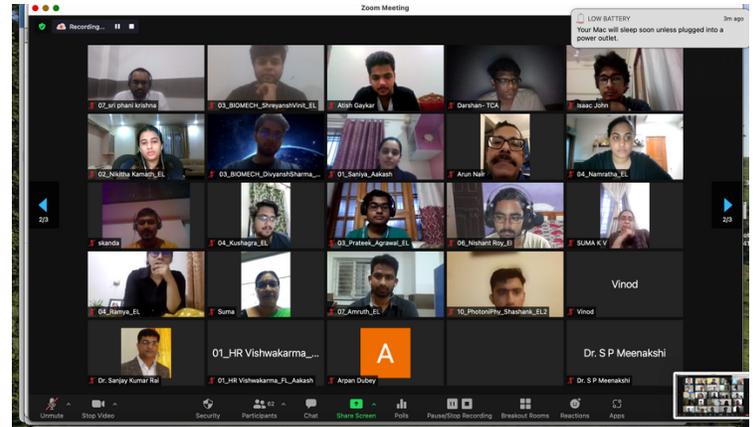
9 Startup teams complete Cohort 17 of I-NCUBATE program



Prof. BS Murty

A myriad of research-based ideas, discussions, learnings, and iterations marked the 17th cohort of I-NCUBATE online program. Nine startup teams participated in the program from STEM colleges across India. They were working on research ideas in fields ranging from agricultural biotechnology to artificial intelligence to environmental technology.

Each team in an I-NCUBATE Cohort includes a Faculty Lead and at least 3 Entrepreneur Leads. The idea is to inculcate entrepreneurial spirit in faculty members across STEM colleges while also identifying promising innovations that need support to transform into businesses.



Participants attending an online session of Cohort 17

Cohort 17 was different from most of the earlier cohorts as there was a large proportion of teams from tier 2 & tier 3 towns.

The Cohort began with an Orientation Session on 3rd September 2021. Over the next eight weeks, participants undertook a rigorous Customer Discovery exercise for their respective innovations. The teams interviewed people whom they thought would be their potential customers, the early adopters of their solution, and validated or invalidated the assumptions that they had about their innovation.

At the end of the program, most faculty described their experience as transformational. Most of the faculty members were trying their hand at building a startup for the very first time. They said that after attending the program, they felt confident about pursuing more entrepreneurial ventures in the future.

The teams presented their learnings at the FINALE session, on 30th October 2021. Speaking at the event, Prof. BS Murty, Director of IIT Hyderabad, the Chief Guest at the FINALE, lauded the efforts taken by students, faculty members, and GDC in bolstering deep-tech innovations in the country.

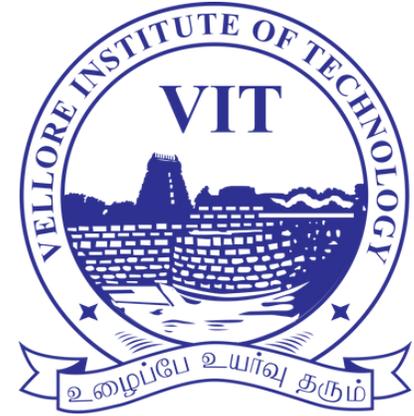
Addressing the startup teams, Prof. Murty said, “The problems these teams are tackling are commendable. Some are socially relevant and some are futuristic... Some of these technologies may sound like fiction when it’s discussed today, but serious attempts are being made to realize them.”

“These presentations that I have seen here today are an indication that youngsters are thinking outside the box. They are not being conventional. With support coming from organizations such as GDC, startups are going forward in their journey. I am really happy to see GDC doing such a wonderful job on that front,” he said. “It’s time that we celebrate initiatives such as these so that India becomes a leader in innovative solutions in the next few years.”

You can watch a recording of the FINALE session [here](#).

Meet the teams from Cohort 17 of I-NCUBATE program

Team Aakash from Vellore Institute of Technology is working on a technology to strengthen the internet backbone, one monitoring solution at a time. Their research shows that nearly half of the current internet downtimes are preventable, and service providers focus only on reactive maintenance and not on proactive monitoring. But, who would be their customer? Are their assumptions true? These were the questions that Team Aakash had when they came into the program.



Team Nexus Mobility from IIT Madras is working on an economical and scalable battery-swapping technology for four-wheeler Electric Vehicles (EVs). They believe their solution will resolve the current problems in the ecosystem that have resulted in the low penetration of four-wheeler EVs in the Indian market. Their analysis shows that currently, there is no such solution available in the Indian market. During the I-NCUBATE program, the team's idea of who would be their initial customers evolved. They realized that not every customer who has a problem is looking for a solution.



Team Pragathi Tech from IIT Palakkad is addressing a critical problem related to Covid. They are designing smart robots that can clean and sanitize high-risk areas. Their design is based on the IoT technology, which means the robot can be accessed and used through an app installed on a smart phone. During the I-NCUBATE program, they had some insightful learnings about who would be their customers.

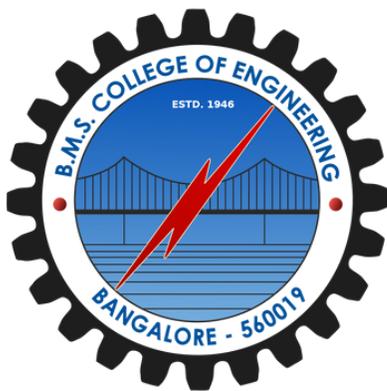


IIT PALAKKAD

Team Gravity from Shankaracharya Technical Campus is building an AI-powered microscope. They are hoping that their new technology will replace expensive high-end microscopes which cause neck pain, fatigue, and, thereby, result in low productivity. Through the I-NCUBATE program, the team validated some of their critical assumptions and are moving forward in their startup journey.



SHRI SHANKARACHARYA TECHNICAL CAMPUS



Team PhotoniPhy from BMS College of Engineering aspires to wirelessly power the world by eliminating batteries. They came up with their concept of wireless power transmission after understanding the environmental costs of batteries. At the I-NCUBATE program, the team spoke with several stakeholders to discover their early adopters. Enthused by the learnings, the team has set out to speak to more customers.

Team IntELCoM from NIT, Andhra Pradesh is building a technology to monitor and control the consumption of electricity by appliances using existing power lines. Before joining the I-NCUBATE program, the team assumed that every power consumer would be their customer. Over the course of the program, they undertook a rigorous Customer Discovery exercise to identify their initial adopters.



Team CapiTech from Ramaiah Institute of Technology is developing a pre-screening tool for diabetic retinopathy. At the initial stages of Customer Discovery in the I-NCUBATE program, the team found that there is such a device already in the market. However, they learned that it indicated a need in the market for such products. After completion of the program, the team is continuing to talk to its potential customers to find its way forward.

Team GlyZy from Indian Institute of Science is developing synthetic microbial technology for production of flavonoids. They are hoping that their technology will replace the current cost-intensive and ecologically degrading method of flavonoid production. While the team assumed that bio-pesticides and nutraceuticals could be their early adopter segments, after undertaking the Customer Discovery exercise, the team found new segments to target.



Team Alvolved from Ramaiah Institute of Technology is developing an AI-based motion analyser assistant for doctors and physiotherapists. The gait analyser can monitor and measure the walk of an individual, providing medical insights. The team was inspired to work on the idea as there are very few gait labs in tier 1 cities of India. Through the I-NCUBATE program the team started discovering who had a problem, who needed their solution, and who would ultimately benefit from the innovation.

GDC conducts I-NSPIRE program for IIT Madras pre-incubator, NIRMAAN

GDC's I-NSPIRE program is targeted at Science and Technology-Based Incubators (TBIs) and Accelerators across India. The principal objective of I-NSPIRE is to help the founders to evolve an optimal path to a sustainable revenue generation status for their startup. Founders of a typical startup that gets admitted into the I-NSPIRE program are already committed to their ventures and have a strong belief that their idea is worth commercializing based on an available prototype or working model.



Cohort 8 of I-NSPIRE program was conducted for NIRMAAN, the pre-incubation centre of IIT Madras. Three startups from NIRMAAN successfully completed Cohort 8, which concluded on 28th August 2021.

Team DigiEnergy is attempting electricity distribution management through digitization. Their concept is a real-time power quality monitoring sensor system that can give detailed data to power distribution companies. During the program, they realized that cash-strapped power distribution companies are focused on revenue realization. They were in no position to invest in such monitoring systems. The team then, through the Customer Discovery exercise, identified a segment that could be their potential customers.

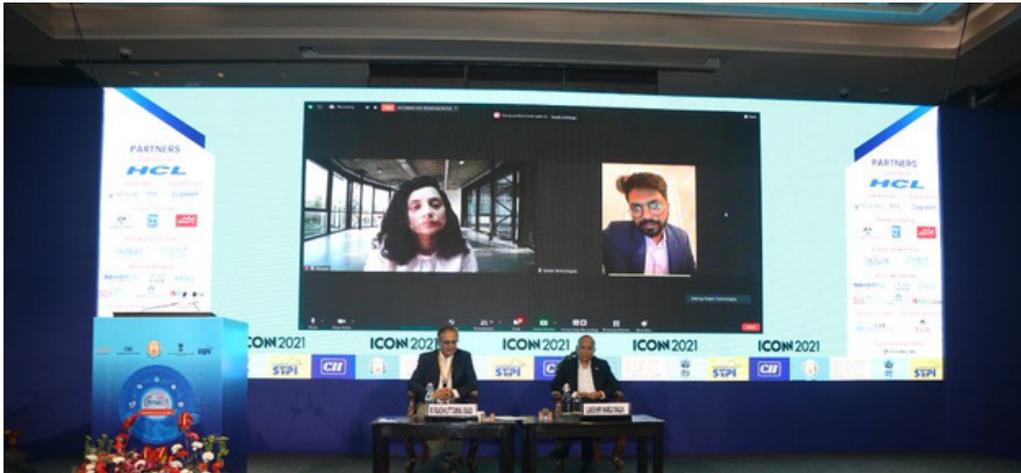
Team Eigen Dynamix was building a “drive from anywhere” concept that they aimed to use in creating an automotive freelancing platform. They assumed that there was a lack of trained drivers in the commercial vehicle segment, and were focusing on solving that problem. During Customer Discovery, they realized the market had bigger problems. The team then decided to pivot and use their technology in a different sub-segment in the logistics sector.

Team Kitab's members were tired of the limitations in current PDF document readers. Hence, they aspired to develop a “feature-rich document reader” that would be beneficial for academics and researchers. Their solution aimed to provide a single, cohesive work environment for users. After conducting the Customer Discovery exercise, the team realized that academics and researchers had no problems with the current methods. However, a new customer segment was within sight – industrial research. They are now continuing their Customer Discovery in this segment.

OUR IMPACT



'India needs a deep tech startup revolution' **CEO of GDC chairs panel discussion at CII Connect Conference**



Panel discussion at CII Connect conference

GDC's Chief Executive Officer, Mr. Raghuttama Rao, chaired a panel discussion on "Fostering an enabling environment for deep tech startups," organized by the Confederation of Indian Industry under the banner, CII CONNECT 2021, on 26 November 2021.

The panel comprised Mr. N Lakshmi Narayanan, Founder Member of Cognizant, India; Mr Daniel Raj David, CEO and Co-founder of Detect Technologies; and Ms. Roopan Aulakh, Managing Director of Pi Ventures.

Highlights of the discussion:

- Deep tech startups differ from other startups by their outsized impact on society, by providing breakthrough solutions to substantial scientific challenges. Since the inputs required – from technical know-how to availability of talent pool and extended gestation periods – are much higher, nuanced, and orchestrated participation is needed from academia, industry, investors, and government to support the deep tech startup ecosystem.
- Over 1 billion Indians today are denied the fruits of modern technology. Deep tech startups emanating from Indian labs have the potential to bridge the access gap for this large section of population. Hence, it's imperative for policymakers to take necessary steps to kickstart a deep tech startup revolution in India.
- Panelists representing the viewpoints of industry, academia, and investors came up with several insights, anecdotes, and suggestions for catalyzing the Indian startup ecosystem.

You can listen to the full panel discussion here: <https://vimeo.com/652096282>

ABOUT US

The **Gopalakrishnan-Deshpande Centre for Innovation and Entrepreneurship (GDC)** was launched in 2017 at IIT Madras. GDC was established to provide thought leadership and networking impetus to help build entrepreneurial systems and processes in STEM universities across India. GDC is funded by grants from three illustrious alumni of IIT Madras: Dr. Gururaj Deshpande, Mrs. Jaishree Deshpande, and Mr. 'Kris' Gopalakrishnan.

GDC works with STEM universities to implement an innovative 'Lab to Market' mission, by helping faculty, researchers, students, and entrepreneurs to commercialize research ideas, and develop robust startups that positively create impact at scale. We work with stakeholders from academia, industry, finance, and government to help build sustainable business ventures.

GDC currently offers two programs for startups emanating from STEM colleges:

I-NCUBATE : Based on Lean Startup Methodology, I-NCUBATE is an 8-week-long intensive boot camp for early-stage, science-based startups. About 10 teams come together in every Cohort of I-NCUBATE to undertake a Customer Discovery exercise for their respective innovations. Each participating team must comprise at least 3 Entrepreneur Leads and 1 Faculty Lead.

I-NSPIRE : I-NSPIRE is a 4-week long program targeting founders of early-stage startups working on science-based innovations. The program drives the founders to clearly define the core problem that they are trying to solve, and to understand what finding a problem-solution fit entails. I-NSPIRE is designed to enable participants to improve their Entrepreneurial Quotient.

Upcoming Programs

Program	Batch Details	Stage	Date & Time
I-NCUBATE	Cohort 18	FINALE	12th January 2022, 9am – 12.10pm
I-NCUBATE	Cohort 19	FINALE	9th March 2022, 9am – 12.10pm
I-NSPIRE	Cohort 9	Application Deadline	23rd December 2021



Attention Business Incubators & Early-stage Startups

Applications are now open for **Cohort 9** of

I-NSPIRE



I-NSPIRE is a 4-week-long bootcamp for science-based, early-stage startups. The principal objective of I-NSPIRE is to help founders evolve an optimal path to market.

A typical I-NSPIRE team would have:

- Founders committed to the startup, with strong intent to commercialize their idea
- Prototype or working model ready (some proof of technology in place)
- Pre-revenue stage (seeking clarity on their target customers)
- Registered as business entity
- Some capital raised (bootstrapping, grants & seed funding)



Learn more about I-NSPIRE at our

OPEN HOUSE

13 December 2021 | 6pm - 7pm

To register, visit: www.gdciitm.org

Contact Us

*If you have any queries, reach out to us at equiries@gdciitm.org
To stay updated about GDC's programs and events, visit: www.gdciitm.org
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