Annual Report 2020-21
Institution's Innovation Council (IIC)
Mar Baselios College of Engineering and Technology (Autonomous)
Mar Ivanios Vidyanagar, Trivandrum, Kerala

A. About IIC MBCET

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). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes.

Major focus

- To create a vibrant local innovation ecosystem.
- Start-up supporting Mechanism in HEIs.
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework.
- Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
- Develop better Cognitive Ability for Technology Students

Vision

To become a Centre of Excellence in Innovation and Entrepreneurship.

Mission

1. To develop and encourage the spirit of innovation among students for handling socially relevant projects.
2. To spearhead the Institutional Innovation Rankings.
3. To kindle a Learner centered approach that focuses on entrepreneurial skill upgradation.
4. To enable an ecosystem that promote start-ups and entrepreneurial ventures of students, faculty and staff

IIC MBCET is actively involving in spreading the spirit of innovation and entrepreneurship in and out the campus by conducting various activities in domains like Innovation, Entrepreneurship and IPR, strictly adhering to the guidelines of MIC from the year 2018 and awarded with 4.5 star rating for the excellent performance in the previous academic year.

In addition to all the activities, faculty members from MBCET have attended the Innovation Ambassador training (Foundation Level and Advanced Level), the students have participated in the National Innovation Contest 2020 and Smart India Hackathon 2020.

The summary of activities conducted by the IIC MBCET during the academic year 2020-21 are listed below.

- IIC calendar Activities – 17
- MIC driven Activities – 6
- Self-Driven Activities – 14

B. **Brief mention of key functionaries at the IIC Institute**

Sl. No.	Name of the Member	Member Type (Teaching/ Non-teaching /External Expert)	Key Role/ Position assigned in IIC
1.	Dr. M. J. Jayashree	Teaching	President
2.	Mr. Arun J.S	Teaching	Vice President, Innovation Ambassador (Advanced Level)
3.	Mr. Jijo Jose	Teaching	Convener, Innovation Ambassador (Advanced Level)
4.	Ms. Lakshmy S.	Teaching	ARIIA and NIRF coordinator
5.	Mr. Sherry Varghese George	Teaching	Social Media coordinator, Innovation Ambassador
6.	Ms. Manju Ann Mathews	Teaching	IPR coordinator
7.	Ms. P.P.Hema	Teaching	Innovations coordinator
8.	Ms. Kiran Baby	Teaching	Internship coordinator
9.	Mr. Bobin Saji George	Teaching	Startup coordinator
10	Ms. Sherin Mathew	Teaching	Member, Innovation Ambassador
11	Mr. Shiras S N	Teaching	Member, Innovation Ambassador
12	Ms. Lani Rachel Mathew	Teaching	NISP Coordinator

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

Total No. of IIC Members	12
Total No. of IAs	Foundation Level – 4 Advanced Level – 2
Total No. of faculty Mentors	6
Pre-Incubation Units	
• Name of the Incubation centre • Thrust Area • No of Start-up Incubated • Faculty In charge	Dr. APJ Abdul Kalam Centre for Innovation, Incubation and Entrepreneurship (ACIIE) Electronics & IT 7 Mr. Arun J S, Assistant Professor

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

- **Name of the pre- incubation centre** - Dr. APJ Abdul Kalam Centre for Innovation, Incubation and Entrepreneurship (ACIIE)
- **Types of Services offered** –
  - Mentoring support
  - Seed grant assistance
  - Incubation facility

- **Facilities** –

  - IEDC Maker Space
  - Access to software and hardware Lab
  - High Speed Internet Connectivity
  - Access to Experts/Mentors/Advisory support
  - Access to Library and e Library of the institution
  - Access to Venture capital fund support
  - Co working space at Incubation Unit
  - Grand and Mini Challenges, Competitions etc
  - Idea/innovation validation consultation and expert service
  - PoC validation
  - Provide access to avail seed/grant support/ access to Govt. schemes available

- **Student Bodies/ Club – Innovation and Entrepreneurship Development Centre(IEDC) –** Established under Kerala Start-up Mission (KSUM)

E. Highlight Achievements (Narrative/Graphical/tabular representation)
  - Number and Different types of I&E and IPR activities Conducted

SL No	Activity Type	Title
1	IIC Calendar Activity	IIC 3.0 Council Formation
2	IIC Calendar Activity	My Story - Motivational Session by Successful Innovators Speaker- Mr. Andrine Mendez, Founder of Zimbly Eat, Entrepreneur, Digital consultant, Marketer
3	IIC Calendar Activity	My Story - Motivational Session by Successful Entrepreneur/Start-up founder Speaker-Mr. Kochouseph Chittilappilly, Founder, Director of V Guard Industries
4	Self Driven Activity	Catalyst Chat by Dr. Arun surendran
5	Self Driven Activity	Catalyst chat by Ashwin Panicker
6	Self Driven Activity	Catalyst chat by Mathew Joseph
7	Self Driven Activity	Fuelling Innovation for the future – conducted by Mr. Arun J.S
8	IIC Calendar Activity	Session on Problem Solving and Ideation Workshop – Kickstarter by Mr. Sanju Mathew
9	IIC Calendar Activity	Orientation Session on National Education Policy (with a focus on Innovation and entrepreneurship) Speaker- Dr. Nidhi M.B. Session was coordinated by Ms. Sherin Mathew
10	IIC Calendar Activity	Orientation session for all students & faculties of Institute by Innovation Ambassador Speaker – Mr. Sherry Varghese George

11	IIC Calendar Activity	Workshop on Entrepreneurship Development Phases Start o Vember- 6-day Startup workshop for aspiring entrepreneurs coordinated by Arun J.S.
12	MIC Driven Activity	KAPILA: Kalam Program for IP Literacy and Awareness
13	MIC Driven Activity	IKS orientation session
14	IIC Calendar Activity	Workshop on Design Thinking, Critical thinking and Innovation Design was conducted by Jijo Jose
15	Self Driven Activity	Sochh – a thought to share a motivational talk conducted by Mr. William George
16	IIC Calendar Activity	Orientation Session on National Innovation and Start-up Policy (NISP) by Mr. Bobin Saji George
17	Self Driven Activity	Talk on Smart Cities by Dr. Ajith Chandran M C, Director-Technical, TNC
18	IIC Calendar Activity	IIC Council Meeting- Review of Q1 progress and Planning for Q2
19	Self Driven Activity	How to get your Idea funded? – Design thinking inspiration Speaker- Mr. Arun J.S.
20	Self Driven Activity	Inspire '20 – IEDC Zonal Meetup and IEDC Summit Precusor
21	IIC Calendar Activity	IIC Council Meeting- Review of Q2 progress and Planning of Q3.
22	MIC Driven Activity	Toycathon 2021
23	Self Driven Activity	Identifying Intellectual Property at early stages of innovation a talk was conducted by Mr. Shafikh S Technical Officer, KSCSTE coordinated by Ms. Manju Ann Mathews.
24	Self Driven Activity	My Entrepreneurial Journey (Motivational Talk) was conducted by Ms. Joshila Ramesh
25	Self Driven Activity	Sochh A thought to share- Topic of the session was "How to be comfortable with change. " by Mr. Rakesh Venugopal, Associate Director, Unacademy
26	Self Driven Activity	Sochh A thought to share- Topic of the session was 'Luring benefits of NEVER GIVING UP! Session was handled by Gouri.A.V -Associate Software Engineer at EY
27	Self Driven Activity	Talk on Developing Professional Competencies using Discord Platform was conducted

		Session was handled by **Rejah Rahim**, Director and Founder, Beagle Security and Appfabs Peer Learning Enabler at ATFG; **Deepu S Nath**, Managing Director, FAYA, Convenor @ ATFG.
28	IIC Calendar Activity	IIC Council Meeting- Review of Q3 progress and Planning of Q4
29	IIC Calendar Activity	Orientation session for all students and Faculties of Institute by Innovation Ambassador - Mr. Sherry Varghese George
30	MIC Driven Activity	Talk on "From your Ph.D. / Masters Thesis to a start-up": Dr. Anand Deshpande, Founder and CMD, Persistent Systems
31	MIC Driven Activity	Session on "Why IP is important in academia?" speakers Dr. Abhay Jere, Chief Innovation Officer MoE Innovation Cell and Dr. Mohit Gambhir , Innovation Director, MoE Innovation Cell
32	IIC Calendar Activity	Talk session on " How to plan for Start-up and Legal & Ethical steps" by Adv.Bindu Sankarapillai
33	IIC Calendar Activity	Talk session on 'Business Model Canvas' by Mr. Arun J.S.
34	IIC Calendar Activity	Interactive Session/Mentoring Session with "Successful Start-up founders" (Entrepreneurs in Campus) by Mr. Bibin B I, Founder and CEO of English Wizards, Cofounder of TATOS technologies Pvt LTD. And Mr. Nived Priyadarshan, Founder and CEO at Vittore Corsetti Global Pvt Limited.
35	IIC Calendar Activity	Session on Accelerators/Incubation - Opportunities for Students & Faculties - Early Stage Entrepreneurs by Mr. Vishal B Technical Officer Incubation-Early Stage Start-ups Kerala Start-up Mission
36	MIC Driven Activity	National Webinar on Research, Innovation, and Ranking as part of the one-year celebration of National Education Policy 2020 (NEP 2020).
37	Self Driven Activity	Inceptra 2021 - Interact, Imagine & Innovate

- No. of student's & faculty ideas generated – 70
- No. of student's & faculty Innovation/prototypes developed - 7
- No. of IPs generated, published and granted - 0
- No. of Student & Faculty Start-ups/Ventures established.- 1
- Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus – 16,000
- Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR - 0
- No. of Technology Transfer and Commercialisation happened - 1

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

1. **Mr. Arun J S** – Innovation Ambassador(Advanced Level), Mentor Oxyfine – Mentor - Toycathon
2. **Mr. Jijo Jose** – Innovation ambassador (Advanced Level), Mentor – National Innovation Contest (NIC)2020
3. **Mr. Sherry Varghese George** – Innovation Ambassador
4. **Mr. Pradeep M** – Innovation Ambassador

5. **Mr. Shiras S N** – Innovation Ambassador
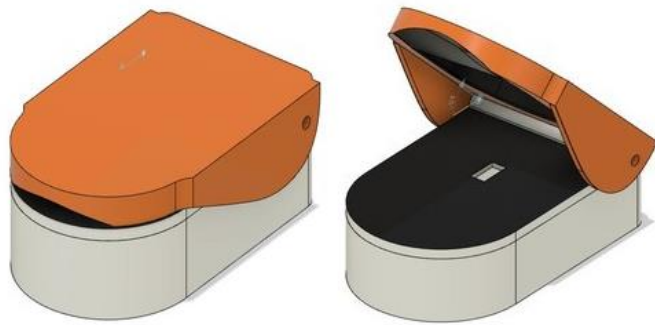6. **Ms. Sherin Mathew** - Innovation Ambassador

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

OxiFine

OxiFine is an open-source Pulse Oximeter device made using minimal components and simplest design aspects. It is a modular device which is different from the conventional pulse oximeters. The makers can build the device and can monitor the pulse rate in bpm and SpO_2 level in % using the companion mobile application. This will take away the display unit from the device and we can power it using a normal micro-b usb power adapter so that batteries can also be avoided. This will ultimately reduce the size and cost of the product.

Mr. Vishnu P Kumar   *3D CAD Model of OxiFine*

The product was initially evaluated by Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Trivandrum and considered for technology transfer at Dr. APJ Abdul Kalam Technological University(APJKTU).

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

   - Name of the start-up :EcoRich Technologies
   - Sector or domain of operation : Health Care, Agritech
   - Products   : Grow Mira, Ckit, Napkin Incinerator
   - Names of founders : Vishnu P Kumar (CEO), Milad Muhammed (CTO)

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

   1. **OxiFine** - Proposed by Vishnu P Kumar, S6EC Student. OxiFine is an open-source Pulse Oximeter device made using minimal components and simplest design aspects. It is a modular device which is different from the conventional pulse oximeters.
   2. **Catalyzer** - Proposed by Vishnu P Kumar, S6 EC Student, Catalyzer is an automatic sanitizer dispenser. Product developed with the help of IEDC and installed at college campus.

   3. **Digital Voting Machine** - Proposed by Hentry Christudas, S6ME Student. Submitted the idea in NIC 2020 and reached up to stage 2.

J. Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting specially for the schemes or programs
- ARIIA – participation and Rank
  - o Institute have participated in ARIIA 2021 ranking
  - o Faculty Coordinator **: Ms. Lakshmy S,** Assistant Professor, Dept. of Electronics & Communication Engineering

- **NISP Adoption status** - Trained Faculty, Policy Formulation, Policy Implementation
  - o Faculty Coordinator: **Ms. Lani Rachel Mathew,** Assistant Professor, Dept. of Electronics & Communication Engineering
  - o Policy formation/Implementation Status : In Progress

- Smart India Hackathon etc.
  - o IIC in association with IEDC and Dept. of computer Science and Engineering organised Smart India Hackathon

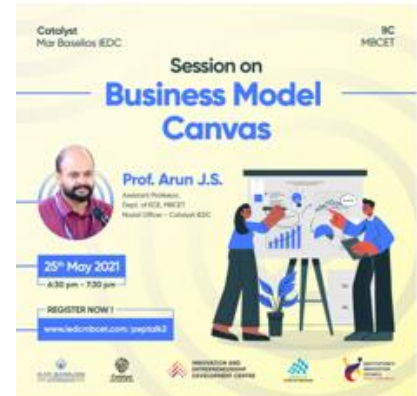K. Detail of Social Media & Connections of IIC institute
- Facebook : officialmbcet
- Instagram : officialmbcet
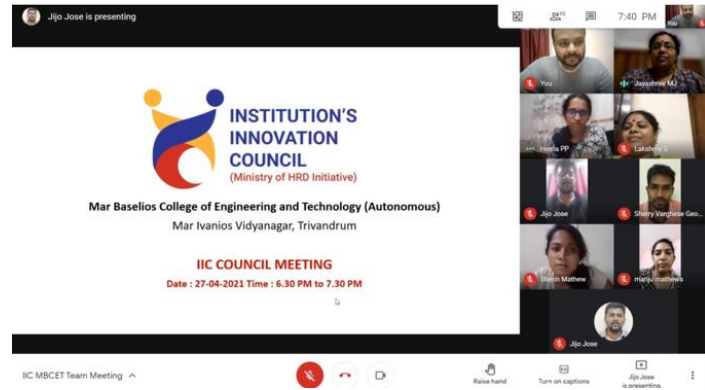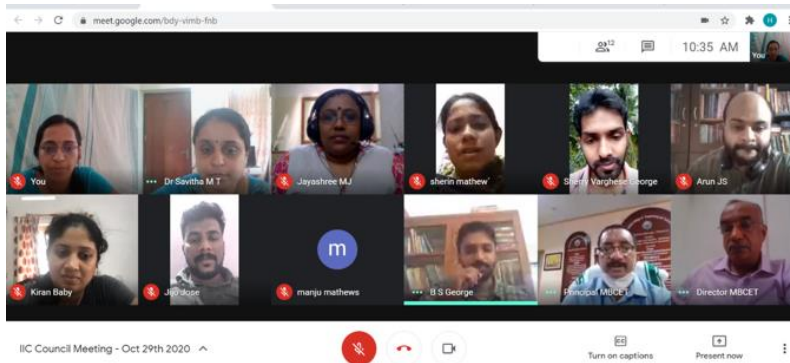- Twitter : officialmbcet

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

M. Images

N.

O. **Contact**

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