

# USTM



Unveiling Excellence

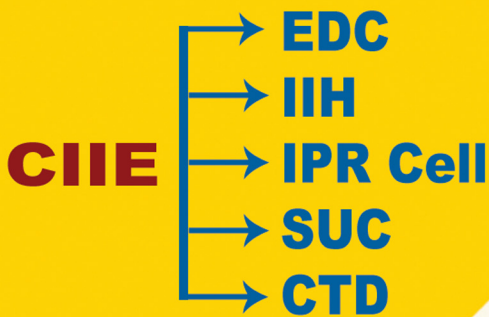
## Activity Report

### Center for Innovation Incubation & Entrepreneurship



# UNIVERSITY OF SCIENCE & TECHNOLOGY MEGHALAYA

Accredited 'A' Grade by NAAC



# CIIE



## **About Center for Innovation, Incubation and Entrepreneurship**

Innovation today is the key to achieve sustainable development goals and entrepreneurship drives the economy. In today's context at the Institutions of Higher Learning and more so in a University ecosystem, utmost emphasis should be given on both innovation and entrepreneurship alongside academic research. The research outcomes must serve the society in addressing problems and thus expedite development.

The Center for Innovation, Incubation and Entrepreneurship (CIIE) at USTM envisages creating an entrepreneurial ecosystem within the university and enable the students to pursue their dream of becoming a successful entrepreneur. The academic environment at USTM promotes research initiatives that lead to innovative problem-solving. Such innovative efforts of students are promoted at the CIIE to help the student innovators to come up with prototypes, proof of concepts and appropriate business plans. Within the CIIE the following cells are present:

1. Entrepreneurship Development Cell (EDC)
2. Innovation and Incubation Hub (IIH)
3. Intellectual Property Right Cell (IPR Cell)
4. Start-Up Consortium
5. Consultancy & Training Division

The Entrepreneurship Development Cell (EDC) at University of Science & Technology was formed in 1st August 2015 with the following strategic intent:

### **Vision**

Inculcating entrepreneurial mindset among students and leading holistic entrepreneurship through innovative and ethical business practices.

### **Mission**

- o Instill the passion and spirit among students to pursue entrepreneurship
- o Promote entrepreneurial activities
- o Mentor and handhold entrepreneurial ventures by students
- o Facilitate effective linkages with stakeholders

### **Long Term Goals (5 Years)**

- o Sensitize and motivate students towards Entrepreneurship
- o Promote Business Ideation
- o Help develop prototypes
- o Create business incubation and acceleration facilities
- o Create corpus fund to seed ventures

### **Short Term Goals (2 Years)**

- o To provide a meaningful platform to students for effective interaction with entrepreneurs
- o Conduct Entrepreneurship Awareness and Sensitization Programs – Interactive Sessions/ Workshops
- o Organize events/ exhibitions to promote student entrepreneurs creativity and
- o Facilitate exchange of ideas among students both in-house and from other institutions
- o Establish linkages with stakeholders and seek assistance towards promotion of Entrepreneurship

### **Entrepreneurship Development Cell:**

Any business idea to become sustainable and commercially feasible has to identify a key

problem, address that problem with viable solution and serve the specific needs of a particular segment of customers. The Entrepreneurship Development Cell (EDC) will identify and recognize those students who have a knack of doing things differently with problem-solving acumen. EDC will build the capacity of such youths and prepare the ground for them to come up with excellent business plans by facilitating research and academic support.

### **Organization Structure of EDC:**

Chairman:

Shri Mahbubul Hoque (Chancellor, USTM and Chairman ERD Foundation)

Faculty Secretary:

Prof. Amit Choudhury (Dean – School of Business Sciences)

Treasurer:

Dr. Nurjjaman Laskar (Dy. Controller, Examination)

Advisors:

1. Prof. G. D. Sharma (Vice Chancellor, USTM)
2. Dr. B.K. Das (Pro Vice Chancellor, USTM)
3. Dr. R K Sharma (Advisor, USTM)
- 4.. Prof. Enamul Karim (Dean – School of Applied Sciences)

### **Students Core Committee:**

A List of 11 students

The Core Committee is supported by the following Working Committees:

- Multimedia and Aesthetics
- Public, Corporate Relations and Startup Connect
- Accounts & Documentation

## **Center for Innovation Incubation Entrepreneurship**

### **Annexure - IV**

### **NewGen IEDC**

**Under the Aegis of NSTEDB, DST, Govt. of India, New Delhi**

### **SUBMISSION OF PROGRESS REPORT 2021-2022**

Name of the College/Institution hosting NewGen IEDC	University Science & Technology, Meghalaya	
Year of starting NewGen IEDC	2017	
Name of the Head/Principal of the Institution/College	Prof G. D. Sharma, Vice Chancellor +91 7987333308/ 9406218401 vcustm@gmail.com	
Name of NewGen IEDC Coordinator	Dr. Amit Choudhury	
Contact Details of NewGen IEDC Coordinator	8761007133, 09854453170 sbusdean@gmail.com	
Financial Details	<b>Sanction Order No./ Date</b>	<b>Amount Sanctioned</b>

Previous Sanction Order Details	1	EDII/DST-NEWGEN IEDC/17-18/07 Dated: 20/06/2017	Rs. 60,00,000
	2		Rs. 47,50,000
	3		Rs. 60,00,000
	4		Rs. 60,00,000

**Details of Activities Undertaken during the year (also provide two/three photograph on each activity):**

**[A] To inculcate the spirit of innovation and entrepreneurship amongst S&T students**

1. Entrepreneurship Awareness Camp
2. Brainstorming Among Faculty of USTM and other members of the E-Club
3. Industry Visit
4. Motivational Talk by Successful Entrepreneurs/ Speakers

**[B] To identify, develop & commercialize students' innovative ideas**

1. Sensitization on Entrepreneurship among newly enrolled students of USTM
  - Entrepreneurial discussion led to promote projects directed towards prototype development
2. Brainstorming of Project development
  - Project Idea generated
3. Initializing of projects
  - 22 project groups shortlisted and Prototype development initiated.

**1. Other important highlights (new initiatives), if any:**

- Awareness on IPR
- 38 IPR Applications made till date, and Novelty report had for 22 applications which are undergoing further modification as suggested in Novelty Report.
- Participation in
  - NEATEHUB's Hackathon,
  - NECTAR's Exhibition,
  - MSETC Science Awareness Camp cum Business Exhibition
  - One Student Group Secured special mention among top 10 Business Idea at North East Research Conclave organized by IIT Guwahati.
  - ABI Sprout organised by Agri Business Incubation Center, ICAR where **one student group bagged the Runners up Prize.**

## Details of Student Projects

**Project-01:** Development and standardization of “kulfi” blended with locally available variety of Banana & Pineapple in NER

**Project-02:** Supplement having Anti Diabetic & Immunity Boosting Food Supplement

**Project-03:** Fertilia Mirror – Reproductive Health Meter

**Project-04:** Nutritional Feed from Hostel Waste

**Project-05:** Smart Urban Tree – Road-side Air Pollution Control

**Project-06:** Low-Cost Vertical Self-Irrigating Gardening System

**PROJECT 07:** Herbal Antimicrobial Diffuser

**PROJECT 08:** Herbal Tooth Gel for Management of Gingival Bleeding & Toothache

**PROJECT 09:** Development of a Dryer Based on Refractive Window Technology for Small Tea Growers

**PROJECT 10:** IoT based Agriculture Environment Monitoring System

**PROJECT 11:** Preparation and Standardization of Hair Serum from Medicinal Plants of NE India

**PROJECT 12:** Utilization of Bio-resource & Bio Processing of Cow Dung

**PROJECT 13:** Vehicle Classification and Speed Estimation System

**PROJECT 14:** *CIEnv* –Portable Plastic Recycler

**PROJECT 15:** Development of Cosmetic & Nutraceutical Formulation from Selected Fruits of NE

**PROJECT 16:** Solar powered river water purifier

**PROJECT 17:** Advanced Agriculture Drone for Pest Control in Tea Garden

**PROJECT 18:** Development of Low GI Bread

**PROJECT 19:** Isolation of PGPR and Production of Multi-functional Bio-Fertiliser

**PROJECT 20:** Innovative Solar Lighting System for Sunlight Deprived Buildings

**PROJECT 21:** Medicinal Herb Based Immunity Booster – Documentation & Standardization of Traditional Practices

**PROJECT 22:** MalDet –Malaria Dectector

## Entrepreneurship Awareness Camp



## Brainstorming Among Faculty of USTM and other members of the E-Club



## Industry Visit



## Motivational Talk by Successful Entrepreneurs/ Speakers



- Awareness on IPR
- NEATEHUB's Hackathon,
- NECTAR's Exhibition,
- MSETC Science Awareness Camp cum Business Exhibition



**ABI Sprout organised by Agri Business Incubation Center, ICAR where one student group bagged the Runners up Prize.**

**Prototype/product development Student groups.**

**Project 01. Development and standardization of “kulfi” blended with Locally available variety of Banana & Pineapple in NER**



**Project-02: Supplement having Anti Diabetic & Immunity Boosting Food Supplement**



**Project-03: Fertilia Mirror – Reproductive Health Meter**



#### **Project-04: Nutritional Feed from Hostel Waste**



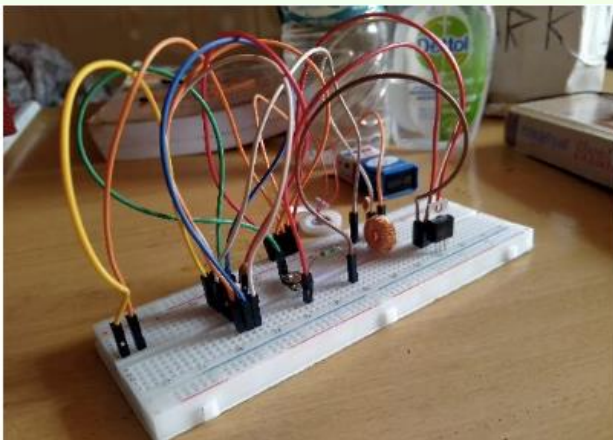
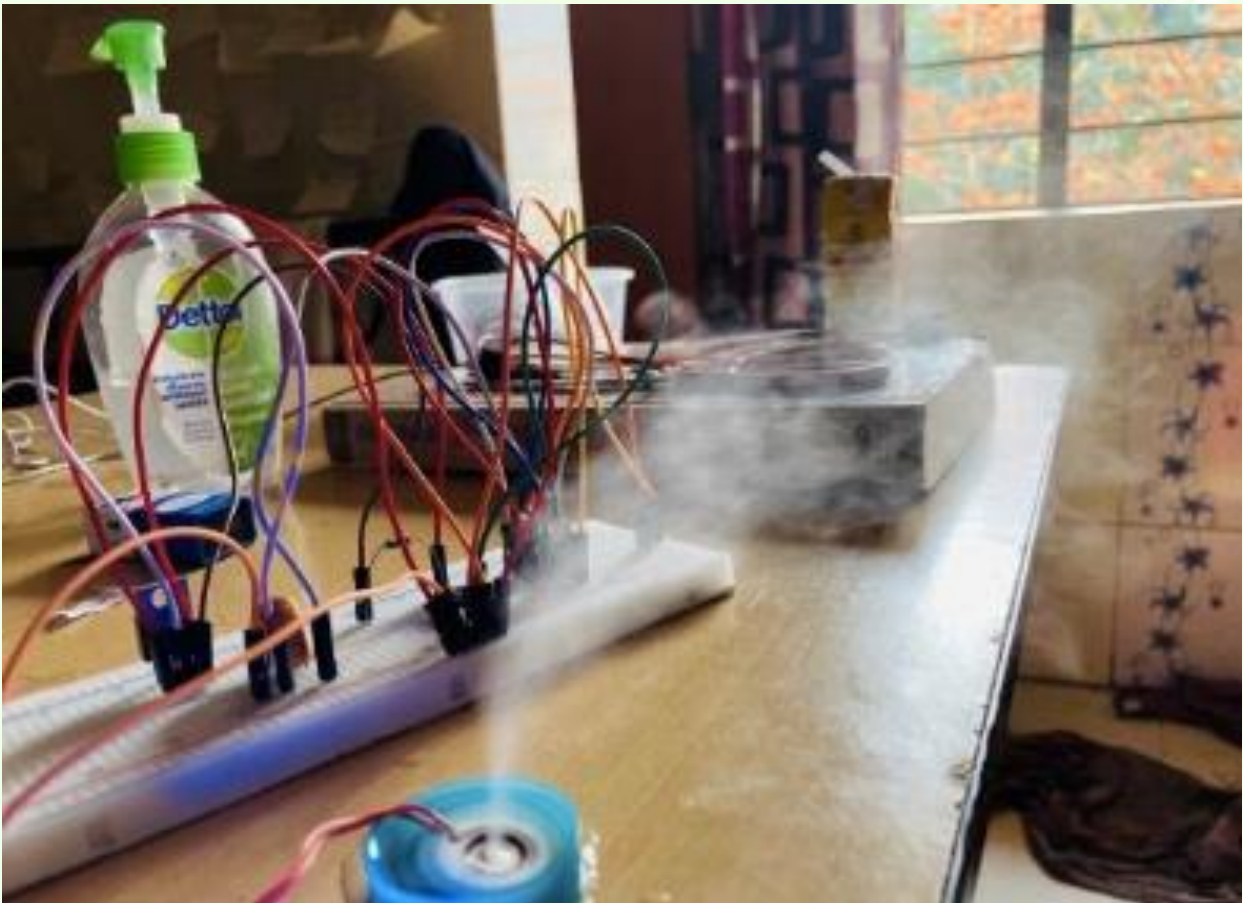
### Project-05: Smart Urban Tree – Road-side Air Pollution Control



### Project-06: Low-Cost Vertical Self-Irrigating Gardening System



## PROJECT 07: Herbal Antimicrobial Diffuser



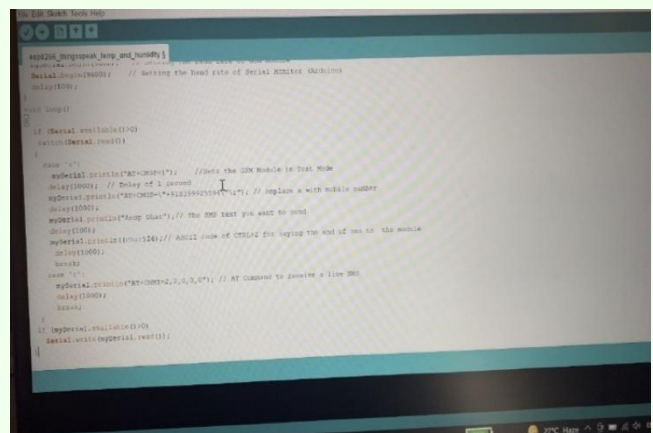
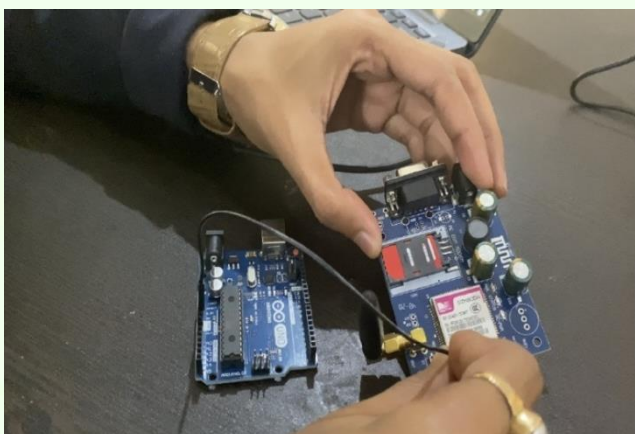
## PROJECT 08: Herbal Tooth Gel for Management of Gingival Bleeding & Toothache

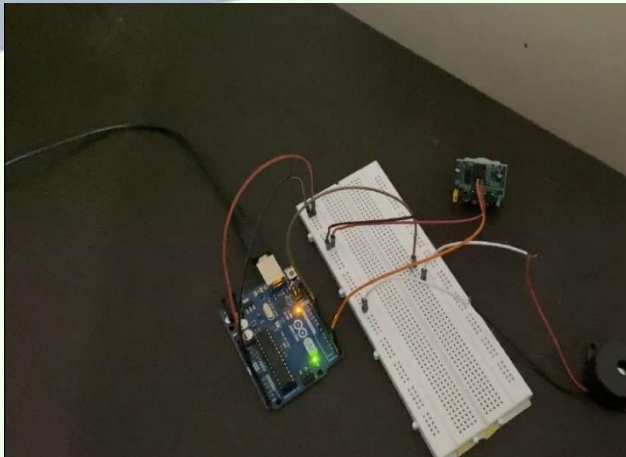


## PROJECT 09: Development of a Dryer Based on Refractive Window Technology for Small Tea Growers



## PROJECT 10: IoT based Agriculture Environment Monitoring System





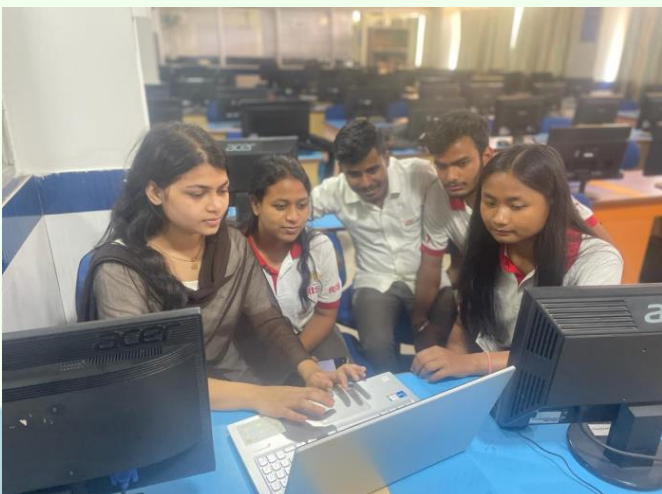
## PROJECT 11: Preparation and Standardization of Hair Serum from Medicinal Plants of NE India



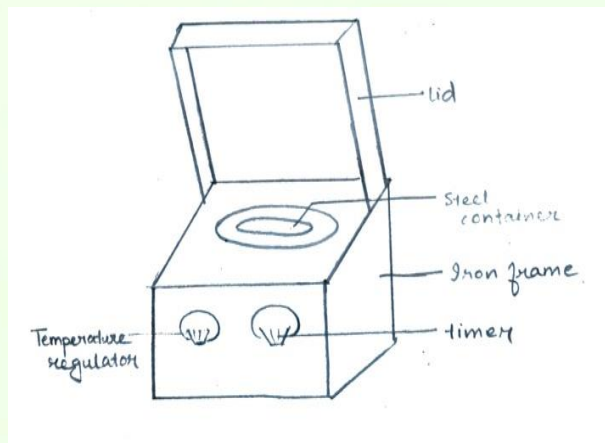
## PROJECT 12: Utilization of Bio-resource & Bio Processing of Cow Dung



## PROJECT 13: Vehicle Classification and Speed Estimation System



## PROJECT 14: CIEEnv –Portable Plastic Recycler



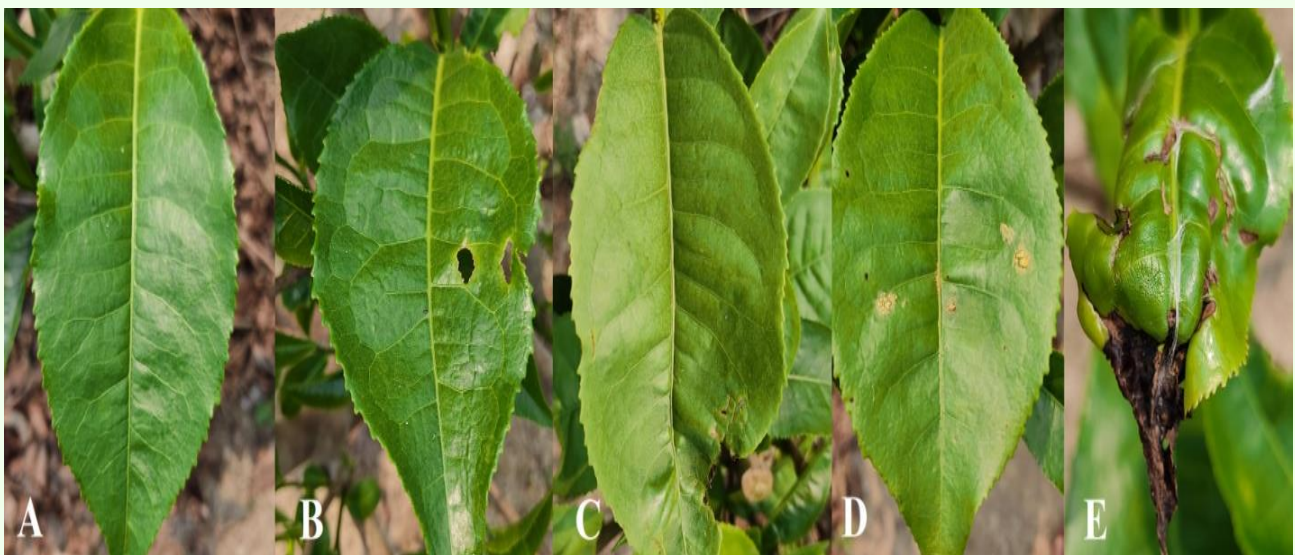
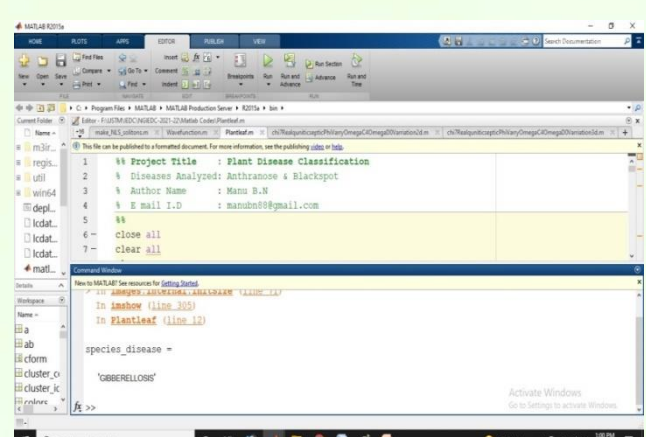
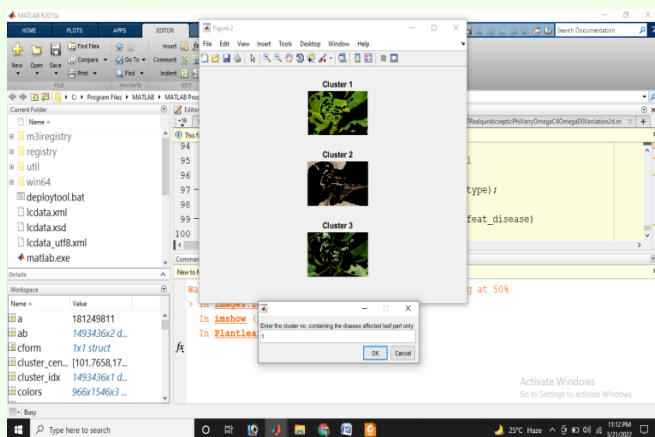
## PROJECT 15: Development of Cosmetic & Nutraceutical Formulation from Selected Fruits of NE



## PROJECT 16: Solar powered river water purifier



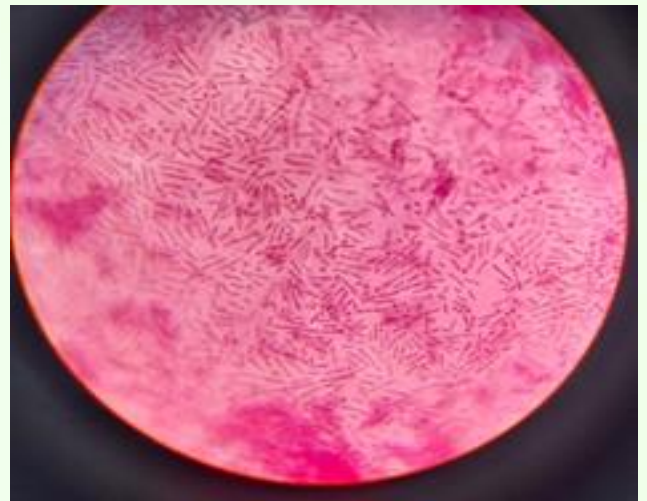
## PROJECT 17: Advanced Agriculture Drone for Pest Control in Tea Garden

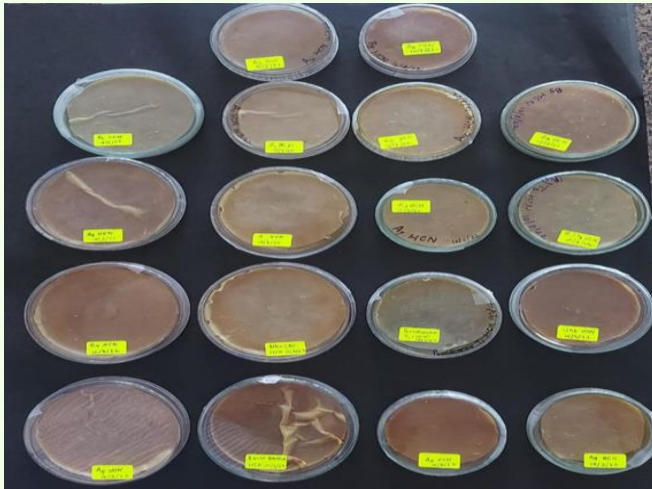


## PROJECT 18: Development of Low GI Bread



## PROJECT 19: Isolation of PGPR and Production of Multi-functional Bio-Fertiliser





## PROJECT 20: Innovative Solar Lighting System for Sunlight Deprived Buildings



**PROJECT 21: Medicinal Herb Based Immunity Booster – Documentation & Standardization of Traditional Practices**



**PROJECT 22: MalDet –Malaria Dectector**



### **Start-Up Consortium:**

In order to commercialize the innovations, a Start-Up Consortium is started under the aegis of Center for Innovation, Incubation and Entrepreneurship. The Start-Up Consortium will groom the budding entrepreneurs through intensive mentoring sessions and need-based boot camps. There will be a pool of in-house mentors from every domain of business, right from health, education, tourism, fashion, livelihood, finance to science & technology who will spend time with the entrepreneurs and understand their business ideas, identify their knowledge-gaps and support them with requisite skill-set to become successful entrepreneurs. The Consortium will facilitate learning opportunities by leveraging best resources in the country. The Consortium will also create and manage a robust database of all entrepreneurial resources and will set-up a Startup Data and Information Repository to buildup best practices and create success stories from the NE region.

### **Vision:**

To be an effective catalyst in the journey of an innovator to a successful entrepreneur.

### **Mission:**

To bring together all innovative minds in a platform with flux of creative energy and create the right environment for launch of successful Start-Up projects.

The Consortium will look into business incubation and acceleration very seriously and conduct valuable Startup exchange programs with other thriving incubators in the country. In view of the above, the Consortium is looking at creating a local Angel Investment Network to fund the Startups and therefore, plans to rope in Angel investors, Venture Capitalists, Impact Investors and other financial agencies into its scheme of things from all over the country. To begin with, the Consortium will create a corpus fund along with seed fund ventures for making the Startups commercially viable, scalable and sustainable.

### **Consultancy & Training Division:**

Having a varied spectrum of subjects in the university, we realized that we were sitting with a pool of knowledge which can be of immense help for the society. Research based Consultancy as well as non-research based consultancy were prospect areas for the University in which our faculty could contribute through knowledge sharing for the interested agencies. We were approached by CASFOS for the training of their staff members in varied areas like Management and ICT Skills and we had conducted a number of such trainings with that organization. That set the ball rolling and thoughts of formalizing the Consultancy & Training services were initiated.

### **Vision:**

To be a key facilitator and impact the budding businesses and institutions through knowledge transfer to enable them to reach their success better and faster.

### **Mission:**

To engage the faculties in knowledge sharing and exchanging to become relevant for the society and industry and create a dedicated beneficial pipeline for knowledge exchange.

The Consultancy & Training Division has also been created to formally offer training and consultancy services to the various agencies in need and thus create a platform for knowledge sharing. During the evolution stage, we came across with many business houses which were not very professional in their management style. In the course of their growth, they approached us for giving them the adequate knowledge which can help them to grow their business further and manage them more professionally.

We have done a number of consultancy and training in areas of Business Management, Accounting, etc. and we shall keep widening the spectrum of our Consultancy and Training services for the mutual benefit of the University, Faculty and the Agencies.

## Campus

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