



## INSTITUTION INNOVATION COUNCIL

HOLY CROSS COLLEGE, NAGERCOIL



### Members of the Council

<b>President</b>	:	Dr. A. Shyla Suganthi
<b>Convener</b>	:	Dr. S. Sujitha
<b>Faculty-in-charge</b>	:	Dr. Sheeba Daniel
<b>Student Coordinator:</b>		Ms. Ancilin Briji

## Activities (2018 – 2019)

**09.01.2019**

Three Faculty members and 10 student members of IIC council participated in the one day “Dissemination workshop on ARIIA, Smart India Hackathon 2019 & Institution Innovation Council” organized by MIC (MHRD Innovation Council), MHRDC and AICTE held at KRM TRP Engineering College, Trichy



**Date: 12.01.2019**

## **Workshop on IPR**

### **Session – 1: Inauguration of IIC**

The Institution Innovation Council of Holy Cross College was inaugurated on 12.01.2019. The event commenced with a prayer song followed by the welcome speech by Ms. Monica Rachael. Er. Retnam inaugurated the council and stressed the importance of entrepreneurship and innovation. Dr. Sr. Jhonsy felicitated the gathering.

### **Session – 2: Entrepreneurship & Innovation**

**Resource Person:** Er. Retnam, Rtd. Director of Entrepreneurship Development Centre, Nagercoil.

The workshop on IPR was diligently organized by the Institution Innovation Council (IIC) of Holy Cross College. The purpose of the workshop was to make aware of Intellectual Property Rights (IPR) that safeguards the creators and other producers of intellectual goods and services. Er. Retnam, the former Director of Entrepreneurship Development Centre, Nagercoil was the expert, who spoke on Entrepreneurship, Innovation and IPR. Er. Retnam motivated the students and provoked a thought within them to come up with innovative ideas. He shared his life experiences and encouraged to expand their entrepreneurship skills.

### **Session – 3: Intellectual Property Rights (IPRs)**

**Resource Person:** Dr. Josephine Priyatharshini, Assistant Professor in Zoology

Dr. Josephine Priyatharshini, enlightened the students through PowerPoint presentation on Intellectual Property Rights (IPRs) to take measure for the protecting the ideas and business strategies. The students interacted and discussed on the topic and clarified their doubts related to patents and copyrights. The session was then followed by Vote of thanks by Ms. Gabrilla and finally the workshop was concluded with National Anthem.

### Session – 1: Inauguration of IIC



### Session – 2: Entrepreneurship & Innovation Resource Person: Er. Retnam, Rtd.



### Session – 3: Intellectual Property Rights (IPRs) Resource Person: Dr. Josephine Priyatharshini





**Date: 19.01.2019**

6 Student team was nominated by Holy Cross College to participate in Smart India Hackathon, 2019.



Phone : 04652 - 261473  
Fax : 04652 - 260704

## **HOLY CROSS COLLEGE**

(AUTONOMOUS)

(Re-Accredited with 'A' Grade (CGPA3.34) by NAAC)

Nagercoil - 629 004.

Kanyakumari Dt., Tamilnadu

E.mail : [holycrossngc@yahoo.com](mailto:holycrossngc@yahoo.com)  
website:[www.holycrossngl.edu.in](http://www.holycrossngl.edu.in)

Date: 19/January/2019

### **Sub: Smart India Hackathon 2019 - Nomination**

I am pleased to nominate the below team from our college to participate in Smart India Hackathon 2019. AISHE Code is C-41177.

#### **Team : Brachio Brains**

	Name	Gender (M/F)	Email id	Mobile no.
Team Leader	S. Sabadini	Female	sabadini2000@gmail.com	9489219724
Team Member	N. Rubika	Female	rubi2691999@gmail.com	7358838746
Team Member	S. Preethi	Female	preethisutha29@gmail.com	9940791716
Team Member	Vijayakumari	Female	vijayavinita@gmail.com	9629376001
Team Member	M. Merisha	Female	mmerisha02@gmail.com	9486343697
Team Member	Serine Michael	Female	serinemichael2000@gmail.com	8903256545

Sincerely,

*Dr Basil*

(Dr. Sr. M.R. Basil Rose)

**PRINCIPAL**  
**Holy Cross College**  
**(AUTONOMOUS)**  
**Nagercoil - 629 004.**



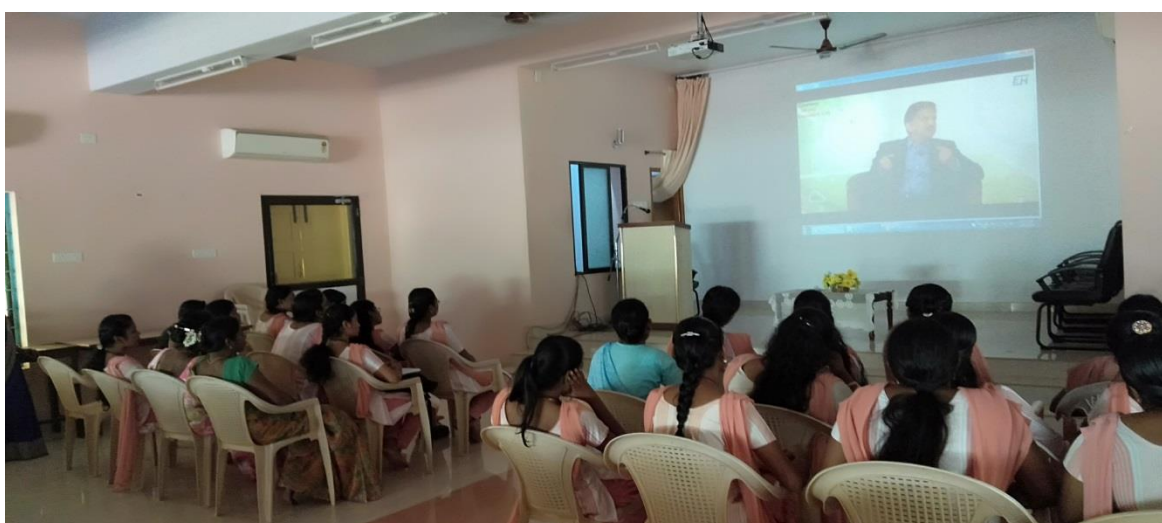
**Date: 09.03.2019**

**Webinar: Episode 03 : “India First Leadership Talk Series”**

**Shri Ajit Doval Ji, National Security Advisor.**

**Theme- Art of Decision Making**

The webinar session related to **the art of design making**, delivered by Shri Ajit Doval, was watched by the faculty (5) members and the students (32) from various disciplines.



**Date: 05.04.2019**

**Name of the activity:** Innovation Creativity and Idea Competition

1. **Session I:** Dr. A. Shyla Suganthi delivered a talk on Innovation and creativity.
2. **Session II:** Introduction on idea competition.
3. **Session III:** Presentation of ideas through PowerPoint



**Session**



**Session II**



**Session III**

## Activities (2019 – 2020)

### Proof of Concepts (PoC)

The IICs have conducted Idea competition and Design Competition for PoC development during May 2019, and three PoC (three teams) have been nominated and submitted at portal under PoC submission report upload module on 23.06.2019.

#### 23. 06. 2019:

Following are the PoCs registered and acknowledged successfully by MIC:

#### 1. Team Name: Aquaria

Name of Leader : Gabrilla Sabadini, H  
Names of Co-Leaders : Apila, A., Ieswerya, J.  
Idea/PoC Title : Water quality detection through filters

#### 2. Team Name: Biotica

Name of Leader : Serine Michael  
Names of Co-Leaders : Tony Leslin, Karthika, M., Vijayakumari  
Idea/PoC Title : Bacterial consortia to degrade Xenobiotics

#### 3. Team Name: Bananica

Name of Leader : Vijayakumari  
Names of Co-Leaders : Tony Leslin, Karthika, M., Vijayakumari  
Idea/PoC Title : Wealth from Banana fibre





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## Application Format for Submission of Idea/PoC

**Team Name:** Biotica

**Name of Leader:** Serine Michael

**Cell No & Email of Leader:** 8903256545, serinemichael2000@gmail.com

**Names of Co-Leaders:** Tony Leslin, Karthika, M., Vijayakumari

**IIC/Institution ID:** IC201810157

**Institution Name and Address:** Holy Cross College, Rochnagar, Kurusady, Nagercoil 629004, Kanyakumari, Tamil Nadu

**Idea/PoC Title:** Bacterial consortia to degrade xenobiotics

### Abstract of Idea/PoC: (Maximum in 100 words)

Pesticide causes acute, chronic or delayed syndromes in humans. One promising treatment method is to exploit the ability of microorganisms to remove xenobiotics from the environment. The microbes, especially the bacteria, which could degrade the xenobiotics may be isolated and cultured in large amount through fermenters. Microbial consortia specific to each pesticide compound can be supplied as microbial tonic along with the pesticide to farmers. Isolated bacterial strains from different habitat would be identified through morphology and 16SrRNA analysis.

### Sector of Focus (Theme):

Clean tec and environment

### Detail about Idea/PoC:

#### 1. Define Problem Statements (or) Pain Points: (Specify with in 100 Words)

Pesticides played a pivotal role in reducing crop loss and in increasing farmer's revenue thus benefiting economy by reducing price of raw materials. Despite their importance in the increase of food production, extensive use of pesticides can lead to environmental contamination, pollution and residues in food. These contaminants affects at ecological level, leading to imbalance in the ecosystem. A number of health hazards related to this have been continuously reported. Hence

an effective method would help the society and the environment from the hazards of these toxic pollutants.

2. Prescribe solution to the defined problem: (Specify with in 100 words)

Though two or three methodologies are available, bioremediation found to be very appropriate to clean up these pesticides. So it is inevitable to identify the microbes that would degrade the pesticides. Though a number of bacteria reported to degrade these pollutants, the scenario still remains incomplete. The bacterial consortia would help to clean the contaminated field thereby reduce the risk of health hazards.

3. What is the technological innovation associate with the solution: (Specify with in 50 words)?

The bacteria from different habitat and from the soils of the contaminated site will be isolated, identified and cultured in large scale. Microbial consortia, specific to each type of pesticide, will be formed. Large scale culture of these microbes using fermenters made as microbial tonic and recommends the farmers to apply in their filed.

4. Define if any Intellectual property (IP) component associate with the solution prescribed (Specify with in 50 words)

The microbial product, if identified will be patented.

5. How the prescribed solution is more relevant and suitable for adoption to current market requirement (Specify with in 100 words)

Pesticide contamination and related health and environmental hazards invite solution from the farmers. So while the farmers purchase the pesticide/or related compounds, the microbial tonic, if supplied along with it, would greatly reduce the contamination of the pesticide.

**Is Prototype Ready?: YES**

**Submit a 1 Min Video of Team introduction and Idea/PoC (on portal)**



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## Standard Application Format for Submission of Idea/PoC

**Team Name** : Aquaria  
**Name of Leader** : Gabrilla Sabadini, H  
**Cell No & Email of Leader** : 7871122033, gabrillasabidini@gmail.com  
**Names of Co-Leaders** : Apila, A., Ieswerya, J.  
**IIC/Institution ID** : IC201810157  
**Institution Name and Address** : Holy Cross College, Rochnagar, Kurusady,  
Nagercoil 629004, Kanniyakumar, Tamil Nadu  
**Idea/PoC Title** : Water quality detection through filters

### Abstract of Idea/PoC: (Maximum in 100 words)

Usually, to check the water quality in RO filters, the concerned person uses ph detector which is **manual**, but here is the idea that some machine which detects the quality (ph) of the water. These are named as filters, can be fixed near the input and output valves. The test water could be passed through the input valves, and the detector/filter detects the PH or the quality of the water. The digital screen attached displays the details **automatically**. This would help to test the quality of the drinking water.

### Sector of Focus (Theme): Water Conservation

#### Detail about Idea/PoC:

#### 1. Define Problem Statements (or) Pain Points: (Specify with in 100 Words)

The drinking water and the water we use for domestic needs are polluted and contaminated with organic and inorganic nutrient/toxic loads. Even the water from the well and aquifers are not potable at times eventually leading into a number of health problems.

#### 2. Prescribe solution to the defined problem: (Specify with in 100 words)

If we have a portable instrument to detect the water quality, this would help the society to detect the water at home instantly.

**3. What is the technological innovation associate with the solution: (Specify with in 50 words)?**

The instrument are of filters/detector types, can be fixed near the input and output valves.

The test water could be passed through the input valves, and the detector/filter detects the PH or the quality of the water. The digital screen attached displays the details automatically. This would help to test the quality of the drinking water.

**4. Define if any Intellectual property (IP) component associate with the solution prescribed (Specify with in 50 words)**

**5. How the prescribed solution is more relevant and suitable for adoption to current market requirement (Specify with in 100 words)**

The detectors/filters would be simple and portable so that each and every family can have it.

**Is Prototype Ready?: YES/NO**

**Submit a 1 Min Video of Team introduction and Idea/PoC (*on portal*)**





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## Standard Application Format for Submission of Idea/PoC

**Team Name** : Bananica  
**Name of Leader** : Vijayakumari  
**Cell No & Email of Leader** : 7838001287, vijayavinita@gmail.com  
**Names of Co-Leaders** : Tony Leslin, Karthika, M., Vijayakumari  
**IIC/Institution ID** : IC201810157  
**Institution Name and Address** : Holy Cross College, Rochnagar, Kurusady,  
Nagercoil 629004, Kanyakumari, Tamil Nadu  
**Idea/PoC Title** : Wealth from Banana fibre

### Abstract of Idea/PoC: (Maximum in 100 words)

Kanyakumari is one of the largest banana producer districts in Tamil Nadu. After harvest, the banana cultivation wastes are disposed in the nearby area. The stem and banana bunch stalks are rich in fibre and other biochemical constituents. Sometimes, during unfavourable environmental conditions such as cyclone, storm, these plantains are either uprooted or damaged. The farmers of the different taluk feel difficult to dispose these valuable wastes. So the cultivars feel if they get appropriate support they would convert these wastes into valuable products; baskets, containers, vase, etc. The baskets and the bags could replace the usage of plastic bags.

**Sector of Focus (Theme):** Sanitation and waste management

### Detail about Idea/PoC:

#### 1. Define Problem Statements (or) Pain Points: (Specify with in 100 Words)

The banana wastes especially the stem is rich in fibre. . The cultivars face difficulty in disposing or transporting these wastes. They are dumped in the field as well as in the market that create a unfavourable odour and undesirable conditions Prescribe solution to the

**2. Defined problem: (Specify with in 100 words)**

These wastes can be purchased from the cultivars after cultivation and cane used to extract the fibres either manually or using machines. The fibre thus obtained could be used to make valuable products. Apart from that the cultivars could also be assisted to draw the fibre and make use for their income.

**3. What is the technological innovation associate with the solution: (Specify with in 50 words)?**

Valuable products such as bags, mats, wastes, etc. are either hand-made or by using machines.

**4. Define if any Intellectual property (IP) component associate with the solution prescribed (Specify with in 50 words)**

**5. How the prescribed solution is more relevant and suitable for adoption to current market requirement (Specify with in 100 words)**

Tamil Nadu Government banned the usage of plastics. The public used plastic bags and containers to purchase items. It is at this juncture, the sale of banana fibre bags which can be used for a long time.

**Is Prototype Ready?: YES**

**Submit a 1 Min Video of Team introduction and Idea/PoC (on portal)**