

# Criterion III Research, Innovation and Extension



# 3.3.1 Innovation @ Vimala

# **Innovation @ Vimala**

- **►** Institution's Innovation Cell
- ➤ Seminars /Workshops /Competitions /Exhibitions on

  Innovation, Entrepreneurship, Intellectual Property rights
- **Student Innovative Programmes**
- **▶** Vimala Centre for Innovation
- **Collaborations with MoU**

#### 1. Institution's Innovation Cell

The institution established Institution Innovation cell (IIC ID: IC202115789)in July 2021 under the Ministry of Education (MoE), Govt. of India, to systematically foster the culture of Innovation among students in our college. The activities of IIC was co-ordinated by the convenor Dr. Sr. Silvy Mathew, Asst. prof., Dept. of Botany, Vimala College, Thrissur. Nine teachers were given responsibility as Innovation Ambassadors and were given training in a number of courses. These Innovation Ambassadors are now providing training to our students and students from other colleges and schools.



MoE's Objectives

#### **Functions of IICs**

- To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.
- Identify and reward innovations and share success stories.
- Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors,
   professionals and create a mentor pool for student innovators.
- Network with peers and national entrepreneurship development organizations.
- Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students.
- Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries.



In the year 2018, the ministryof education (MoE) through MoE's Innovation Cell (MIC) launched the Institution innovation Council (IIC) program in collaboration with AICTE for Higher Education Institutions (HEIs) to systematically foster the culture of innovation and start up ecosystem in education institutions. IIC's role is to engage large number of faculty, students and staff in various innovation and entrepreneurship related activities such as ideation, problem solving, proof of concept development, design thinking IPR, project handling and management at pre-icubation /incubation stage.



Vimala College (Autonomous), Thrissur convened the first Board Meeting of its Institution's Innovation Council on 21 July 2021. All members of the Institution's Innovation Council external experts, teaching and non-teaching faculty representatives and student representatives of our institution participated in this meeting.



Assessment Períod (2016 - 2021)



#### **IIC Activities**

25 Activities were conducted by our IIC During the period July 2021 to December 2021.

#### **IIC Awards/Recognitions**

The college was awarded with three star status for its contribution towards Innovative programmes.



Three Star Status of Vimala College



**Certificate of Solar Ambassador** 

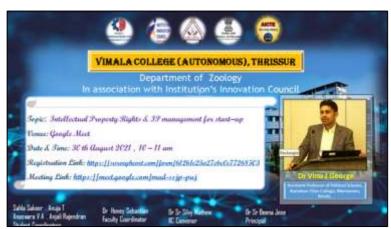


2. Seminars /Workshops /Competitions /Exhibitions on Innovation, Entrepreneurship, Intellectual Property rights

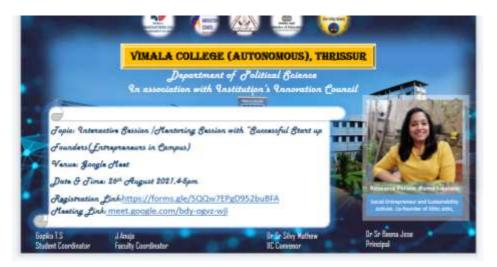


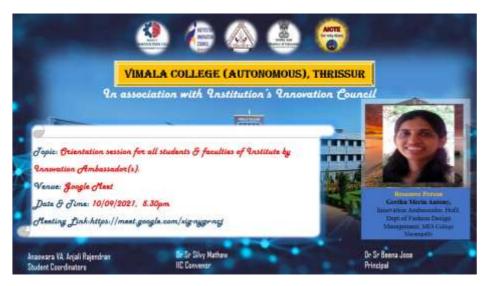






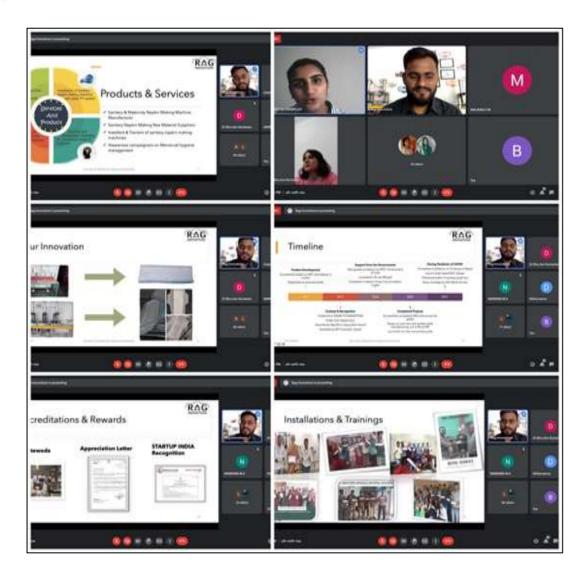












**Entrepreneurship Development Club Activities** 

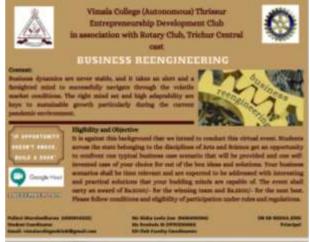
Entrepreneurship Development Club paves the way for a sustainable business career of personal choice to the students. Our ED club is registered under the District Industries Centre, Thrissur

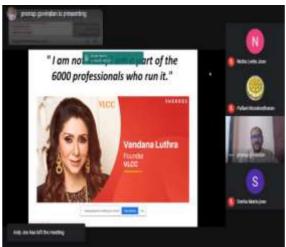




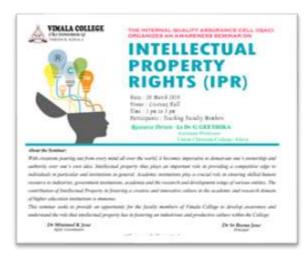


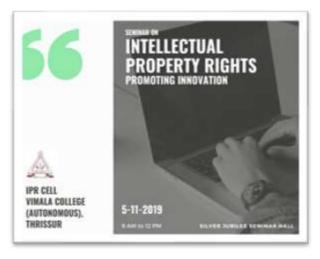






#### **ED Club Seminars**





#### **IPR Cell Seminars**



### 3. Student Innovative Programmes

Students are encouraged to take part in Innovative programs like Young Innovators Programme (YIP) and Yuva Mastermind Competition where they were given opportunity to come up with innovative ideas and compete with other young minds.

**Young Innovators Programme (YIP):** Vimala has been an active participant in this initiative of the Government of Kerala YIP







**YIP Certificates of Students** 



#### **Yuva Master Mind**

#### Thrissur Vimala College students win Yuva Mastermind season 9 | Complete winners list

Our Correspondent



The prizes were amounced at a ceremony here on Sunday in which ISBC chief K Stran was the chief guest,

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Kochi: An innovative method for cancer drug delivery and treatment developed by Vimala College, Thrissur, won the first prize in college category at the Malayala Manorama-IBS Yuva Mastermind season 9, the grand finale of which was held here on Saturday.

The winners – a team comprising Rakhi Shanker, Anjana C, Aloysia Francis, Anupama Xavier and Adithya A – would take home a cash prize of Rs 2 lakh. Universal Engineering College, Thrissur, won the second prize for their invention of cloud-based visual pattern recognition for security alert. Mohammed Zakeer, Pavin Krishna, Manu Krishna and Mohamed Fayaz won Rs 1 lakh. Muthoot Institute of Technology and Science, Ernakulam, won the third prize (Rs 75,000). The team comprising Albin Kuiriakose, Joseph Kalapurackal, Valshnavi G Rao and Anjana P, won the prize for an early warning system for hypoglycemia.

The prizes were announced at a ceremony here on Sunday in which ISRO chief K Sivan was the chief guest.

Yuva Mastermind Season -9 College Level Winner -Vimala College Team



#### 3. Vimala Centre for Innovation

Vimala Centre for Innovation promotes start ups at the departmental level. Departments of Botany, Home science, Chemistry, Zoology, Economics and Physics had initiated start ups with expertise in the discipline. Students actively involve in the startup programmes inculcating the ideas of innovation, entrepreneurship and marketing.

#### [1]. Department of Botany

- Vermicomposting Technology -V -fert
- Mushroom Cultivation

#### **Vermicomposting Technology -V -fert**

Department of Botany, Vimala College has set up a new platform of start-up of vermicomposting manufacturing unit named V-fert. It has started operating on 14<sup>th</sup> October 2018. This attempt aims at solving the problems of organic garbage collected from the college campus. Two tanks 4x4 sq.ft are setup in the college premise. Organic waste collected from the college campus are filled in the Tank 1.



Adult earthworms are introduced into it. It is moistened and stirred at regular intervals. The processing takes almost 2-3 months. The processed organic compost is transferred to Tank 2 at appropriate intervals. This vermicompost is marketed under the title 'V-fert' to the organic farmers.



Sale of V-fert



#### **Mushroom Cultivation Unit**

Department of Botany initiated Mushroom Cultivation as an extension activity on 8th November 2019. The first harvest was taken by our respected principal on Dr. Beena Jose on 13th December 2019. Dr.Sheeja T Tharakan (HoD) and Dr.Sr.Silvy Mthew (Coordinator). Basidiocarps were collected and distribute.

The cultivation of paddy straw mushroom can be done in a thatched house and also under the shade of a tree. Fresh, disease free paddy straw is the ideal substrate. Ten –fifteen kg paddy straw is necessary for preparing one bed. The mushrooms start appearing from all sides in 6-10 days as tiny buttons, which can be harvested in another 4-5 days. The harvesting is to be done at the button stage itself, since the opened sporocarp will be more fibrous. Usually, 1-2 kg of mushroom can be harvested from 10 kg substrate.









#### [2]. Department of Economics

An Innovative Sanitary Napkin

Dr.Binu Ann Kuriachan ,Assistant Prof., Dept. of Economics after a research has initiated a start up. The idea is to innovate a sanitary napkin using natural raw material which is locally available and is free of chemicals. Based on the research supported by seed money from the college, sanitary napkins having a high levels of absorbency and biodegradability were successfully vendered in the start up unit. The start up room with necessary machinery is set up in the college which is going to start production of napkins and marketing within a short while. The work is being carried out with MoU in collaboration with Kerala Khadi & Village Industries Association, Avinissery, Thrissur that provides raw material for the fabrication of sanitary Napkins . The work is being considered for patent filing.



Innovative Sanitary Napkin Made at our startup unit



#### [3]. Department of Home Science

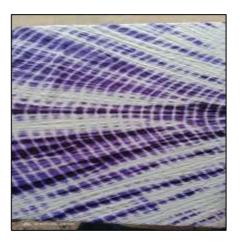
- Rangeela (Dyeing Printing Unit)
- Foodie's Spot

#### Rangeela" (Dyeing Printing Unit)

The Department of Home Science established a dyeing and printing unit "Rangeela" on November 12<sup>th</sup> 2019. As our first project, the table clothes for all the faculty members of Home Science Department were specially dyed using tie and dye technique. We also extended our products to Hand bags, Duppattas, Scarves and Laptop bags. The teacher coordinators are Suparna M G and Vidya K B and the student coordinators are Bhagya Sadanandan and Dhrishya A Sunil.







Sun burst" Tie and Dye technique Table Cloth

#### Foodie's Spot

As a part of processed food entrepreneurial skill development programme, the students of B.Voc



Food processing, Department of Home Science conducted a start up programme "Foodie's Spot" on 13 November 2019 at 10.30 am. The motto of our programme was 'EAT HEALTHY & STAY HEALTHY'. The teacher coordinators were Miss Devyani Haridas Pisharadi, Miss Urmila Vijayan and Miss Rinu Thomas. The student coordinators were Kavya T. S, Asha K. S and Nitha M.A. The products prepared by students were 'Chocolate Brownie' and 'Peanut cookies'. They prepared 42 pieces of brownie and 23 pieces of peanut cookies. The price for one brownie was 20 rupees. They sold one peanut cookie for 8 rupees and 4 peanut cookies for 30 rupees. The programme was concluded at 12.30pm. As a part of processed food entrepreneurial skill development programme, the students of B.Voc Food processing, Department of Home Science conducted a programme Foodie's Spot – "Christmas Hampers" on 19 December 2019 at 10.30 am.

The motto of our programme was 'EAT HEALTHY & STAY HEALTHY'. The teacher coordinators were Miss Devyani Haridas Pisharadi, Miss Urmila Vijayan and Miss Rinu Thomas. The student coordinators were Anjali Sali, Nimisha Manoj and Emilin Thobias and Kayva K.S. The products prepared by students were 'Chocolate Brownie', Swiss roll, cupcake and chocolate truffle. Students sold their products as hamper packs as per the order placed by teaching and non-teaching staffs in the college. Hamper packs rates were 200 and 350 rupees respectively. In, addition to hamper pack sale an open counter was set up for students purchase at Leisure tower. The programme was concluded at 12.30pm









#### [4]. Department of Chemistry

• C-glow (Sanitisers & Cleansing Agents)

Department of Chemistry initiated the start up programme 'Everyday Chemistry; A practical approach' in the year 2019. This includes the production of House hold products like soap, detergent, hand wash, dish wash, toilet bowl cleaner etc.. Products were made by the students and were distributed among the students and staff of college.







Assessment Períod (2016 - 2021)







#### **C-glow Cleansing Agents**

**Hand Sanitizer** (**C glow**) **Preparation**: An initiative against COVID-19 and towards break the chain by the state government. In association with this, hand sanitizers were distributed among staff and students of the college to ensure personal protection against lingering virus on hands. A demonstration on the preparation of hand sanitizers was also conducted for the nearby school officials.



#### [5]. Department of Zoology

• Start-up- 'Aquaphilia'

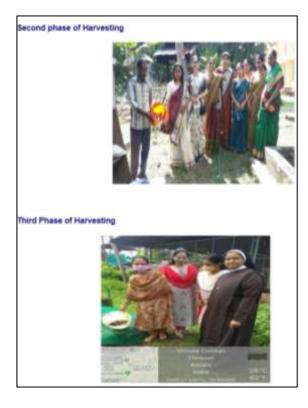
Start-up- 'Aquaphilia' Entrepreneurial skill development programme through fish farming in the campus Department has initiated a startup programme, fish culture in the campus in June 2018. Tank Preparation and budget allocation The very idea of starting fish farming in the campus was initiated by Dr.Sr.Mariaette, Principal and Head, Dept. of Zoology, Dr.Kezia Kuruvilla in 2017-2018. Initial fund for setting up the tank came from the management and department fund. Initial investment includes construction of tank, motor for water pumping and an iron grill to keep the tank closed. The total initial investment is Rs.16, 496/- (Rs.8248/- from department fund and Rs. 8248/- seed money from management).

The faculty, students, non-teaching staff of the department and other non-teaching staff of the college are involved in stocking and feeding procedures. Formulated pelleted fish feed was purchased from the local aquarium. Coconut oil cake and the algae Azolla were also given as feed. Fish stocking –First phase Fish pond was set up and kept ready for stocking in March-April 2018. 175 Fingerlings of Tilapia were collected from fish farm, Rosen Fisheries, at Marathakkara, Thrissur and released in the pond in 20th July 2018. Feeding was done by the staff and students two times a day.





Fish harvesting Fishes attained marketable size in January 2019. Harvesting programme was inaugurated by the Principal, Dr. Sr. Mable on 25.01.2019 and sale of the catch was done on the same day. Faculty members, students and sister staff purchased the catch.





An angling programme was also organized for staff and students of the college in connecting with the harvesting. 15 kg of fish were captured. The fish were sold for Rs.250/- per Kg.



#### [6]. Department of Physics

#### • Astrophile

The department introduced a startup initiative named 'Astrophile' this year. The programme was was arranged to improve creative and technical skill among students and to initiate activities through industry academia interface. Students participated actively in Star making, lambshade making and X-mas tree making.



### 4. Collaborations with MoU

A number of skill enhancement programmes, add on certificate courses are conducted within the college in collaboration with Industry, organisations. The MoU's and the collaborative activities are listed below.

#### List of MoU's

. No	Organisation with which MoU is signed	Year of Signing MoU	Duration	List the actual activities under each MOU year-wise
1.	Kerala Institute of local administration, KILA, MG Kavu, Thrissur	2021	3 Years	Certificate course in Participatory Local Governance, Internships for MA Economics Students
2.	Nyeste Venture Technologies PVT Ltd.	2021	Until Terminated	Internship programme
3.	GLOBALFTI, Strategic Educational Professionals Private Limited	2021	2-3 years	Value Addition Course Chartered Certified Accountant-
4.	Alliance Française De Trivandrum	2021	4 Month	Teaching French to students
5.	Kerala Khadi & Village Industries Association, Aviniserry, Thrissur	2020	Until terminated by either parties	Purchase of Raw Material for Start up Projects
6.	The Tax Study Vocational Training Centre, Ernakulam, a Vocational Training Centre of National Council of Vocational and Research Training (NCVRT), New Delhi	2020	Till the Course is Completed during 2020to 2021	Diploma in Practical Accounting and Tax Practice (DPATP) (100 Hours) & Certificate course in Tally with GST (50 Hours)
7.	Vidyarupa School of Management Studies Private Limited Sunrise Thrikkakara Gardens, Thrikkakara, Changampuzha Nagar (PO), Ernakulam, Kerala	2020	2 Years	Value Addition Course Certified management Accountant
8.	Kahaniya (Rohinin Tech Media Pvt. Ltd), Saroor Nagar, Hyderabad - 500035	2020	1 Years	Conduct of various online/offline literary competitions
9.	Fabstudioz IT Reasearch and Development	2020	1 year	Internship programme for B Voc S4
10.	Atees Industrial Training	2020	1 year	Internship programme for B Voc S2
11.	Grapes Genix Technical Solutions Pvt Ltd, Patturackal P O, Thiruvambadi, Thrissur	2020	1 Year	Skill development Programme- Python for Data Science



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12.	Catalyst, a Centre for Human Excellence, First Floor, Sivashakthi Building, Cochin Devaswom Board, Round North, Thrissur-680001	2020	1 Year	Reinforcement - Placement Training Programme
13.	Amrita School of Ayurveda, Clappana P O, Vallikkavu, Kollam - 690525	2020	Until terminated by either parties	Research and Development , Skill Development programmes and Training and Visits
14.	Zoo & Museum, Thrissur	2019	1 Year	Student internship and zoo related activities.
15.	G-Tec Computer Education, Indus Avenue, Kallai Road, Calicut - 673002	2019	11 Months	Basic computer course for S3 BSc Botany Students
16.	Cloud Craft Studio Pvt Ltd, MG Road, Thrissur - 680004	2019	1 Year	Internship
17.	BestDoc Technology Private Ltd.SBC-1, Second Floor, Thapasya Building Infopark, Kakkanad, Kochi 682402	2019	1 year	Internship for PGDDS
18.	Networkz Systems (V-cube Tech Systems)	2019	1 month	Free Training on Digital Marketing with Internship
19.	Manjilas Food Tech Private Ltd Sasthri Road, Nellikunnu, Thrissur - 680 005 Kerala, India	2018	Until Terminated by either parties	Training, visits, internships, expert lectures (B.Voc Course)
20.	Canning Industries Cochin Ltd., (Caico Industries), Caico Road, Thrissur, 680006	2018	Until Terminated by either parties	Training, visits, internships, expert lectures (B.Voc Course)
21.	Dev Associates, 2nd floor, Grace Building, Shankara Iyer Jn., Thrissur 680004	2018	Until Terminated by either parties	Internships, projects, site visits, expert lectures
22.	Networkz Systems, Thrissur	2018	1 Year	Internships, Enabling students on programming, Handling Add-On courses
23.	CBS Ventures, Angamaly, Ernakulam	2018	Unless revoked by either party	GST practitioner
24.	The Tax Study Vocational Training Centre, Ernakulam, a Vocational Training Centre of National Council of Vocational and Research Training (NCVRT), New Delhi	2018	1 Year	Diploma in Goods and Service tax practice
25.	Industrial Manufacturers Organization and Welfare Society (IMOWS), Viyyr, Thrissur	2018	10 Months	To provide certificate course to 3rd and 4th UG



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26.	Evangelical Social Action Forum (ESAF), Mannuthy, Thrissur	2018	3 years	Add on certificate course on "Sustainable Banking and Financial Inclusion"
27.	Design Campus, Thrissur 04	2018	10 Months	Certificate course in fashion choreography and styling
28.	Star Innovations, Star Chambers, Shornur Road, Thrissur - 680001	2018	1 Year	Python Programming Training
29.	Kerala Institute of local administration, KILA, MG Kavu, Thrissur	2018	Three days	Three Day Workshop To encourage the leadership capacity of women representatives
30.	Legal Service Clinic & Alternate Dispute Resolution Centre, Govt. Law College' Thrissur	2018	1 Month	Certificate Course on Practical Application of Law
31.	Design Campus	2017	10 Months	Certificate course in fashion choreography
32.	Zoo and Museum, Chembukavu, Thrissur, 680020	2017	1 year	Internship Projects
33.	Kerala Institute of local administration, KILA, MG Kavu, Thrissur	2017	3 Month	Certificate Course on Local Governance and Development
34.	Directorate of Higher Education for ASAP Programme	2017	Continued upto 2019	Training Partner Institute for Additional Skill Acquisition Programme
35.	The Tax Study Centre, Judges Avenue Road, Near St.Augustine Road, Kaloor, Ernakulam	2016	1 Year	Diploma in Sale Tax Practice
36.	Goethe-Zentrum Trivandrum (International Institute giving training in German Language)	2015	Continuing	Add on Course in German