

SANATANA DHARMA COLLEGE ALAPPUZHA



AQAR 2021-2022

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge



3.2.1. Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institute has created an ecosystem for innovation and other initiatives like creation and transfer of knowledge by establishing SD College Research, Consultancy and Innovation Cell, Entrepreneurship Development Club, Innovation and Entrepreneurship Development Centres (IEDC), Centre for Research on Aquatic Resources and MoU with external Agencies/institution for creation and transfer of knowledge.

The SD College Research, Consultancy and Innovation Cell motivates the faculty members and provide mechanism for submission of minor and major research proposals to various funding agencies like, DST, DBT, KSCSTE etc. The cell of the college consists of faculty members having research inclination. The Cell takes every initiative to encourage the participation of students in various exhibitions and fairs, to nurture their technical expertise. The cell conducts Technical Workshops, for creation and transfer of knowledge among the students and faculty members.

Entrepreneurship Development Club (ED Club): The Institute has a long tradition of promoting entrepreneurship among students. The ED-Club is established with the aim to identify and nurture the latent entrepreneurial spirit of students and provide them opportunities to become Entrepreneur EDC initiated various activities for the career enhancement of students like self-employment, start-up initiatives, etc. through various training programme.

IEDC: A flagship initiative of Kerala Startup Mission to promote innovation and entrepreneurship among the student and academic fraternity in the educational institutions in the State of Kerala. IEDC was established in the college in 2022 and the SDC IEDC was in 2022 and inaugurated by Sri. Joy Sebastian, Founder of Techgenstia Software Technologies in January 2022.

An amount of two lakhs was received from Kerala Startup Mission for the various activities of SDC IEDC.

Centre for Research on Aquatic Resources (CRAR): This center mainly focusing on the utilization of the aquatic weed, water hyacinth, to value added products through students' involvement.

The dissemination of knowledge to the academic, scientific, and general public is made possible by faculty members and research scientists publishing their findings in scholarly publications and popular articles.

In addition, the activities of TBI - Eichho Tech, motivating students to participate in YIP to present their ideas create an ecosystem for innovation and knowledge transfer.

Formation of Innovation Entrepreneurship Development Committee

Sir,

It is indeed prestigious moment for our college as we get sanctioned as Innovation Entrepreneurship Development Centre (IEDC) under Start up mission. Please refer the print out of email attached. The new role is to create an entrepreneurship eco system in our college with emphasizing innovation and technology. IEDC in college can organize events to impart entrepreneurship skills and desire among students. The functioning of these groups will help us to identify potential startups in our college.

The function of IEDC will be monitored by start up mission and all the events will be awarded with pints which are considered to identify the best campus with best entrepreneurship eco system. The novel ideas bloomed in the institution will be nurtured to productive ones with the assistance of IEDC. Financial assistance (grants) for their expansions which are sanctioned by start up mission will be disbursed through IEDC.

For the effective functioning of IEDC in college we need to identify student leaders; named as leads, in different sections who will be under Nodal officer and assistant nodal officer. An executive committee formed with group of teachers can guide the activities of students. The proposed committee for IEDC can be:

Nodal Officer: Dr Priya R, Assistant Professor in Commerce

Assistant Nodal Officers : Dr Manjunol, Assistant Professor in Chemistry

Innovators Lead

SI	Lead	Faculty leads & Department	Signature
1.	IEDC Lead	Dr Prema K H, Department of Chemistry Lekshmi S, Department of Commerce	
2.	Technology lead	Dr Sreekanth Varma, Department of Physics Dr Rathikala, Department of Chemistry	
3.	Quality lead	Dr Vaisakh SS, Department of Chemistry Dr Roshmi Thomas, Department of Microbiology Dr Priya P S, Department of Commerce	
4.	Finance Lead	Aswathi S, Department of Commerce Gowri Krishna U, Department of Economics	
5.	Creative and	Dr Jose Mathew, Department of Botany	

	Innovative	lead	Dr Vidya V, Department of Zoology Dr Akhil V, Department of Chemistry	
6.	Branding	lead	Damu Chandran, Department of Commerce Dr Chinmay Murali, Department of English	
7.	Community	Lead	Dr Bindhu P K, Department of Botany Neetha Prasad, Department of English	

Advisory Body

Principal - Dr P R Unnikrishna Pillai

Vice Principal – Prof Dr Krishnan Namboothiri

IQAC Coordinator – Dr P S Parameswaran

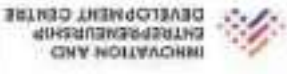
Principal Investigator, Centre for Research on Aquatic Resources -Dr Nagendra Prabu.

YIP Coordinator – Dr Rakesh Chandran S B

Student representatives need to be selected by notification and interview process if required.



SRI. JOY SEBASTIAN
 Founder Techgensta Software
 Technologies
 (Alumnus SDC)



IEDC Nodal Officer
 Dr Priya R
 Assistant Professor in
 Commerce

Guest of honour & keynote address



Sri. P. Krishna Kumar,
 (Manager, SD College)

Inaugural address

Inauguration



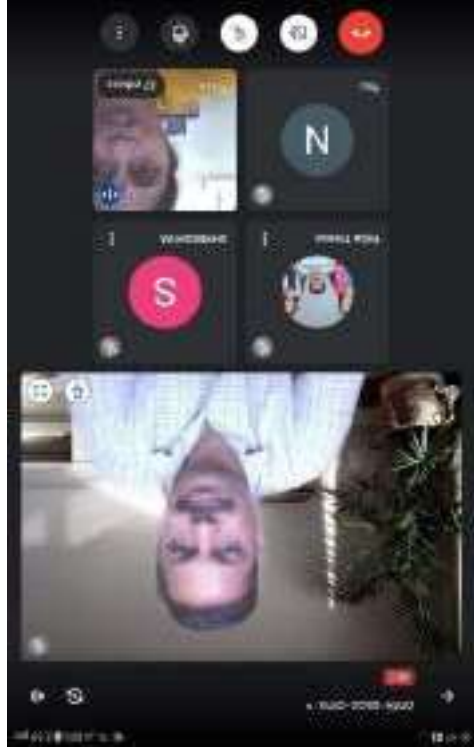
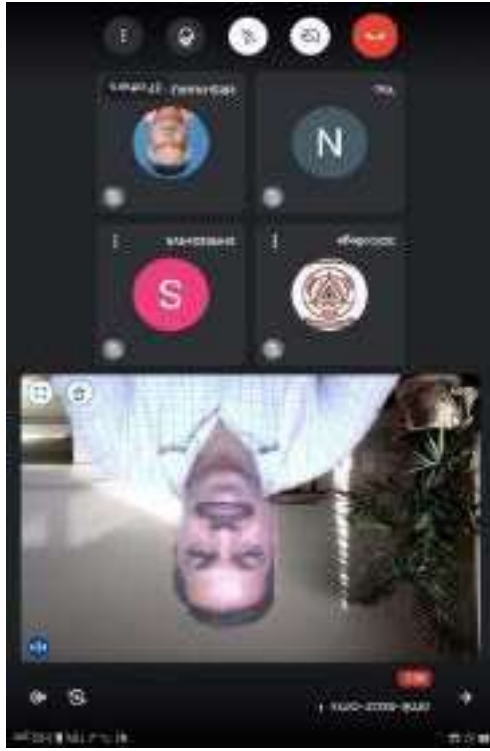
Date : January 28, 2022
 Time : 02:30 pm
 Platform : Google meet



Sanatana Dharma College, Alappuzha
 (RE-ACCREDITED BY NAAC WITH A+ GRADE AND AFFILIATED TO
 UNIVERSITY OF KERALA)
 INNOVATION AND ENTREPRENEURSHIP
 DEVELOPMENT CENTRE (IEDC)



Inaugural session of IEDC. Keynote address by Sri. Joy Sebastian
 Meeting id: <https://meet.google.com/omk-ssoz-omx>
 Google meet link : S D College, IEDC Inauguration
 Friday, 28 January • 2:15 – 4:00pm



IEDC Faculty lead meeting





State Institute for Community Development, Department of Industries & Commerce,
Govt of Kerala

YUVA BOOT CAMP 2021

DISTRICT : ALAPUZHA | VENUE : SAMANTHA DHANNA COLLEGE | DATE : 28 & 29 JAN 2022

Department of
Industries & Commerce
Govt of Kerala



FIND OUT MORE
www.kied.info



HOSTING INSTITUTION
KIED
SDC
PO DEPARTMENT OF COMMERCE
AND RESEARCH CENTER
ED CLUB





➤ യുവ ബുട്ട് ക്യാമ്പ് എഡിഐകു ആലപ്പുഴ ഡയറക്ടർ ഇൻ ചാർജ് എം. ദീപ ഉദ്ഘാടനം ചെയ്യുന്നു

വിദ്യാർത്ഥി സംരംഭകർക്കായി 'യുവബുട്ട് ക്യാമ്പ്'

ആലപ്പുഴ: ഇൻഡസ്ട്രീസ് ആൻഡ് കൊമേഴ്സ് വകുപ്പിന്റെ ആഭിമുഖ്യത്തിൽ കേരള ഇൻസ്റ്റിറ്റ്യൂട്ട് ഫോർ എൻട്രപ്രണർഷിപ്പ് ഡെവലപ്മെന്റ്, ആലപ്പുഴ സനാതന ധർമ്മ കോളേജുമായി സഹകരിച്ച് വിദിന യുവ ബുട്ട് ക്യാമ്പ് സംഘടിപ്പിച്ചു. എസ്ഡി കോളേജിലെ ഇഡി ക്ലബ്ബ് കോഡിനേറ്റർ ഡോ. പ്രിയ ആർ. പ്രോഗ്രാമിന്റെ കോഡിനേറ്ററായി. എഡിഐകു ആലപ്പുഴ ഡയറക്ടർ ഇൻ ചാർജ് എം. ദീപ ഉദ്ഘാടനം ചെയ്തു. കൊമേഴ്സ് വകുപ്പ് മേധാവി ഡോക്ടർ എം. കൃഷ്ണൻ അദ്ധ്യക്ഷനായി. പ്രിൻസിപ്പാൾ ഡോ. പി.ആർ. ഉണ്ണികൃഷ്ണപിള്ള, ഡോ. ഇ. കൃഷ്ണൻ നമ്പൂതിരി, ഡോ. ജി. നാഗേന്ദ്ര പ്രഭു, അദ്ധ്യക്ഷി എസ് എന്നിവർ സംസാരിച്ചു. ജില്ലയിലെ 18 കോളേജുകളിൽ നിന്നായി 136 കുട്ടികൾ പങ്കെടുത്ത പ്രോഗ്രാമിൽ മെന്റിന്റെ സൗജന്യകുടും പ്രവൃത്തി പരിചയ



SANATANA DHARMA COLLEGE

Affiliated to University of Kerala

Re Accredited by NAAC with A+ Grade (3rd Cycle)

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www.sdcollege.in, e-mail : sanatanamaip@gmail.com

Ref :

Date :
20.02.2021

To

Dr.G.Nagendra Prabhu

Coordinator

Research, Consultancy and Innovation Cell

I request the Research, Consultancy and Innovation Cell to look into the following matters and give a report for effective implementation in our college.

1. Formation of Department Level Research Committee
2. Research Policy
3. Encourage teachers to apply for research grant
4. Research methodology seminars in various disciplines

Members in Research, Consultancy and Innovation Cell

1. Dr. G.Nagendra Prabhu (Coordinator)
2. Dr.Bibin K. Jose (Joint Coordinator)
3. Dr.S.R.Rajesh (Joint Coordinator)
4. Dr.Sreerenjini
5. Dr.V.R.Prabhakaran Nair
6. Dr. S.Ajayakumar
7. Dr.M.Krishnan
8. Dr.Bindu Nair
9. Dr.Prema K.H

(Principal, Vice-principal & IQAC coordinator ex-officio members)



[Handwritten Signature]
20/2/2021

Dr. P.R. UNNIKRISHNA PILLAI
PRINCIPAL
S.D. College, Alappuzha

RESEARCH, CONSULTANCY &
INNOVATION CELL
S D College, Alappuzha



IPR

AWARENESS PROGRAMME

About the programme

The IPR Awareness Programme is organized by the Research, Consultancy & Innovation Cell of S D College, Alappuzha with the support of Patents Office, Ministry of Commerce and Industry, Government of India under the National Intellectual Property Awareness Mission (NIPAM). It is a Government initiative as part of the 75th Anniversary of our Nation's Independence under the banner of **Azadi ka Amrit Mahotsav**. This ambitious mission aims to provide awareness on intellectual property and its rights to 1 million students. This programme also aims to inculcate the spirit of creativity and innovation to students and to inspire them to innovate and protect their creations.

Resource Person

**SMT. ANJANA
HARIDAS**



is presently working as the **Examiner of Patents and Designs** in Indian Patent Office, Chennai. She completed her Masters Degree in Integrated Biotechnology from Kerala Agricultural University in 2014 and has a research publication to her credit. She has 6 years of experience in the field of Patents in the capacity of an Examiner.

CERTIFICATES BY GOVERNMENT OF INDIA SHALL BE ISSUED TO ALL PARTICIPANTS

 **07** MARCH
2022

 **2pm**

 **COMMERCE SMART CLASS
S D COLLEGE ALAPPUZHA**



Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
Office of the Controller General of Patents, Designs and Trade Marks

CERTIFICATE OF APPRECIATION

Presented to

**SANATANA DHARMA COLLEGE, ALAPPUZHA,
KERALA**

*In recognition of active participation in the **National Intellectual Property Awareness Mission (NIPAM)** launched by the Government of India on the occasion of the 75th anniversary of independence under the banner "Azadi Ka Amrit Mahotsav" to create widespread awareness on Intellectual Property Rights (IPR). The exceptional contribution in successfully organizing the awareness programme on **March 07, 2022** in association with **Intellectual Property Office, Chennai** by providing your valuable time and support is highly appreciated.*

Solicit your continued support for outreach of IPR far and wide.

Date: March 11, 2022




(RAJENDRA RATNAG, IAS)
CONTROLLER GENERAL OF
PATENTS, DESIGNS & TRADE MARKS

KERALA

Students of SD College in Alappuzha develop automated temperature monitoring system

STAFF REPORTER

ALAPPUZHA AUGUST 24, 2021 18:56 IST
UPDATED: AUGUST 24, 2021 18:56 IST

ATMAS, developed by final-year BSc students Abhishek R. Nath, Midhun Mohan and Sangeeth S. Kini under the guidance of assistant professor Sreekanth J. Varma, makes use of recycled items



Thermal scanners, infrared thermometers and thermal cameras, which can measure body temperature in a contactless manner, have become vital tools in the fight against the COVID-19 pandemic.

In the search for newer technologies that are cost-effective and safe, three students of the Department of Physics, Sanatana Dharma (SD) College, Alappuzha, have designed an Automatic Temperature Measurement and Alert System (ATMAS).

The system consists of a camera, temperature module, and an Arduino microcontroller. It measures the temperature of the forehead of a person approaching via face recognition

using the camera and temperature sensor. ATMAS can be used to estimate the body temperature from wrist or fist.

Readings greater than the normal body temperature suggesting fever are instantly notified to the individual and authorities concerned. It is designed to measure the temperature irrespective of the height of the individual, and the camera captures photographs of those monitored with elevated body temperatures.

Cutting cost

One of the highlights of ATMAS, developed by Abhishek R. Nath, Midhun Mohan and Sangeeth S. Kini (final-year BSc students) under the guidance of Sreekanth J. Varma, assistant professor, Department of Physics, is the intelligent use of recycled items, thereby reducing the overall expenditure. The prototype costs around ₹5,000.

The team said research was under way to make the device more compact, portable and economic. "In our fight against the pandemic, this invention is going to be of immense help," said P.R. Unnikrishna Pillai, principal, SD College.

The research team is also planning to develop an automatic entry and exit system with a database recording facility that contains information of the individuals monitored. The invention comes at a time when SD College, the oldest college affiliated with the University of Kerala, is celebrating its platinum jubilee.

The college had received a funding of ₹1 crore from the Department of Science and Technology, the Government of India, for research and teaching in basic sciences under the Fund for Improvement of S&T Infrastructure (FIST) programme. The Department of Physics had secured special research assistance of ₹30 lakh from the Kerala State Council for Science, Technology and Environment.



Our code of editorial values

This article is closed for comments.

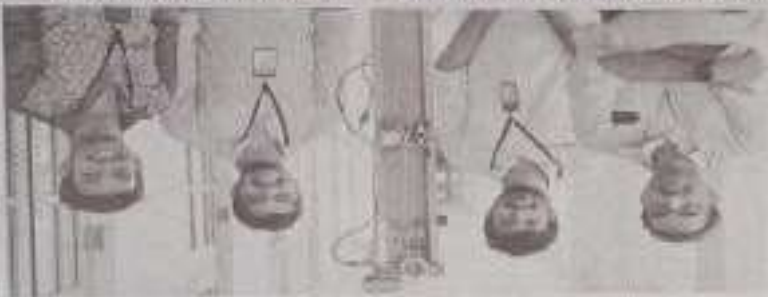
Please [Email the Editor](#)

Printable version | Sep 12, 2022 2:03:51 am |

<https://www.thehindu.com/news/national/kerala/students-of-sd-college-in-alappuzha-develop-automated-temperature-monitoring-system/article36080722.ece>

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എറണാകുളം സർവ്വകലാശാലയിലെ ഹൃദയം, കിടപ്പുമേശ, കിടപ്പുമേശ, കിടപ്പുമേശ



മുഖ്യമന്ത്രിയുടെ നേതൃത്വത്തിൽ സംസ്ഥാന സർക്കാർ ഏറ്റെടുത്തിട്ടുള്ള 'ഹൃദയം' പദ്ധതിയുടെ ഭാഗമായി എറണാകുളം സർവ്വകലാശാലയിലെ ഹൃദയം, കിടപ്പുമേശ, കിടപ്പുമേശ, കിടപ്പുമേശ

എറണാകുളം സർവ്വകലാശാലയിലെ ഹൃദയം, കിടപ്പുമേശ, കിടപ്പുമേശ, കിടപ്പുമേശ

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ഹൃദയം, കിടപ്പുമേശ, കിടപ്പുമേശ, കിടപ്പുമേശ

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CERTIFICATE OF PARTICIPATION

THIS CERTIFICATE IS PRESENTED TO

Mr. Midhun Mohan

For presenting the Idea 'Automatic Temperature Measurement & Alert System ' in Idea Pitching Camp under Idea Challenge 2021 conducted by Samrambhak Mithra in association with Kerala Startup Mission on 20th December 2021 at St. Teresa's College, Ernakulam.


CHAIRMAN
SAMRAMBHAK MITHRA




SECRETARY
SAMRAMBHAK MITHRA

Activities of CRAR & EichhoTech 2021-2022

1. 01/07/2021 Selected for incubation at Kerala University Business Innovation and Incubation Centre (KUBIIC), University of Kerala.

KUBIIC envisages building a robust Start-up ecosystem for nurturing innovation and providing opportunities to budding entrepreneurs of the University of Kerala. Applications were welcomed from Research Scholars and students affiliated to the University of Kerala. Start-ups were selected based on innovation and scope for commercialisation.

2. 17/07/2021 Inauguration of “Payal Jwala”

Sri. P. Prasad, Hon. Minister for Agriculture inaugurated Payal Jwala, a project to make biogas using water hyacinth. A ball pen portrait of the minister on water hyacinth paper was gifted to him on this occasion. The products made from water hyacinth were also exhibited for creating awareness.



3. 12/11/2021 Attended Regional Rural Innovators' Meet. Conducted by KSCSTE, Govt. of Kerala.

Regional Rural Innovators' Meet 2021 for Kottayam-Alappuzha Region was conducted at Srinivasa Ramanujan Institute for Basic Sciences, Pampady. EichhoTech presented their value-added products for the competition.



4. 20/12/2021 Selected for Rural Innovators' Meet 2021 (State Level Contest of Rural Innovations). Conducted by KSCSTE, Govt. of Kerala.

22 projects were selected for State level competition of RIM 2021. EichhoTech was one among them.

List of projects selected for State level RIM

Sl. No.	Project details
1	Paper Bag Making - E. Saji
2	Agro Mechanisation - Dr. C. Geethamma & Smt. Seemayya D.
3	Process based paper garden - Mrs. Mahalingam P. D.
4	Smart Solar DC Motor with generator - Mrs. Shyja Narayanan
5	Agri crop irrigation/pulchey - Mrs. Jina Cherian, Mrs. Jina V. V.
6	Water irrigation - Mrs. Indya Joseph
7	Woodblock paper and memory pads from agri waste - Mrs. Anoop Kanna V.
8	Portable vertical acid flow pump - Mrs. Madhukrishnan T.
9	Design and fabrication of a multifunctional gauge for drip/soy application - Mrs. Anu Thani
10	Smart Filter - Mrs. Resul Akhthar, Mrs. Indira Joseph
11	Red Chilli products converter run drive - Mrs. Shyja P. V.
12	Packaging Machine - Mrs. M. Subashini
13	Packaging machine for small items - Mrs. Suresh R. V.
14	Jar run Red efficient cover - Mrs. K. Santhirani
15	Packaging machine - Mrs. Bina David
16	Concrete tool to reduce LPG usage by 1/3 person - Mrs. V. Jayaprabha
17	Medicinal plant - Mrs. F. F. Mithun
18	Smart gardening and plants cover from plastic film condition - Mrs. M. Mahalingam
19	Microirrigation of banana - Mrs. Manu Saji
20	Coffee Mechanism - Mrs. Nayal Jina, Mrs. Ajla Maria
21	Smart watch - Mrs. Anand Thambi K.
22	Arise and Filter - Mrs. Uruthara K. V.



5. 21/12/2021 won Regional Rural Innovation Award 2020-21 for Kottayam-Alappuzha region.

Won the Regional Rural Innovation Award 2020-21 for the work entitled Handmade Paper and nursery pots from aquatic weeds.



**6. 03/01/2022 won India Plastic Challenge Hackathon Award 2021 (National Level).
Conducted by Ministry of Environment, Forests and Climate Change.**

India Plastic Challenge 2021 was a platform for students and young innovators to put forth their ideas or showcase solutions aimed at reducing single-use plastics (SUPs), leading the nation towards a circular economy. It was organised by the Ministry of Environment, Forest, and Climate Change in association with the German agency for international cooperation (GIZ) as technical partner and the Climate Collective Foundation as the challenge partner.

There were 138 contestants, nationwide. Out of them, 20 were shortlisted and provided training. 3 Start-ups each from two themes were selected based on novelty and environmental benefits.



7. 18/01/2022 Visit by Meenakshi, Kayal Island Retreat, Kakkathuruth.

The visit to CRAR and EichhoTech by Meenakshi was to learn about the possibilities of value-addition of water hyacinth and its implementation at her resort.



8. 19/02/2022 Conducted training at Kayal Island Retreat, Kakkathuruth on Value-addition of Aquatic weeds.

Hands-on workshop on value-addition of aquatic weeds were conducted at Kayal Island Retreat in Kakkathuruth. Kakkathuruth has been listed in National Geographic's 'Around the World in 24 Hours,' a photographic tour of travel-worthy spots in the world. The water bodies in the region are infested by water hyacinth. The training was a CSR Activity of the resort. Women inhabitants of the island attended the training for making pulp products, mushroom cultivation and composting.



9. 16/03/2022 Meeting with Chamber of Vembanadu Hotels & Resorts, Kumarakom

The meeting was attended by the representatives of various resorts in the region. The agenda was economic utilization of water hyacinth since its infestation posed great threat to various tourism related activities by the resorts.



10. 22/03/2022 Visit by students of Christian College Chengannur.

The students of Christian College visited CRAR and EichhoTech as part of their study tour.



11. 25/03/2022 Made eco-friendly pots using areca nut leaves for a book release function

An innovative, customised pot was designed for the release of “Pookunnashokam”. The pot had a brand tag with a hidden message and a seed.



12. 05/04/2022 Received the India Plastic Challenge Hackathon Award and Cash Prize

The award function of IPCH 2021 was held at Central Pollution Control Board, Delhi. The award and cash prize were handed over by Sri. Chandra Prakash Goyal, Director-General of Forests & Special Secretary, in presence of Sri. Bhupender Yadav, Hon. Union Cabinet Minister for Environment, Forest & Climate Change and Sri. Ashwini Kumar Choubey, Hon. Minister of State for Environment, Forest and Climate Change.



13. 06/05/2022 Visit by Team Weed Watch

Scientists and professors from University of Stirling, University of Strathclyde, International Crops Research Institute for the Semi-Arid Tropics and National Institute of Plant Health Management visited Eichhotech.



14. 28/05/2022 Selected for Research Innovation Demo Day by Kerala Startup Mission

EichhoTech was selected to showcase products and prototypes at Kerala Technology Innovation Zone (KTIZ), HMT Colony, North Kalamassery, Kochi during the Research Innovation Demo Day.



ONLINE TRAINING ON

VALUE-ADDITION OF AQUATIC WEEDS

SCHEDULE

DAY BEFORE TRAINING (12-01-2022)

1. Collect all raw materials mentioned in the TRAINING MANUAL
2. Remove mud and dirt from water hyacinth (WH) by washing under tap water
3. Cut into small pieces as mentioned in the TRAINING MANUAL
4. Cut the papers into small pieces and soak in water

**the above preparation is done the day before training to save time*

TRAINING DAY (13-01-2022)

Pre-Training Preparation	9:30 - 10:00
Introductory Session	10:00 – 11:00
Tea Break	11:00 – 11:15
Training	11:15 – 1:00 pm
Lunch Break	1:00 – 1:30
Training continues	1:30 – 4:00
Tea Break	4:00 – 4:15
Feedback session	4:15 – 5:00

1. Boil WH and soaked papers in separate vessels after Trainers' instruction
2. Prepare WH in pressure cooker for Mushroom Cultivation
3. Introductory session, Presentation on problems of water hyacinth and its utilisation
by **Dr. G. Nagendra Prabhu**, Principal Investigator, CRAR
4. Presentation on problems of water hyacinth and its utilisation
Training session
5. Squeeze WH with clean hands and keep for cooling (for Mushroom Production)
6. Pulping
7. Preparation of paper
8. Preparation of pulp products
9. Mushroom Bed preparation
10. Feedback Session

- End of Programme -





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Kerala Development and Innovation
Strategic Council

SANATANA DHARMA COLLEGE
ALAPPUZHA

2021

YIP

YOUNG INNOVATORS PROGRAMME



SUCCESSFULLY

SUBMITTED

21 IDEAS !



YOUNG INNOVATORS PROGRAMME (YIP) 2021

Teams Shortlisted from Preliminary Evaluation

Congratulations

SOLID LIQUID AND HAZARDOUS WASTE WATER MANAGEMENT



Anil V. H.



Sneha V.



Sethuraman S.



Nanditha N. Prabhu



Vishnupriya R.

HOSPITECH - DIGITALIZING THE HEALTH SECTOR



Harikrishnan Namboothiry N.



Anandkrishnan L.



Adarsh S. Babu



Rahulkrishnan R.



Muhammad Sajad K. S.

POST PANDEMIC INNOVATIONS



Arathi R.



Sreelakshmi S.



Saju Sathesan

MODERN MEDICINE AND BIOMEDICAL TECHNOLOGY



Sangeetha K. Namboothiri



Meenzakshy Manoj Kumar
Nair



Aarsha A. S.



Ahalya Prasanna



Meenakshi F. R.

ENERGY, E-MOBILITY AND RENEWABLES



Arathy S.



Sreelakshmi Biju



Ashwin Anand



Sagar Siran



Arjan S.



CERTIFICATE OF RECOGNITION

This certificate is awarded to:

Sagar Sivan

YIP ID: 21YIP086515

SANATANA DHARMA COLLEGE

Idea ID: 8728

for completing all the requirements and submitting an idea in
the Young Innovators Programme -2021 conducted by the Kerala
Development & Innovation Strategic Council

Dr. P. V. Unnikrishnan

Member Secretary, K DISC



Dear Sir/Madam,

Kerala Startup Mission is organizing a 'Research Innovation Demo Day' on 28 May, 2022 at Technology Innovation Zone, Kochi. The demo day is a part of the Kerala Innovation Week (www.iwkerala.org), India's largest Design, Technology and Maker Fest happening from 22-28 May, 2022 at Kochi.

During the Demo Day, selected innovators from various research institutions and universities will be showcasing their research innovations before science enthusiasts and tech geeks. The 'Research Innovation Demo Day' will be a platform for the research community to interact with the stakeholders of Kerala's startup ecosystem.

The researchers can demonstrate their technologies/processes during the demo day. They can also present the details of their research innovation or showcase the prototypes/products developed.

The demo day will be an amazing opportunity for the researchers to network with the startups, technocrats, mentors, investors, corporates, industries, and government officials. They will also get insights about the translation of their research into commercial ventures.

Being one of the leading research institutions in the state, your association with the demo day would add value to this initiative.

We request you to encourage the researchers in your institution/research lab to apply for the 'Research Innovation Demo Day' on or before 22 May, 2022.

Date : 28 May, 2022

Venue : Technology Innovation Zone, Kochi

Apply : <https://bit.ly/KIW-RINK>

Let's unleash the research potential and rethink the research benefit for creating a knowledge economy.

--

"Kerala Innovation Week is expected to have the presence of 5000 plus participants including 40+ Speakers, 25+ communities, 20 plus programmes etc over the 7 days of the fest.

The fest will feature workshops, masterclasses, hackathons, investor cafe, pitch fest, community programmes, food festival, live performances, design summit, maker fest, product expo, and women in tech.”

For more details, visit : www.iwkerala.org

Regards,

Kerala Startup Mission

A: G3B, Thejaswini, Technopark, Trivandrum-695581

W: startupmission.kerala.gov.in | E: rink@startupmission.in

PARTICIPATION OF SANATANA DHARMA COLLEGE IN 'Research Innovation Demo Day' on 28 May, 2022 at Technology Innovation Zone, Kochi.





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Patent Search

Invention Title	METHOD OF INDUCING THE PRODUCTION OF ANDROGRAPHOLIDE FROM ANDROGRAPHIS PANICULATA AND COMPOSITE MEDIA COMPOSITION THEREOF
Publication Number	37/2020
Publication Date	11/09/2020
Publication Type	INA
Application Number	201943008313
Application Filing Date	04/03/2019
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	BIOTECHNOLOGY
Classification (IPC)	A61K0036190000, A01H0004000000, A61K0031365000, C12N0005000000, C12N0005040000

Inventor

Name	Address	Country	Nationality
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Dr. Susila Kuruvila	Oonnukallil House, CMC 12/426A, Cherthala - 688524, Alappuzha District, Kerala	India	India

Applicant

Name	Address	Country	Nationality
Sanathana Dharma College, Alappuzha	Sanathanapuram P.O., Alappuzha - 688003, Kerala, India	India	India

Abstract

A method for inducing the production of andrographolide, a secondary metabolite produced from *Andrographis paniculata* by ? irradiating seedlings of *Andrographis paniculata* selecting an explant from the irradiated seedlings of *Andrographis paniculata*; and callus culturing the explants in a culture media supplemented with plant growth regulator additives. The invention also relates to a method of inducing the production of andrographolide by callus culturing an explant harvested from seedlings of *Andrographis paniculata*, irradiating the cultured callus, and sub culturing the irradiated callus in a culture media supplemented with plant growth regulators and additives. Further, the invention also relates to a composite culture media composition for the production of Andrographolide.

Complete Specification

This invention relates to a method and callus culture medium compositions for inducing the production of andrographolide, a secondary metabolite produced from *Andrographis paniculata*, and more particularly to the production of andrographolide from a callus culture of *Andrographis paniculata* which has been irradiated with γ radiation.

BACKGROUND OF INVENTION

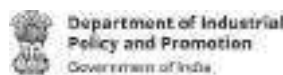
Andrographis paniculata is a herbaceous plant in the family Acanthaceae. *Andrographis paniculata* is an erect annual herb extremely bitter in taste. *Andrographis paniculata* is distributed in tropical Asian countries, often in isolated patches. It can be found in a variety of habitats, such as plains, hillsides, coastlines and disturbed and cultivated areas such as roadsides, farms and wastelands.

As an ayurvedic herb *Andrographis paniculata* is known as Kalmegh or Kalamegha. Since ancient times, the herb has been in use in traditional Unani, Siddha and Ayurvedic systems of medicine. The herb has also been known to be used in tribal medicine in India and some other countries for multiple clinical applications since ancient times. The herb is also reported to possess astringent, tonic and alexipharmic properties and is useful in dysentery, cholera, diabetes, HIV, jaundice, influenza, bronchitis, swellings, itches, Japanese B encephalitis, pelvic infection, leprosy, chicken pox, mumps, eczema and piles.

Most of the biological actions of *Andrographis paniculata* have been associated to the presence of andrographolide, a diterpenoid lactone present in the plant. Andrographolide has a bitter taste, is colourless and crystalline in appearance. Andrographolide is mainly extracted from leaves and stem of *Andrographis*

paniculata with the leaves known to contain the maximum amount of andrographolide (around 2.5%). However, andrographolide produced from plant extract requires

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Patent Search

Invention Title	A PROCESS OF PREPARING SILVER NANOPARTICLES
Publication Number	09/2022
Publication Date	04/03/2022
Publication Type	INA
Application Number	202241004609
Application Filing Date	27/01/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	METALLURGY
Classification (IPC)	B22F0009240000, B82Y0030000000, B82Y0040000000, H01M0004920000, B22F0001000000

Inventor

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Raji. R. Krishnan	P.G & Research Dept. of Chemistry, S. D. College, Alappuzha, Kerala, PIN: 688003, India	India	India

Applicant

Name	Address	Country	National
Sanatana. Dharma College (S. D. College), Alappuzha	Sanatanapuram P. O, Alappuzha, Kerala, PIN: 688003, India	India	India

Abstract

Provided herein is a process of preparing silver nanoparticles using gruel of a cereal or a lentil involving preparing a solution of a silver precursor, heating and forming a further single decomposition process. The process involves preparing dry bulk of solid metal nanoparticles in a cost-effective way without use of solution phase reduction process, or any complicated process of purification and without use of toxic and hazardous chemicals and without aid of external reducing agents.

Complete Specification

hazardous chemicals.

Background of the Invention

Silver nanoparticle is a versatile element with wide range of applications in various fields such as semiconductor, biological sensors and stripping voltammetry. The exceptional conductivity of silver nanoparticles makes it widely used in electrode preparation and fabrication of non-enzymatic biosensors. The use of silver nanoparticle for therapeutic purposes was first evidenced in the ayurvedic system of medicine since the period of Charaka and his contemporaries. Silver Bhasma or Rajata Bhasma prescribed for respiratory disorders comprises of pure silver metal (52%59%), ferric oxide (14.33%), free sulfur (0.675%), calcium (10.769%), and silver chloride (0.479%) as well as traces of other metals including potassium, sodium, and aluminum. Silver is an efficient catalyst for several functional group transformation reactions. It can replace the more expensive noble metals in hydrogenation and hydrogen auto transfer reactions such as hydrogenation of olefins and carbonyl compounds, Knoevenagel condensation Michael addition reactions and Suzuki coupling reactions. They have lot of application in the field of biomedicine due to their good antimicrobial and antiviral activities.

The existing methods for the synthesis of silver nanoparticles are colloidal synthesis and yield of silver nanoparticles formed is very low and separation of solid silver nanoparticles is also a tedious process.

Most of the reported technologies involve the use of solution phase reduction method for the synthesis of silver nanoparticles. Inadequate purification and formation of silver nanoparticles with nonuniform particle size is found to be the result of most of the reported methods. Therefore, these methods cannot be extended to the bulk

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