



Department of Biochemistry

Hearty Welcome to the NAAC PEER Team



December 20, 2023

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Department Profile



About the Department

- **Course Offered**

B.Sc. & M.Sc. Biochemistry

- **Programs Taught - Core Papers & Elective Papers to**

B.Sc. Microbiology

M.Sc. Microbiology

Uniqueness of the Department

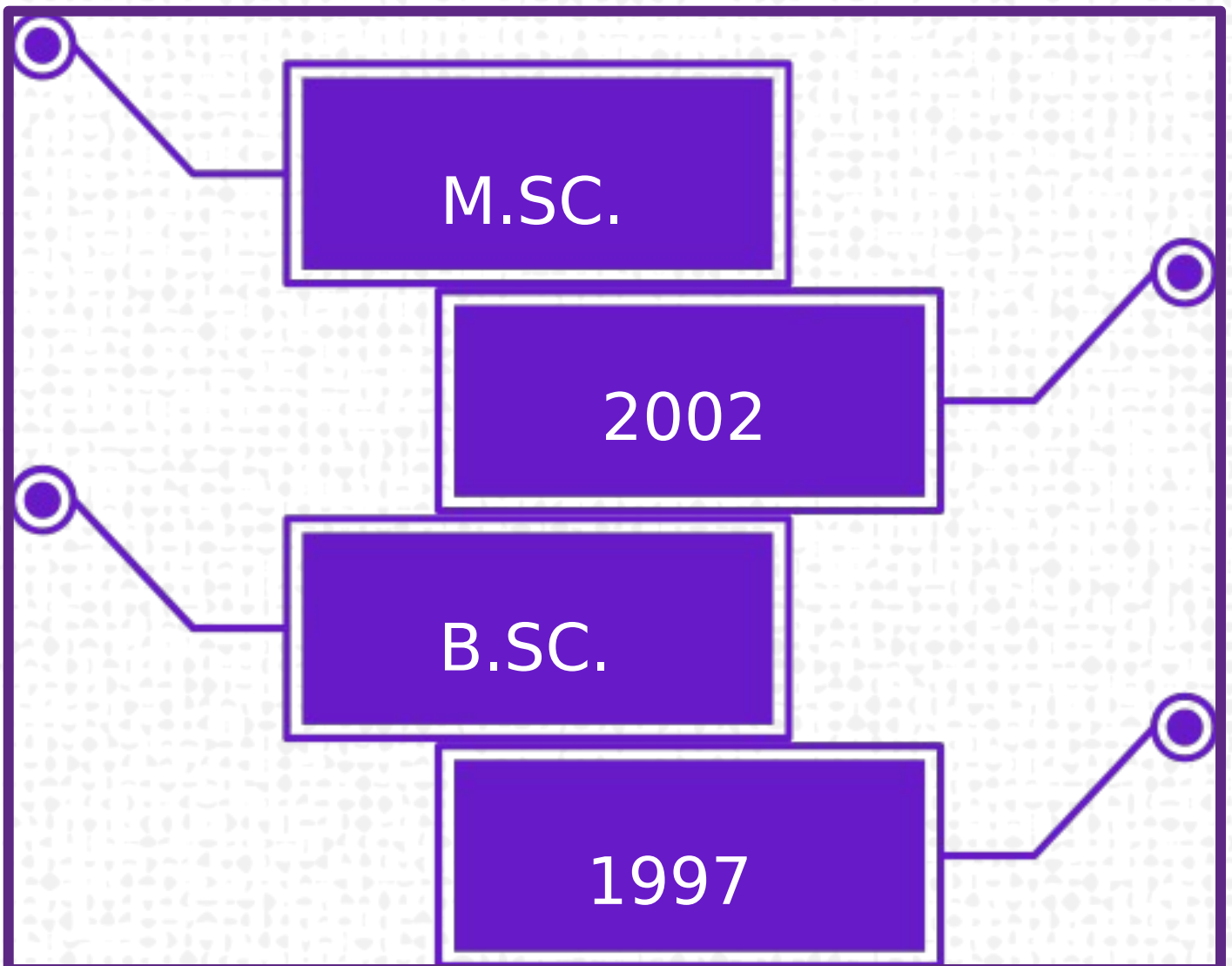
Organizing Health Awareness Programmes
Millet Exhibitions

Internships in CLRI, CECRI, ICMR

Green Practice - biofertilizer, herbal Garden
and Seed ball



VectorStock



Funds from ICSSR, RGNIYD, TNSCST

Publishing Books and Book Chapters and Research Articles
in
UGC, Scopus indexed Journals

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Faculty Profile

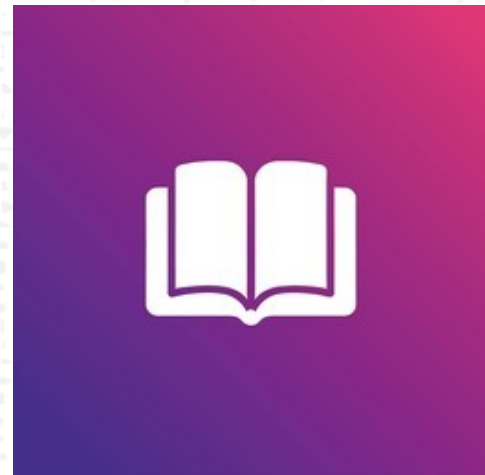


S.No	Name	Area of Specialization	Journals	Books & Book Chapters	Patent	H index/ I10 Index	Citation Index
1	Dr.T.Karpagam, Head	Phytomedicine	35	07	1	11/11	375
2	Ms.P.Anitha	Phytomedicine	08	01	1	4	25
3	Dr.A.Shanmugapriya	Clinical Biochemistry	25	03	1	4/2	85
4	Dr.B.Varalakshmi	Phytomedicine	36	08	2	10/10	349
5	Ms.S.Gomathi	Phytomedicine	18	01	1	5/3	84
6	Dr.V.Suganya	Cancer Biology	32	04	2	7/3	316
7	Dr.T.Abarna	Hepatoprotective	15	02	1	2/0	11
8	Dr.R.Manikandan	Cancer Biology	27	07	2	10/10	308

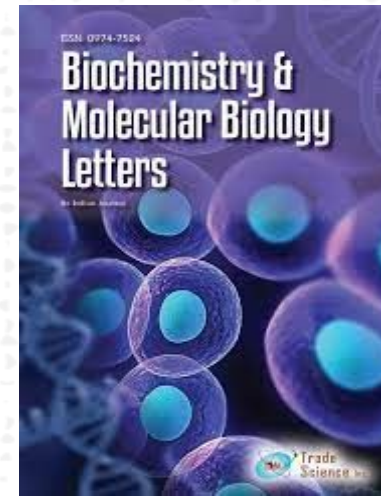
Faculty Details



Overall Publications



Book Chapters - 06



Journal Publications - 41



5: h-index in Scopus
86: Citation Index in Scopus



Patent - 04

Published - 03

Designed - 01



Startup - 01

Faculty Details



Board of Studies

S.No	Name of the Faculty	BoS Effective from	Period of Effectiveness
1	Dr.J.Radhika	01.10.2021	03 Years
2	Dr.B.Varalakshmi	01.10.2021	03 Years

Chairman

S.No	Name of the Faculty	Description	Period of Effectiveness
1	Ms.P.Anitha	Chairman, Question paper Setting in the Department of Biochemistry, Bharathiar University	From 2017 - till now

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Curriculum Enrichment



International workshop on “**Biochemical and Bioinformatics Techniques**” - 05.09.2017

Curriculum Enrichment

Exhibition Conducted

- ❑ Herbarium on medicinal plants
- ❑ Herbs and Soups for Healthy lifestyle
- ❑ Biochem World – role of
phytochemicals
- ❑ Seedling Day – Seed Ball Preparation



Herbarium on Medicinal plants
19.10.2019



Herbs and soups for Healthy
lifestyle 22.06.2019



Biochem world
01.03.2021 & 02.03.2021



Seedling Day – Seed Ball
Preparation
27.07.2019

Curriculum Enrichment



Inter Departmental Exhibition “Millets Expo 2019” on

12.07.2019

Exhibition Conducted

- ❑ Interdepartmental Millet Expo 2017
- ❑ Interdepartmental Millet Expo 2019



- ❑ National Science Day – Science

Exhibition



Inter – Departmental Exhibition -
“**Millets**” 26.08.2017

National Science Day -
Science Exhibition 03.03.2022

Curriculum Enrichment



Webinars Conducted



“Alumni Spotlight series” – Medical coding for the Millennium " on 28.07.2021



“Women in Leadership Series” - Combating Challenges and Brewing Innovation on 22.12.2021

Curriculum Enrichment

Distinguished Speakers



Dr. Kavitha Manivannan
Genetic Analyst,
Tharb Camel Hospital,
Qatar



Dr. R. Srinivasan, Member Secretary,
TNSCST, Chennai



Dr. Sivanesan Dhandayuthapani, Deputy
Dean Research, Santhosh Deemed to be
University, Delhi



Dr. Loganathan Veeramuthu, Research
Assistant Professor, Institute of Organic &
Polymer Materials, Research &
Development Center of Smart Textile
Technology, National Taipei University of
Technology, Taiwan



Dr. Balaji Krishnamachary, Post-Doctoral
Fellow, Department of Anesthesiology,
Center for shock, Trauma and
Anesthesiology Research (STAR), University
of Maryland, USA



Dr. Balasubramanian Balamuralikrishnan,
Professor & Researcher,
Department of Food Science and
Biotechnology,
South Korea

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Students' Centric Methods

Experiential Learning



Visit to Biogas Community Kitchen



Visit to Pollution free Environment



Workshop on Production of Biofertilizer: Panchagavya, and

Students' Centric Methods

Experiential Learning

Potato Research Institute and Pasteur Research Institute of India



Students' Centric Methods

Participative Learning



Students' Buzz Programme on "Secret of Life"



Peer Learning



Summer Internship programme at Pasteur Institute at Coonoor

Students' Centric Methods



Problem Solving Methodology
Projects - Mini and Major

Year	Number
2017-2018	45
2018-2019	25
2019-2020	20
2020-2021	11
2021-2022	23
Total	124

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Students Achievements



Rank Holders

Year	UG	PG
2017-2018	3	1
2018-2019	4	1
2019-2020	4	4
2020-2021	2	2
2021-2022	5	9
Total	18	17
Grand Total		

Bharathidasan University Gold Medalist



ருச்சி இந்திராகாந்தி மகளிர் கல்லூரி ஆண்டு விழாவில் பல்கலை அளவில் சிறப்பிடம் பிடித்த மாணவி அபிராமிக்கு கல்லூரி செயலாளர் மீனா விருது வழங்கினார். அருகில், தொலைக்காட்சி ஒருங்கிணைப்பாளர் ரங்கராஜ் பாண்டே, கல்லூரி கலைமை செயல் அதிகாரி சந்திரசேகரன், இயக்குனர் அபர்ணா உட்பட பலர்.

35P. Abirami, B.Sc. Biochemistry (2019-2022) secured University Gold medal after URE examination

Students Achievements



Tamil Nadu Uniformed Service Recruitment Board – TNUSRB – Serving

Public



R.Rukku

Grade II Constable police



K.Gayathri

Grade II Constable police



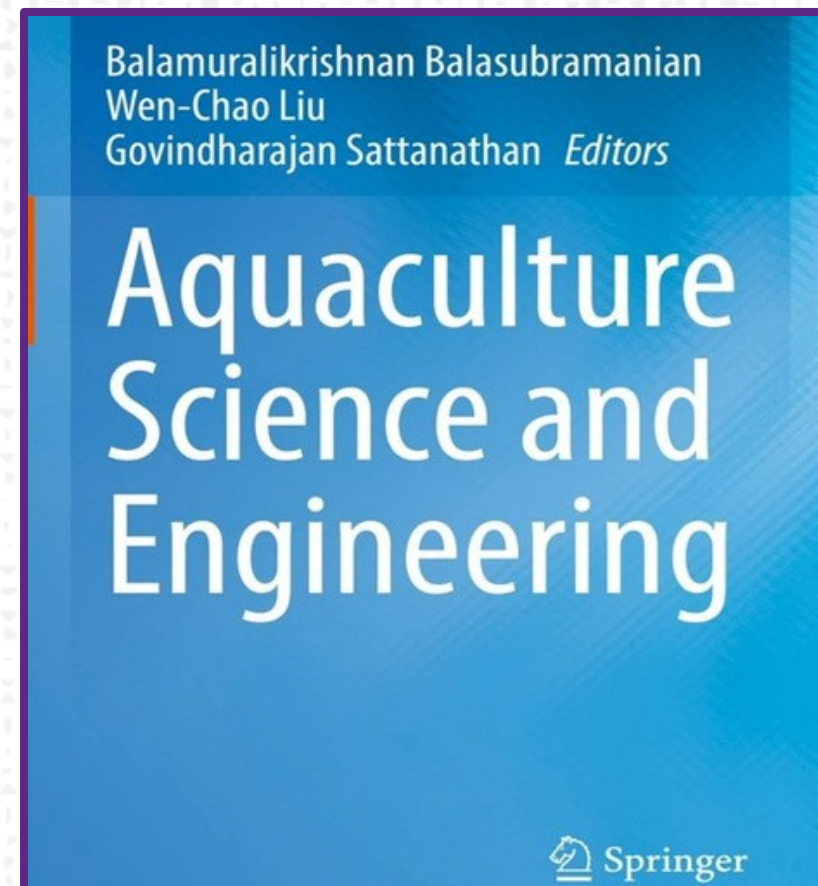
R.Radha

Grade II Traffic Constable police

Students Achievements

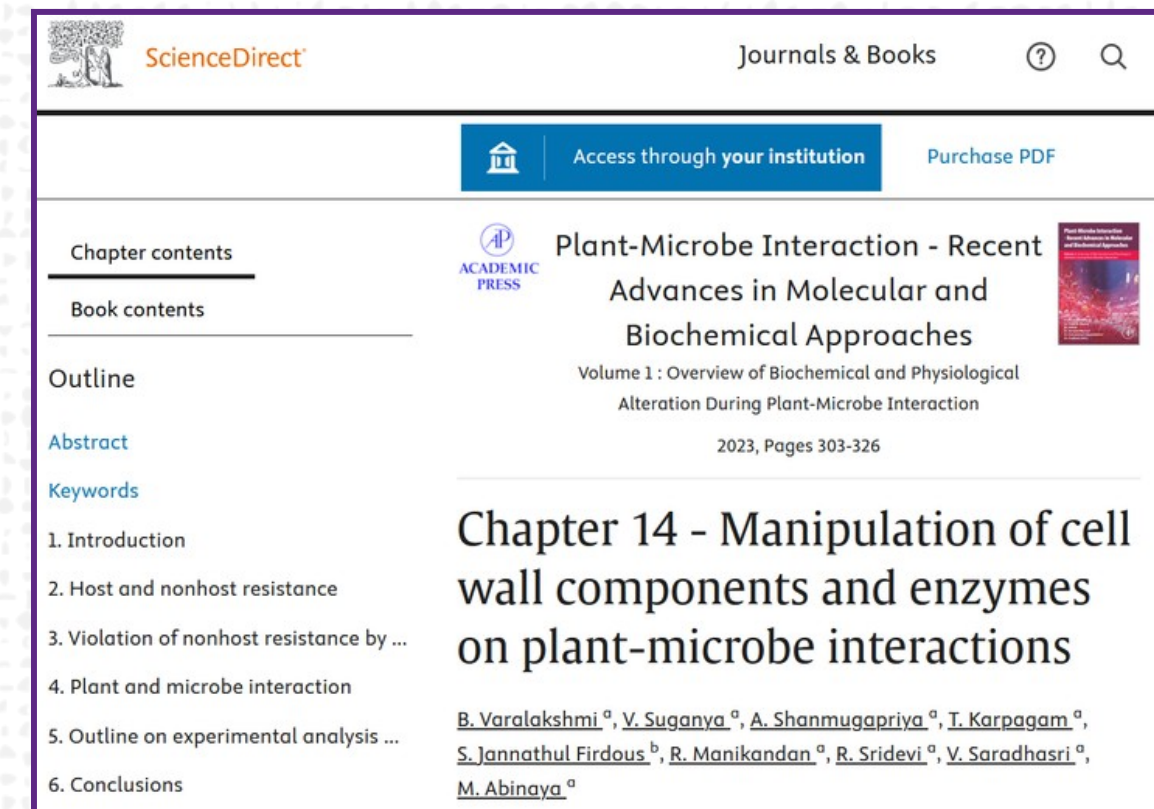


Published Book Chapters



M. Abinaya, V. Saradha Sri, R. Sridevi.

II M.Sc. Biochemistry. "Bacterial fish disease and treatment". Aquaculture Science and Engineering 565, Springer publications, page number- 518.



M. Abinaya, V. Saradha Sri, R. Sridevi.

II M.Sc. Biochemistry. "Manipulation of cell wall components and enzymes on plant-microbe interactions" Recent Advances in Molecular and Biochemical Approaches, Academic Press, 2023, Pages 303-326

Students Achievements



Published Article in UGC indexed Journals

The screenshot shows the website header for IJPDA with the ISSN: 2348 - 8948. The navigation menu includes Home, About, Editorial Board, Policies, Current, Archives, Submissions, Indexing, and Contact Us. The breadcrumb trail is HOME / ARCHIVES / VOLUME-6, ISSUE-2, FEBRUARY-2018 / Research Articles. The article title is 'Evaluation of antihepatotoxic effect of Avicennia marina against alcohol-induced liver injury'. A small thumbnail of the journal cover is visible on the right.

N.Abirami, K.Parkavi, W. Esther Rani, S.Kaviya Lakshmi.

Evaluation of antihepatotoxic effect of *Avicennia marina* against alcohol-induced liver injury. International Journal of Pharmaceutics and Drug Analysis. 2018; 6 (2): 225 – 231. ISSN: 2348-8948; UGC: 44824

The screenshot shows the website header for IJPDA with the ISSN: 2348 - 8948. The navigation menu includes Home, About, Editorial Board, Policies, Current, Archives, Submissions, Indexing, and Contact Us. The breadcrumb trail is HOME / ARCHIVES / VOLUME-6, ISSUE-2, FEBRUARY-2018 / Research Articles. The article title is 'A Combinative Evaluation Of Antioxidant Potential In Tridax procumbens and Boerha-via diffusa'. A small thumbnail of the journal cover is visible on the right.

A.Abinaya, S.Kamali, G.Praveena, C.Jeyachitra, M.Jeyapriya.

A Combinative Evaluation Of Antioxidant Potential In *Tridax procumbens* *Boerhavia diffusa*. International Journal of Pharmaceutics and Drug Analysis. 2018;6 (2): 197 – 202. ISSN: 2348-8948; UGC: 44824.

Students Achievements



Publications

RJPT Research Journal of Pharmacy and Technology
ISSN 0974-360X (Online), 0974-3618 (Print)

HOME | PAST ISSUES | EDITORIAL BOARD | FOR AUTHORS | MORE | NEWS | Search | Submit Article

Antibacterial action of *Pedilanthus tithymaloides* leaves extract and FTIR Phytochemical Fingerprinting

Author(s): Gomathi S, Jannathul Firdous, Shanmugapriya A, Varalakshmi B, Karpagam T, Bharathi V, Anitha P, Mahalakshmi P
Email(s): Jannathul.firdous@unikl.edu.my
DOI: 10.52711/0974-360X.2021.00358

Address: Gomathi S¹, Jannathul Firdous^{2*}, Shanmugapriya A¹, Varalakshmi B¹, Karpagam T¹, Bharathi V¹, Anitha P¹, Mahalakshmi P¹
¹Department of Biochemistry, Shrimati Indira Gandhi College, Tiruchirappalli, Tamil Nadu, India.

Indexed / Abstracted in:
ISI, Indian Science Abstracts
CAS, Chemical Abstracts Service (CAS)
CAS, Abstract
Google Scholar
Scopus

Mahalakshmi P

Antibacterial action of *Pedilanthus tithymaloides* leaves extract and FTIR Phytochemical Fingerprinting, Research Journal of Pharmacy and Technology (RJPT),14(4): April 2021.ISSN-0974-360X (Online),0974-3618 (Print)

DOI: 10.22270/jmpas.2021.V10I6.1939 ISSN NO. 2320-7418

International peer reviewed open access journal

Journal of Medical Pharmaceutical and Allied Sciences

Journal homepage: www.jmpas.com CODEN: JMPACO

Research articles

Nano phytoremediation for textile dye degradation using abutilon indicum silver nanoparticles: photo catalytic activities

Varalakshmi B¹, Jannathul Firdous^{2*}, Karpagam T¹, ShanmugaPriya A¹, Suganya V¹, Anitha P¹, Gomathi S¹, Manikandan R¹, Abarna T¹, Abirami N¹, Jeyarani³

¹ Srimati Indira Gandhi College, Tiruchirappalli, India.

Abirami N

Nano phytoremediation for textile dye degradation using *Abutilon indicum* silver nanoparticles: photo catalytic activities, Journal of medical pharmaceutical and allied sciences, Volume 10 - Issue 4, 1939, Nov - Dec 2021, Page - 3960-3964. ISSN NO. 2320-7418. Scopus and UGC care II.

Students Achievements



Placement Details



Medical Coding



Laboratory Technology



Clinical Analyst



K.Janani

Medical Coder



R.Sridevi

Medical Coder



R.Kavya

Clinical Analyst



K. Nandhini

Research Assistant

Students Achievements



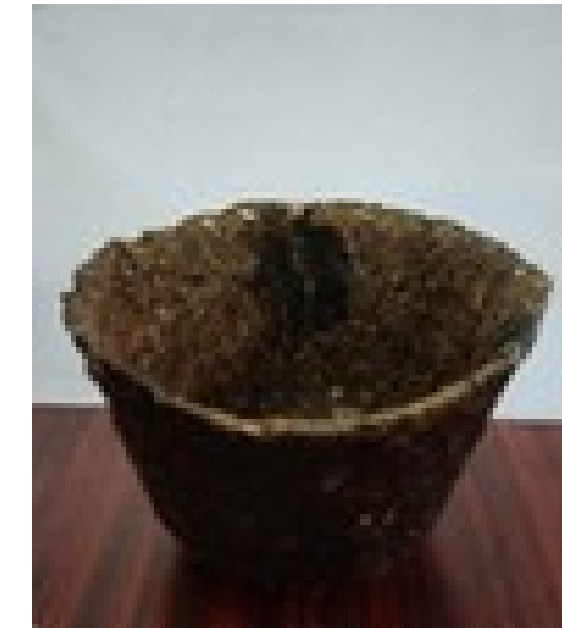
Innovation of Students

Application Details	
APPLICATION NUMBER	202341014517
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	03/03/2023
APPLICANT NAME	1 . Dr.B.Varalakshmi 2 . Ms.N.Vijayalakshmi 3 . Ms. K.Chitra devi 4 . Dr.V.Suganya 5 . Dr.S.Rethinavalli 6 . Dr. N.Hemalatha 7 . Ms. C.Mamtha 8 . Ms. V.Sathyapriya 9 . Ms. R.Ramya
TITLE OF INVENTION	PRODUCTION OF ECO-FRIENDLY BIO PLASTIC CUPS FROM AGRO WASTES
FIELD OF INVENTION	BIOTECHNOLOGY
E-MAIL (As Per Record)	senanipindia@gmail.com
ADDITIONAL-EMAIL (As Per Record)	iprpateent2022@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	17/03/2023

Patent by

1. C.Mamtha
2. V.Sathyapriya
3. R.Ramya

Mentor Dr.B.Varalakshmi



Production of Eco-friendly bioplastic cups from banana peel and banana stem fibre



Students participated in Startup TN Girls Ideathon Competition and won cash award of **Rs 12,500/-** at Zonal Level Patent No: 202341014517

Students' Achievements



Agripreneur

Entrepreneurship Related Programme

Programme Outcome

Workshop on Production of Vermiwash
at College Campus - 21.03.2018 & 14.07.2018



Ms. A. Sowmiya
B.Sc Biochemistry
2017 - 2020



Before applying Vermiwash in the field



Vermiwash Unit at Puthanampatti
developed by Ms. A. Sowmiya

After applying Vermiwash in the field



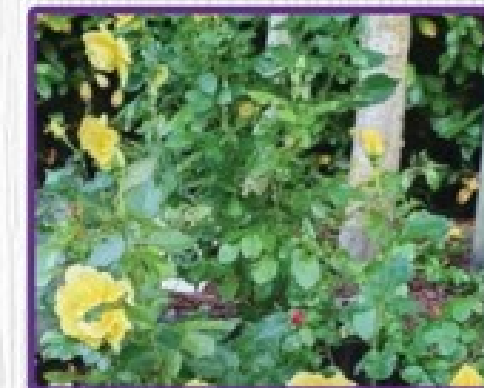
At Lalgudi Panchayat
16.10.2018



At Ettarai Village
08.02.2020



Vermiwash Unit



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Alumni



Dr.S.Jannathul firdous
Assistant Professor,
Faculty of Medicine,
University of Kuala Lumpur, Malaysia
B.Sc. Biochemistry (1997 -2000)



S.Nivedhini
Medical Coder, Logix Health,
Trichy
B.Sc. Biochemistry
(2011 -2014)



A.Dhivya Priya
Medical Document
Reviewer, Rapid Care, Chennai
M.Sc. Biochemistry
(2011 -2014) & (2014 -2016)



V.Nithya
Assistant Professor,
Department of Animal Health and
Management, Alagappa University,
Karaikudi
B.Sc. & M.Sc. Biochemistry (1999 -2002) &
(2002 -2004)



P.Divya
Advocate, Virudhachalam
B.Sc. Biochemistry
(2014 -2017)



J.Jeya Priya
Medical coder,
Visionary RCM infotech Pvt Ltd,
Chennai
B.Sc. & M.Sc. Biochemistry
(2012 -2015) & (2015 -2017)



D.Saranya
Process Specialist,
CTS, Chennai
M.Sc. Biochemistry
(2008 -2010)



C.Anitha
Medical Document
Reviewer, Rapid Care, Chennai
M.Sc. Biochemistry
(2011 -2014) & (2014 -2016)



Dr.B.Manimegalai
Assistant Professor,
Department of Biochemistry,
STET college, Pattukottai
B.Sc. Biochemistry
(2005 -2008)



R.Priyanka
Dietician, Kolors, Trichy
B.Sc. Biochemistry
(2012 -2015)



L.Hemavathi
Denial Analyst, Medical
billing, Chennai
B.Sc. Biochemistry
(2015 -2018)



K.Parkavi
Assistant Professor,
Srinivasan Institute of medical
Sciences, Perambalu
B.Sc. & M.Sc. Biochemistry
(2014 -2017) & (2017 -2019)

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Staff Achievements



Funds Received

S.No	Name of the Faculty	Title of the Project	Amount Received	Funds received from	Year
1	Ms.P.Anitha	Study on Mensural Hygiene Management of Women in Ettarai Village	Rs. 50,000	KR Fuels	2020 - 2021
2	Dr.B.Varalakshmi Dr.J.Radhika Dr.V.Suganya	Diet and Life Style Modifications to Combat Polycystic Ovary Syndrome Among SC/ST Adolescent Girls in Tiruchirappalli	Rs. 75,000	RGNIYD	2021 - 2022
3	Dr.T.Karpagam	Combating Pathogenic Gene Expression by Polyherbal Preparation on Vaginal Infection Causing Microorganism	Rs. 7,500	TNSCST	2021 - 2022
4	Dr.R.Manikandan	Impact of Non Communicable Diseases in India	Rs. 90,000	ICSSR	2023 - 2024

Staff Achievements

Awards & Publications



Awards Received - An Outstanding Teacher Award 2022 - MS.P Anitha



Received the 'Perumaimigu Perasireyar Virudhu' in the Teacher's Day celebration jointly organized by Malar Kannan Publishers and MAM Creations on 24.09.2023 at Prasath Lab Preview Theater, Saligram Chennai.



Biomarkers

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/bmk20>

Cardio-protective effects of *terminalia catappa* leaves and *terminalia chebula* fruit extract in doxorubicin-induced cardiomyopathy in rats

Ramasamy Manikandan, Balamuralikrishnan Balasubramanian, Panneerselvam Punniyakotti, Arumugam Vijaya Anand, Arun Meyyazhagan, Shanmugam Velayuthaprabhu, Rengasamy Lakshminarayanan Rengarajan, Utthapon Issara & Wen-Chao Liu

To cite this article: Ramasamy Manikandan, Balamuralikrishnan Balasubramanian, Panneerselvam Punniyakotti, Arumugam Vijaya Anand, Arun Meyyazhagan, Shanmugam Velayuthaprabhu, Rengasamy Lakshminarayanan Rengarajan, Utthapon Issara & Wen-Chao Liu (2022): Cardio-protective effects of *terminalia catappa* leaves and *terminalia chebula* fruit extract in doxorubicin-induced cardiomyopathy in rats, *Biomarkers*, DOI: 10.1080/1354750X.2022.2064550

To link to this article: <https://doi.org/10.1080/1354750X.2022.2064550>

Published online: 02 May 2022.

Dr.R.Manikandan
SCIE - Impact Factor - 2.66

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A Visit to Pollution Free Environment and solid waste management Ponnampatti on 10.02.2018



Herbs & Soups for healthy life style at SV on 22.06.2019



Production of Vermiwash in Panchayat Union Hall, Ettarai 08.02.2020



Maintenance of Herbal Garden & Competition on Traditional Herbal Food Practices at Santhanam Vidhyalaya on 30.06.2018



Awareness Programme on Menstrual Health and Hygiene Management for Women at Keezhapathai, Ettarai Village, on 19.02.2021

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Instruments



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Best Practices

Regular Internships in Reputed Institutes
Clinical Laboratories
CECRI, CLRI Research Institutes



Internship

Personalized Hands on Training and Skill,
Development extended in clinical
Procedures



Best
Laboratory
Practices

Encourage Students to publish in
Peer Reviewed, Scopus indexed, UGC Care
Journals
Book Chapter Writing



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Future Plan



To upgrade into research department



To start MoU with reputed companies



Establishment of Molecular lab



Thank You All....



December 20, 2023

SWOC



Strength

- Qualified and Experienced Faculty
- Well Equipped Lab
- Passionate Students

Limited Awareness on the Scope of Biochemistry as a Career in Schools.



Weakness



Opportunities

Internship in Reputed Companies

Filling the gaps to prepare students for Industries



Challenges