

Name : Dr. M. Poongothai

Designation : Professor

Department : Biotechnology

Qualification : M.Sc., Ph.D., PGDBI.,

Experience : Teaching: 12 Years 9 months Industry: - Research: 17 Years 9 months

Area of Specialization(s) : Plant Pathology, Molecular Biology, Bioprospecting

Email (Official ID) : drpoongothai@drngpasc.ac.in



Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.,	Biotechnology (Plant Pathology)	Sugarcane Breeding Institute (ICAR), Coimbatore	2011
M.Sc.,	Biotechnology	Bharathiar University, Coimbatore	2004
B.Sc.,	Biotechnology and Biochemistry	Avinashilingam University, Coimbatore	2002

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
Certification	Power User	IBM	2001
Online Certificate	Easy Anatomy and Physiology	Udemy	2016
Online Certificate	Stress Management	NPTEL	2018
Online Certificate	First aid training	Cursa	2020
Online Certificate	Human Behaviour	NPTEL	2020
Online Certificate	How to conduct evidence-based research	Researcher Academy (Elsevier)	2020
Online Certificate	Digital Teaching Techniques	ICT Academy	2020
Online Certificate	Nanotechnology in Agriculture	NPTEL	2020
Online Certificate	Psychology of Everyday	NPTEL	2022

Online Certificate	Molecular Basis of Inheritance	Infosys Springboard	2022
PG Diploma	PG Diploma in Bioinformatics	Bharathiar University	2024

Grants Received

Project Title	Agency	Designation	Amount	Date	Status
ICAR Network project on Wilt of Crops	ICAR (Sugarcane Breeding Institute)	Senior Research Fellow	Rs. 8000 + 15% HRA (I& II Year), Rs. 9000 + 15%HRA (III Year)	2005-2008	Completed
Seed Money for Lab on Project entitled – Effectiveness of Natural pigment as organic dye	Dr. N.G.P Arts and Science College, Coimbatore	Principal Investigator	Rs. 5,000	14.12.2016	Completed
Seed Money for Lab on Project entitled - Antibacterial, Anti acne activity and vitamin B6 content in <i>Caesalpinia sappan</i> L. and <i>Cinnamomum verum</i> J. Presl – A comparison	Dr. N.G.P Arts and Science College, Coimbatore	Principal Investigator	Rs. 5,000	10.01.2018	Completed
Seed Money for Lab on Project entitled – Domestic waste to industrial gold	Dr. N.G.P Arts and Science College, Coimbatore	Principal Investigator	Rs. 5,000	05.10.2021	Completed

Research Guidance

	No. of Scholars	
	Completed	Pursuing
Ph. D.	1	2

Ph. D Projects Guided

1. Extraction and Characterization of protease from the shells of *Cocos nucifera* and its application in Food and Detergent Industry

PG Projects Guided

1. Molecular variation and Antimicrobial activity of different varieties of Ginger (*Zingiber officinale*), Doniya Mathew, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2012
2. Isolation, Production, Characterization and application of Protease Enzyme from Fish waste, Kavitha. R, II M.Sc Biotechnology, Maharaja Co-Education Arts and Science College, Perundurai, April 2014
3. Antimicrobial activity of Orange peels, Yesodha, II M.Sc Biotechnology, Maharaja Co-Education Arts and Science College, Perundurai, April 2014
4. Cultural Diversity of *Streptomyces* sp. isolated from different soil samples, Narmada. M, II M.Sc Biotechnology, Nandha Arts and Science College, Erode-52, April 2015
5. Natural Dyeing in Textile using different Floral extracts, Palanisamy. R, II M.Sc Biotechnology, Nandha Arts and Science College, Erode-52, April 2015
6. Effectiveness of Natural Pigment as Organic Dye, Anaswara. C.K, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2017
7. Antibacterial, Antiacne activity and Vitamin B6 content in *Caesalpinia sappan* L. and *Cinnamomum verum* J. Presl – A comparison, Madhubala. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2018
8. Synthesis of silver nanoparticles using *Phyllanthus niruri* and its antibacterial activity, Mahesh Kumar. E, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2018
9. Extraction and purification of papain enzyme from papaya seeds, Priyavadhana. K, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2019
10. Characterization of protein present in the eggshell of *Periplanta americana* and *Supella longipalpa*, Santhiya. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2019
11. Production of Biofertilizer enriched with Egg Shell powder nutrients and Cocopeat for the effective growth of plants, Vignesh. M, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
12. Formulation of Mosquito repellent cream using Herbal plant extracts, Dhananandhini. M, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
13. Development of Anticariogenic Toothpaste from the extract of *Calotropis gigantea* (Linn.), Kavya. N, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
14. Bioplastic production from peduncle and peel of *Musa paradisiaca* – An ecofriendly approach, Shrirakshaya. S.S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
15. Isolation and Purification of Food Colourant from fruits of *Solanum americanum*, Rathika. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020

16. Extraction of Natural Dye from Green Tea waste, Pomegranate Peel and Eucalyptus bark and its Antibacterial Activity, Athira. K.P, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
17. Extraction and Antibacterial activity of Tannin from Indian traditional Medicine *Coccinia grandis* Leaf and Fruit Extract, Santhiya. R.A, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
18. Extraction and Antibacterial Activity of Alkaloid from Plant (*Coleus amboinicus*) and Cow Urine – A Novel Approach, Raghavi. K.S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
19. Bioethanol Production from Fruit and Vegetable Wastes using *Saccharomyces cerevisiae*, Iswarya. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
20. Isolation of Endophytic Bacteria from *Psidium guajava*, Hemanth. S.T, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
21. Extraction and Examination of Hemorrhoids (piles) healing compounds from the plant *Abutilon indicum*, Barath. P, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
22. Green synthesis of Silver nanoparticles from *Tridax procumbens* and its application for controlling PTC media contamination, Gowrisankar. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
23. Recovery of Silver from X-Ray Films using Microbial Proteases, Pradosh. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
24. Formulation of Biocontrol Spray for Carrot Common Scab Disease, Selva Kumar. N, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
25. Extraction and Purification of Dietary Protein from Macroalgae and its screening for antibacterial and antioxidant activity, Vetrivel. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
26. Isolation and Characterisation of Amylase from Endophytic Bacteria in *Kalanchoe pinnata*, Mirunyaadevi. M, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
27. Antibacterial Cotton Fabric using Copper Oxide Nanoparticles from *Tribulus terrestris* Plant Extract, Prasath. D, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
28. Molecular Docking Analysis of *Artabotrys hexapetalus* (L.F) Bhandari for Antitumor activity and its Antimicrobial potential, Aswini. R, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2024
29. Phytoremediation of Heavy metals using *Chrysopogon zizanoides*, Dharshini. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2024

30. Isolation and Purification of Pigment from the flower of *Delonix regia*, Rajkumar. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2024
31. Computational Approaches on SARS CoV-2 with various Protease enzymes and Protease inhibitors, Piragalathan. S, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2024
32. Isolation and Purification of Pigment from the fruit of *Basella alba*, Venkatesh. R, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2024
33. Extraction of Calcium Chloride from Eggshells and Implementation as Biofertilizer in Plant Tissue Culture Media and Pots, Monisha. G, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025
34. Synthesis of Bio-Based Plastic using peel and peduncle of *Musa paradisiaca*, washed out water of *Solanum tuberosum*, Janani. E.P, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025
35. Immobilisation of protease enzyme extracted from *Cocos nucifera* shells and a comparative study on its stability, Amisha. M, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025
36. Betacyanin extraction from *Gomphrena globosa* and application as natural colourant, Arulraj. P.P, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025
37. Nano-curcumin impregnated wet tissue paper to control Acne Bacteria, Kaviya Sri. M, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025

UG Projects Guided

1. *Tetraselmis indica* Mediated Green Synthesis of Zinc Oxide (ZnO) Nanoparticles and Evaluating its Antibacterial, Antioxidant, and Hemolytic Activity, Oviyasri. B, Gopi Shankar, Punitha Kumaresan, Karthick. S, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2019
2. *Trichoderma* as a biocontrol agent for sooty mould disease in coconut tree, Anitha. R, Harshaprabha. K.S, Manju. A, Elakiya. T.S, Ragul. G, Madhumitha. R, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
3. Antibacterial activity of Silver Nanoparticles produced from *Codium tomentosum*, Tharini. K, Keerthana. V, Kiruthika. T.V, Joy Augusta christy. S, Kalaivani. C, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020
4. Preparation of Medicinal (Skin Care) Soap using *Ageratum conyzoides* oil, Ramya. S, Ragul. G, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2020

5. Isolation of Amylase from Endophytic Bacteria, Anfas Hamim, Vetri. S, Lathika. K, Keerthiga. S, Monisha. A, Prithi. J, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
6. Extraction and Isolation of Protease Enzyme from Coconut Shell, Keerthika. E, Kiruba. M, Lakshmi Sneha. D, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
7. Isolation of Collagen from Marine Fish – *Stolephorus indicus*, Krishna. P, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2021
8. Extraction of Polyphenol from *Musa paradisiaca*, Ravikumar. B, Rebecca. A, Reshma. V, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
9. A Choice of Solvent for Extraction of Flavonoids from *Tridax procumbens*; Wound Healing Ointment from *Tridax procumbens*, Ravindra. D, Samyuktha. A, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
10. Identification of Flavanoids from *Acalypha indica*; Wound Healing Ointment from *Acalypha indica*, Saranya. R, Sarathy. S, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2022
11. Production of Bioplastic from Banana Peel, Deepiga. S, Keerthana. V, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
12. Isolation and Purification of Food Colourant from fruits of *Basella alba*, Keerthiga. K, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
13. Extraction of Anthocyanin pigment from Chrysanthemum for natural food colorant, Divya. S, Kaushika. U, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
14. Evaluation of Phytochemicals from the dried leaves of *Abutilon indicum*, Gobika. V, Vishwa. M, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
15. Formulation and Evaluation of Antidandruff Hair gel from *Punica granatum* peel extract, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, May 2023
16. Characterization of *Enterobacteriaceae* and their biofilm forming potential from spoiled *Citrus Limon*, Aswiga. P, Dhanaraj. T, Karthik. J, Madhan Babu. C, Praveen. K, Sherin. P and Srinithi. G, III B.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025

Mentees facilitated for Project

1. Ganeeshka, II M.Sc Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, April 2025 – Anti-cancer evaluation of natural compounds isolated from *Grevillea robusta* for treating Breast Cancer under the guidance of Dr. Boobalan Gopu, Scientist, Pharmacology Division, Indian Institute of Integrative Medicine, Jammu

Research Publications (Indexed)

1. Viswanathan, R., Balamuralikrishnan, M. and Poongothai, M., **Detection of Phytoplasmas causing Grassy Shoot Disease in Sugarcane by PCR Technique**, Sugar Tech, Vol. 7, No. 2&3, pp. 71-73, June 2005, ISSN: 0972-1525, (Indexed in Scopus, Google Scholar, EBSCO Discovery Service).
2. Viswanathan, R., Malathi, P., Ramesh Sundar, A., Poongothai, M. and Singh, N., **Current status of sugarcane wilt in India**, Sugar Cane International, Vol. 24, No. 4, pp. 2-7, July - August 2006, ISSN: 0265-7406, (Indexed in Excellence Research Australia).
3. Malathi, P., Viswanathan, R., Ramesh Sundar, A., Prakasam, N., Padmanaban, P., Jothi, R., Renuka Devi, S.R. and Poongothai, M., **Variability among *Colletotrichum falcatum* pathotypes used for screening red rot resistance in sugarcane**, Sugarcane International, Vol. 28, No. 2, pp. 47-52, March – April 2010, ISSN: 0265-7406, (Indexed in Excellence Research Australia).
4. Viswanathan, R., Poongothai, M. and Malathi, P., **Pathogenic and Molecular confirmation of *Fusarium sacchari* causing wilt in sugarcane**, Sugar Tech, Vol. 13, pp. 68-76, January – March 2011, ISSN: 0972-1525, (Indexed in Scopus, Google Scholar, EBSCO Discovery Service).
5. Viswanathan, R., Poongothai, M. and Malathi, P. and Ramesh Sundar, A., **Sugarcane Wilt: New Insights into Pathogen Identity, Variability and Pathogenicity**, Functional Plant Science and Biotechnology, Global Science Books, Vol. 6, No. 2, pp.30-39, 2012, ISSN: 1749-0472
6. Poongothai, M., Viswanathan, R., Malathi, P. and Ramesh Sundar, A., ***Fusarium sacchari* causing sugarcane wilt: Variation in morphological characteristics of the pathogen**, International Sugar Journal, pp. 848-857, December 2013, ISSN: 0020-8841, (Indexed in Scopus, SCIE).
7. Poongothai, M., Viswanathan, R., Malathi, P. and Ramesh Sundar, A., **Sugarcane Wilt: Pathogen Recovery from Different Tissues and Variation in Cultural Characters**, Sugar Tech, Vol. 16, pp. 50-66, January – March 2014, ISSN: 0972-1525, (Indexed in Scopus, Google Scholar, EBSCO Discovery Service).

8. Viswanathan, R., Poongothai, M., Malathi, P. and Naveen Prasanth, C., **Sugarcane wilt: Simulation of pathogenicity through different methods and environments**, International Sugar Journal, pp. 194-201, March 2015, ISSN: 0020-8841, (Indexed in Scopus, SCIE).
9. Poongothai, M., **Diversity of Fusarium spp. associated with sugarcane wilt**, Indian Journal of Science, Vol. 15, No. 47, pp. 149-163, April 2015, ISSN: 2319-7730.
10. Poongothai, M., Viswanathan, R., Malathi, P., Ramesh Sundar, A., Naveen Prasanth, C. and Balaji, C.G., **Genetic relatedness among Fusarium populations associated with sugarcane wilt in India: bridging molecular variability and phylogenetic diversity**, Journal of Sugarcane Research, Journal of Sugarcane Research, Vol. 5, No. 1, pp.33-48, June 2015, ISSN: 2249-927, (Indexed in DOAJ).
11. Madhubala, S., Poongothai, M. and Mahesh Kumar, E., **Antibacterial and anti acne activity of *Caesalpinia sappan* L. and *Cinnamomum verum* J. Presl – A comparison**, International Journal of Advanced Research in Biological Sciences, Vol. 5, No. 4, pp. 118-122, April 2018, ISSN: 2348-8069, (Indexed in Google Scholar, IndianScience, Altavista).
12. Daranipriya, P., Shanmugavadivu, M. and Poongothai, M., ***Bacillus anthracis* mediated saccharification of Groundnut shell for ethanol production**, International Journal of Plant, Animal and Environmental Science, Vol. 9, No. 3, pp. 190-199, September 2019, ISSN: 2231-4490, (Indexed in Google Scholar, ResearchGate, Index Copernicus).
13. Shrirakshaya, S. S., Vignesh, M., Dhananandhini, M., Kavya, N. and Poongothai, M., **Cellulose and Starch as the Source of Bioplastic**, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 8, No. 6, pp. 562-567, June 2020, ISSN: 2321-9653, (Indexed in Academia.edu, Mendeley, DRJI, Scribd, Google Scholar, Index Copernicus, Issuu, ResearcherID & Research GATE).
14. Hema, S., Nivetha, L. and Poongothai, M., **Biosynthesis of iron nanoparticle by *Pseudomonas* sp. and its plant growth promotion**, Scrutiny International Research Journal of Biological and Environmental Science (SIRJ-BES), Vol. 7, No. 6, pp.1-13, June 2020, ISSN: 2348-4365, (Indexed in Orcid)
15. Hema, S. and Poongothai, M., **Isolation of Siderophore producing bacteria from seaweed (*Solieria robusta*, *Kappaphycus alvarezii*, *Gracilaria edulis*, *Turbinaria ornata*)**, International Journal of Scientific & Engineering Research Vol. 11, No. 8, pp. 1575-1580, August 2020, ISSN 2229-5518 (Indexed in Google Scholar)
16. Gopi Shankar Thirumoorthy, Oviyashri Balasubramaniam, Punitha Kumaresan, Poongothai Muthusamy & Karthik Subramani, ***Tetraselmis indica* Mediated Green Synthesis of Zinc Oxide**

- (ZnO) Nanoparticles and Evaluating Its Antibacterial, Antioxidant, and Hemolytic Activity**, BioNanoScience, Vol. 11, No. 4, pp. 172–181, January 2021. (Indexed in Scopus, Web of Science)
17. Hema, S. and Poongothai, M., **A Review on Protease – A Key enzyme of Multifold Functionalities**, Gradiva Review Journal, Vol. 8, No. 10, pp. 742-753, October 2022, ISSN: 0363-8057 (Indexed in Google Scholar)
 18. Deepa Onnarakatt, Krishna Vignesh Lakshmanan, DR. A. Mahalakshmi Priya and Dr. M. Poongothai, **Impact of Seminal components on seminal quality**, European Chemical Bulletin, Vol. 12, No. 1, pp. 1552-1560, April 2023, ISSN: 2063-5346 (Indexed in SciFinder, DOAJ)
 19. Hema, S. and Poongothai, M., **Optimization of Temperature for Extraction of Protease from Coconut Shells**, Journal of University of Shanghai for Science and Technology, Vol. 26, No. 1, January 2024, ISSN: 1007-6735 (Indexed in Google Scholar, DOAJ)
 20. Hema, S. and Poongothai, M., **Antimicrobial and Cleansing Properties of Protease Enzyme isolated from Coconut shells**, Indian Journal of Natural Sciences, Vol.15, No. 86, October 2024, ISSN: 0976-0997 (Indexed in Additional Web of Science Indexes: Zoological Record)
 21. Aswathy, J.K. and Poongothai, M., **Novel perspectives on quorum quenching properties, antibacterial, antioxidant and phytochemical capabilities of different spices - A systematic review**, International Journal of Science and Research, Vol.14, No. 2, February 2025, ISSN: 2319-7064 (Indexed in Google Scholar, PubMed)

Books

1. Dr. V. Rajendran, Dr. S. Saravanan, Dean – Admin, Dr. M. Poongothai and Mr. K. Jayabalan (Eds), **Blue Book – Laboratory Facilities**, Vol.5, Dr. N.G.P Arts and Science College, Raasi Enterprises, 2019.
2. Dr. V. Rajendran, Dr. S. Balasubramanian, Dean – R & D, Dr. M. Poongothai, Prof. K. Nagalakshmi and Dr. V. Gopalakrishnan (Eds), **Blue Book – Journal Club**, Vol.5, Dr. N.G.P Arts and Science College, Raasi Enterprises, 2019.
3. Dr. P. Deepak and Dr. M. Poongothai, **Genetics and Biochemistry** (Lab Manual for UG Students), Dr. N.G.P Arts and Science College, Raasi Enterprises, 2022, ISBN: 978-81-960021-3-8.
4. Dr. M. Poongothai and Dr. K. Arungandhi, **rDNA, Bioprocess, Plant & Animal Biotechnology** (Lab Manual for UG Students), Dr. N.G.P Arts and Science College, Raasi Enterprises, 2022, ISBN: 978-81-959939-9-4.

5. Dr. M. Poongothai and Dr. S. Saranya, **Immunology and Bioinformatics** (Lab Manual for UG Students), Dr. N.G.P Arts and Science College, Raasi Enterprises, 2023, ISBN: 978-81-963844-4-9.

Book Chapters

1. Dr. Poongothai. M, **Chapter II: Cloning Vectors**, Handbook of Biotechnology, Ms. Ranjani Devi. M, Dr. Jagannathan S, Ms. Muneeswari. K and Ms. Thenmozhi. R (Other Chapter Authors), Mrs. Pushpanjali S (Ed), Ed.1, AIB Saliha Publications, Tamil Nadu, India, pp. 103-222, 2020, ISBN: 978-81-948129-8-2.
2. Poongothai. M, Chidambararajan. P, Mahalakshmi Priya. A and Hema. S, **Biopigments - Aspects of Bioprospecting**, Synthetic Microbial Research- Challenges and Prospects, Dr. R. Bhakayaraj, Dr. D. Arunkumar and Dr. A. Anitha (Eds.) Vol. 1, Ed.1, Darshan Publishers, Nammakal, Tamil Nadu, India, pp.161-182, October 2021, ISBN: 978-81-947071-0-3.
3. Krishnavignesh Lakshmanan, Deepa Onnarakatt, V. M. Thomas, Smisha Sridev, Anuja Gopalakrishnan and Poongothai Muthuswamy, **Sperm Assessment and Processing**, Recent Advances in Biotechnology Series, Advances in Assisted Reproduction Technologies, Islam M. Saadeldin (ed.), Vol. 5, Bentham Science Publishers, Singapore, pp.60-89, 2022, ISBN: 978-981-5051-67-4.
4. Saranya Rajendran, Saranya S, Gopika. V, Vishwa .M, Poongothai Muthusamy, **Identification of Flavonoids and Tannins from *Abutilon indicum***, The Research of Young Minds, Biotechnological Effective Approach in Science and Technology (BEAST), Dr. S. Boobalan Dr. M. Prasanna Rajeshkumar Dr. M. Aarthi (Eds.) Vol. 2, I I P Iterative International Publishers, Chikkamagaluru, Karnataka, pp.112-121, 2023, ISBN: 978-93-5747-793-2.
5. Rahul. R, Antlin Debora. M., M. Poongothai, K. Kalimuthu & Mathur Nadarajan Kathiravan, **Recent Developments in Microbial Exopolysaccharide (mEPS) Production, Engineering and Commercial Applications: An Overview Current Research on Bioprospecting and its Applications**, Current Research on Bioprospecting and its Applications, Dr. S. Senthil Prabhu and Dr. J. Rengaramanujam (Eds), Vol.1, Ed.1, Dr. N.G.P. Arts and Science College, Coimbatore-48, Tamil Nadu, pp.256-270, 2024, ISBN: 978-81-980173-9-0.

Patents

Published

1. Dr. Parameswaran Chidambaranarajan, Dr. Kandasamy Arungandhi, Dr. Mathur Nadarajan Kathiravan, Dr. Arun Palanisamy and Dr. Poongothai Muthuswamy, *In Silico* based analysis of possible side effects of Biomolecules used for treating Blood Clots, RefNo.: 202241011368 A, DOP:11.03.2022
2. Poongothai. M and Shirakshaya. S.S (Inventors), Bio-plastic production from peduncle and peel of *Musa paradisiaca* – An ecofriendly approach, Ref. No.: 202341015884. DOP:13.09.2024
3. Poongothai. M and Hema. S (Inventors), Optimization of Temperature for Extraction of Protease from Coconut Shells (*Cocos nucifera*) and its application in food industry, Ref. No.: 202341015883. DOP:13.09.2024

Granted

1. Dr. M. N. Kathiravan, Dr. P. Arun, Dr. M. Shanmugavadivu, Dr. M. Poongothai, Dr. K. Kalimuthu and Dr. P. Chidambara Rajan (Inventors), AI based Chlorophyll Determination Device in Leaf Tissues, Design No.: 421987-001, DOI: 27.08.2024

Publications in Conference Proceedings

1. R. Viswanathan, M. Poongothai, P. Malathi, A. Ramesh Sundar, M. Scindiya, M.L. Chhabra and C.G. Balaji, **Characterization of intriguing pathogen *Fusarium sacchari* causing wilt in sugarcane**, 36th Annual Conference of ISMPP – 2015, National Symposium on “Challenges and Management Approaches for Crop Diseases of National Importance – Status and Prospects” Souvenir cum Abstracts, TNAU, Coimbatore. and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan, 12-14-Feb-2015. ISBN: 9788192330693, Pg. 49.
2. M. Dhananandhini and M. Poongothai, **Formulation of Mosquito Repellent Cream using Herbal Extracts**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
3. N. Kavya and M. Poongothai, ***Calotropis gigantea* Leaf Extract against Oral Pathogens**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
4. S.S. Shirakshaya and M. Poongothai, **Synthesis of Bioplastic from Banana Waste**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”,

Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.

5. Vignesh Murugasamy and Poongothai Muthuswamy, **Effective Component of Eggshell as Biofertilizer – Calcium Chloride or Calcium Carbonate**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
6. Hema Shanmugasundravadiel and Poongothai Muthuswamy, **Development of Nanoparticle Based Liquid Bio-Inoculant of Siderophore producing Bacteria Associated with seaweed**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
7. Tharini Karthikeyan, Keerthana Vijayakumar, Kiruthika Thiruvenkatachalam, Joy Augusta Christy Solomon, Kalaivani Chinnasamy and Poongothai Muthuswamy, **Biosynthesis of Silver Nanoparticles from Green seaweed**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
8. Keerthana Vijayakumar and Poongothai Muthusamy, **Biosynthesis of Silver Nanoparticles from Fenugreek Leaves (*Trigonella foenum-graccum*) and Analysing Antibacterial Activity**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
9. Kiruthika Venkatachalam and Poongothai Muthusamy, **Green Synthesis of Silver nanoparticles from Cynodon dactylon leaf extract**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.
10. Tharini Karthikeyan and Poongothai Muthusamy, **Biosynthesis of Silver Nanoparticles using Henna (*Lawsonia inermis*) Leaves and Evaluation of their Antibacterial Activity**, Souvenir - National Conference on “Futuristic Approaches in Transformation of Bioscience Research”, Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 6-7 Mar 2020, ISBN: 978-81-943062-7-6.

11. Saranya Rajendrran, Dharshini Sureshkumar and Poongothai Muthusamy, **Identification of Flavonoids from *Acalypha indica***, National Conference on “Harnessing Biology for Sustainable Development”, PG and Research Department of Zoology - Proceeding, Nirmala College for Women, Coimbatore, 16-17 Feb 2023, ISBN: 97893-5777-1245.
12. Aswini Ramamoorthi and Poongothai M, **The Production of Biogas from Rumen Content and Food Waste – a review**, Proceedings of National Conference on Interdisciplinary approaches on Dynamics of Bioscience Research (IADBR 2023), Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 28 Mar 2023, ISBN: 978-81-962322-7-6.
13. Samyuktha A, Dhivya B and Poongothai M, **Identification and purification of Flavonoids from *Tridax procumbens***, Proceedings of National Conference on Interdisciplinary approaches on Dynamics of Bioscience Research (IADBR 2023), Faculty of Biosciences, Dr.N.G.P Arts and Science College, Coimbatore, 28 Mar 2023, ISBN: 978-81-962322-7-6.

Presentations in Conference

1. **Transgenesis**, Bionneium 2000, Biochemistry association 1999-2000, Kongunadu College of Arts and Science, Coimbatore, 29 Feb 2000.
2. **The Silent Information Regulator 2A novel deacetylase**, National Seminar on Current Trends in Biological Sciences, Department of Biotechnology and Biochemistry, Avinashilingam Deemed University, Coimbatore, 12-13 Dec 2002.
3. **Morphological Characterisation of Fusarium Wilt Fungi**, National Conference on “Advanced Trends in Biotechnology”, MARINA 07, Department of Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, 2-3 Feb 2007.
4. **Secondary Metabolites in Fusarium**, National Conference on “Advanced Trends in Biotechnology”, MARINA 08, Department of Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, 19-20 Dec 2008.
5. **Sugarcane Wilt**, III Louis Pasteur Memorial National Symposium on “Communicable Diseases and its control measures”, Department of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore, 4-5 Aug 2010.
6. **Sugarcane Wilt – Fusarium sp. As Pathogen and its variation**, National Conference on “Recent Trends in Biotechnology”, MARINA 10, Department of Biotechnology, Dr. N.G.P Arts and Science College, Coimbatore, 30 Sep-1 Oct 2010.

7. **Education policies for upliftment of Student Skills**, Two day State Level Conference on “Achieving Academic Excellence through IQAC”, Dr. N.G.P. Arts and Science College, Coimbatore, 9-10 Dec 2011.
8. **Comparative Antimicrobial activity of Crude Polysaccharides and flavonoids from *Zingiber officinale***, National Level Conference on “Perspectives of Biotechnology for Healthcare Management” (MARINA’11), Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 29-30 Dec 2011.
9. **Molecular characterization of Sugarcane wilt pathogen**, National Level Seminar on “Current Trends in Microbiology Research”, Department of Microbiology, Sree Amman Arts and Science College, Chittode, Erode, 28 Oct 2014.
10. **Natural dyeing in Textile using different floral extracts**, 7th National Conference on “Biotechnology-Present and Future for Sustainable Healthcare Development (MARINA’14)”, Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 29-30 Dec 2014.
11. **Genetic diversity of *Fusarium* populations causing Sugarcane Wilt**, International Conference on “Recent advances in Bionanoscience and Technology”, Department of Biosciences, Hindusthan College of Arts and Science, Coimbatore, 25-26 Feb 2015.
12. **Biopigments – Natural Source**, National Seminar on “Biodiversity Products and Industrial Application”, Centre for Biodiversity and Forest Studies, Periyar University, Salem, 28-29 Sep 2015.
13. **Textile Dyes – Natural Source**, National Level Seminar on “Frontier Research in Applied Biology & Environmental Sciences”, Department of Biochemistry, King Nandhivarman College of Arts & Science, Thiruvannamalai, 30 Jan 2016.
14. **Effectiveness of Natural products as Organic dyes**, International Conference on “Frontiers in Biotechnology”, Department of Biotechnology, Nandha Arts and Science College, Erode, 03 Feb 2017.
15. **Papaya Seed – a source of papain enzyme**, International Symposium on “Bioscience Research for Present and Future (Biomillennium’17)”, Department of Biotechnology, Vivekanandha College of Arts and Sciences for Women, 7-8 Mar 2017.
16. **Effectiveness of Natural pigment as organic dye**, International Symposium on “Bioscience Research for Present and Future (Biomillennium’17)”, Department of Biotechnology, Vivekanandha College of Arts and Sciences for Women, 7-8 Mar 2017.

17. **Osteomyelitis: an overview of Antimicrobial therapy**, National seminar on “Indigenous herbs and bone health”, Department of Biochemistry and Bioinformatics, Karpagam Academy of Higher Education, Coimbatore, 21-22 Jun 2017.
18. **Antimicrobial, Antiacne and flavonoid content of *Caesalpinia sapan***, National Seminar on “Challenges and Advances in Microbiology (CAM-2018)”, Department of Microbiology, Faculty of Science, Annamalai University, 1-2 Feb 2018.
19. **Transgenesis**, State Level seminar on “Current Strategies in Forest Resources Management”, Department of Zoology, Virudhunagar Hindu Nadars’ Senthikumara Nadar College, Virudhunagar, 16 Feb 2018.
20. **Papaya seeds - a source of papain enzymes**, National Seminar cum Workshop on “Innovations and implementation of Modern Technologies in Agriculture & Horticulture”, PG and Research Department of Biotechnology, Selvamm Arts and Science College, Namakkal, 22-24 Nov 18.
21. **Bioplastic from Biowaste**, 6th International Conference on “Bioscience towards a sustainable future”, Department of Biotechnology, K.S.G. College of Arts and Science, Coimbatore, 12 Feb 20.
22. **Evaluation of workplace heat stress impact on male infertility**, UGC sponsored Two day National Conference on “Environment and Biosciences”, School of Biosciences, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, 20-21 Feb 20.
23. **Optimization of Temperature for Extraction of Protease from Coconut Shells**, 8th International Conference on “Recent Advances in Bioscience”, PG Department of Biotechnology, K.S.G College of Arts and Science, Coimbatore, 28 Oct 2022.
24. **Phytoremedial perspective for removal of Heavy Metals in Waste water using Water Hyacinth**, National Conference on “Interdisciplinary Approaches on Dynamics of Bioscience Research”, Faculty of Bioscience, Dr. N.G.P Arts and Science College, Coimbatore, 28 Mar 2023.
25. **Implementation Strategies, Roadmap and Key Challenges of Multidisciplinary Education and Flexibility in Curriculum Design as per NEP 2020**, One Day National Seminar on “Impact of New Education Policy among Future Generation”, Post Graduate Department of Commerce with Computer Applications, Nallamuthu Gounder Mahalingam College, Pollachi, 10 Aug 2023.

26. **Magic Mushrooms**, International Conference on “Expedition of Bioprospecting and its Emerging Trends” (ICEBET-2023), Department of Biotechnology, Dr.N.G.P Arts and Science College, Coimbatore, 30 Sep 2023.
27. **Traditional Methods of Food Preservation – a review**, ICSSR sponsored National Seminar on Integration of Traditional Indian Knowledge System into Modern Higher Education: NEP Perspective (ICSSRIKS2024), IQAC, Dr.N.G.P Arts and Science College, Coimbatore, 4-5 Jul 2024.
28. **Traditional Knowledge of Ayurveda and Yoga in Healthcare**, ICSSR sponsored National Seminar on Integration of Traditional Indian Knowledge System into Modern Higher Education: NEP Perspective (ICSSRIKS2024), IQAC, Dr.N.G.P Arts and Science College, Coimbatore, 4-5 Jul 2024.
29. **Food Safety, Quality and Emerging Technologies in Sea Food**, TNSCST sponsored National Level Conference on “Probiotics, Prebiotics, Postbiotics and Biofortification: The Future of Human Health and Nutrition”, Centre of Excellence in Life Sciences, Department of Biotechnology, PSGR Krishnammal College for Women, Coimbatore, 12-13 Dec 2024.

Participation in Conference

1. **National Symposium on “Frontiers in Biotechnology”**, Department of Biotechnology, Bharathiar University, Coimbatore, 27-28 Oct 2004.
2. **IV Louis Pasteur Memorial National Symposium on “Biopharmaceuticals-their application in disease prevention and Health promotion-NSBP 2011”**, Department of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore, 4-5 Aug 2011.
3. **Popular Lectures on “Current Trends in Biotechnology and Bioinformatics”**, Research Department of Botany, Nirmala College for Women (Autonomous), 2 Mar 2012.
4. **National Conference on “Emerging Education Models for 21st Century Learner”**, Association of Principals of Colleges of Bharathiar University and UGC Human Resource Development Centre, Bharathiar University, Coimbatore, 1 Aug 2015.
5. **Third National Conference on Biodiversity Conservation**, PG and Research Department of Biotechnology, Sree Narayana Guru College, Coimbatore, 30 Sep 2015.
6. **International Symposium on “Public Health Emergency and Disaster Management”**, PG and Research Department of Biotechnology and Microbiology, Hindusthan College of Arts and Science, Coimbatore, 3 Nov 2015.

7. **DBT and ICMR sponsored National Conference on “Transitional and Translational Scenarios in Biological Sciences (3I’s- *In vitro* to *In vivo* to *In silico*)”**, Department of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore, 9-10 Sep 2016.
8. **DBT sponsored National Conference on “Changing Disease Profile: Challenges facing basic and Translational research in India”**, Department of Biochemistry, Dr. N.G.P. Arts and Science College, Coimbatore, 5-6 Oct 2016.
9. **50th EarthDay indexed IGEN First 13.36 Hrs Virtual Conference “ENERGATHON 2020”**, The Institution of Green Engineers (IGEN), 2 May 2020.
10. **International Webinar Conference on “Facts and Perspectives of Integrative Biology”**, Department of Biotechnology, Sri Ramakrishna College of Arts and Science, Coimbatore, 2-4 Jun 2020.
11. **Virtual International Conference on “Innovation in Science – A Global Perspective”**, BIOSUMMIT 2021, Departments of Biotechnology, Microbiology and Food Processing Technology, Hindusthan College of Arts and Science, Coimbatore, 3 Dec 2021.
12. **XIV Louis Pasteur Memorial International Symposium on “Role of Multidisciplinary Research in Microbiology for Sustainable Development (RMSD-2023)”**, Department of Microbiology (under DBT STAR Scheme), Dr. N.G.P. Arts and Science College, Coimbatore, 9-10 Mar 2023.

Participation in Seminars

1. **National level seminar on “Bioscientific Research and its Sustainable Development”**, Department of Biotechnology and Microbiology, Maharaja Co-education Arts and Science College, Perundurai, 31 Jan 2015.
2. **International Seminar on “Perspectives of Nanotechnology in Medical Applications”**, Department of Microbiology (under DBT STAR Scheme), Dr. N.G.P. Arts and Science College, Coimbatore, 27 Nov 2021.

Participation in Workshop

1. Workshop on **Student and Environment**, conducted by Sri M. B. Nirmal, EXNORA Innovators’ Club, Coimbatore, 24 Nov 1995.
2. **Internship Training** at Fredrick Institute of Plant Protection and Toxicology (FIPPAT), Padappai, Kancheepuram, May-Jun 2001.

3. Two days Workshop on “**Molecular Immunotechniques**”, Department of Biotechnology, Dr.N.G.P Arts and Science College, Coimbatore, 19-20 Jul 2006.
4. Workshop on “**Analysis of Spectral Data**”, Center for Research, Dr. N.G.P. Arts and Science College, Coimbatore, 30 Jan 2017.
5. **Science Academies’ Lecture Workshop on “Mathematical Biology**”, Department of Biochemistry and Department of Mathematics (CA), Dr.N.G.P. Arts and Science College, Coimbatore, 7-8 Dec 2017.
6. **Science Academies’ Lecture Workshop on “Recent trends in Microbiology and Biotechnology**”, Department of Biotechnology, Karpagam Academy of Higher education, Coimbatore, 27-28 Jun 2018.
7. **Science Academies’ Lecture workshop on “Recent Advances in Biochemistry**”, Department of Biochemistry, Dr.N.G.P. Arts and Science College, Coimbatore, 10-11 Aug 2018.
8. Two days Workshop on “**Computational Methods in Drug Discovery**”, Department of Pharmacology, JSS College of Pharmacy, Ooty, 28-29 Sep 2018.
9. **International Workshop on “Health Risk Assessment of Nanoparticles**”, Faculty of Basic and Applied Science and Biosciences, Dr. N.G.P. Arts and Science College, Coimbatore, 5-7 Dec 2018.
10. **Animal Tissue Culture Techniques**, DBT STAR College Scheme by Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 30 Mar 2019.
11. **Rural Immersion – Community Engagement**, Mahatma Gandhi National Council of Rural Education (MHRD), Hyderabad in collaboration with NSS Unit, Dr.N.G.P. Arts and Science College, Coimbatore, 21 Sep 2019.
12. “**Production Technology on Mushroom - Antimicrobial Biomolecules for Plant Health**”, Department of Plant Pathology, TNAU, Coimbatore, 1 Oct 2019.
13. **Science Leadership Workshop**, Central University of Punjab, Bathinda, India, 22-28 Jun 2020.
14. Two Days Science Academies’ Lecture Workshop on “**Conservation and Management of Biodiversity in the Light of Global Warming**”, Department of Botany, E.S Arts and Science College (Co-Ed), Villupuram, 2-3 Dec 2021.
15. One Day Online Workshop on “**Intellectual Property Rights (IPR) Patents & Designs Process**” organized under National Intellectual Property Awareness Mission (NIPAM) by Shri Shivaji Education Society, Amravati’s College of Engineering and Technology, Akola in

association with RGNIIPM, Nagpur, Ministry of Commerce & Industry, Government of India, IPR Training Institute, 20 Dec 2021.

16. Workshop on **Techniques in Protein Analysis**, Global Education Society's SciTech Training Centre, Pune, 26 Feb 2023.
17. One Day Workshop on **Virtual Lab** organized by Virtual Lab Nodal Centre, Dr.N.G.P Arts and Science College in collaboration with Amrita Virtual Labs, Amrita Viswa Vidyapeetham, Kollam, 22 Aug 2023.
18. **CIPAM's Workshop on Intellectual Property Rights, (IPR) – 2023**, IPR Cell and IQAC, RVS College of Arts and Science, Sulur, 4-5 Sep 2023.
19. Six Days Workshop on **“Entrepreneurship Essentials – Indian Patent Drafting, Filing Procedures & Copyright Filing for IP Management”**, Centre for Innovation, Incubation & Entrepreneurship & Intellectual Property Rights Cell, PSG College of Arts & Science, 7-9, 15-16 Dec 2023 and 22 Jan 2024.
20. Workshop on **“In silico Prediction of Phytochemical Activities, ADMETox and Molecular Docking Studies”**, Department of Biotechnology (DBT STAR -Status), Dr. N.G.P. Arts and Science College, Coimbatore, 7-9 Oct 2024.

Participation in Faculty Development Programme

1. **NPTEL Online Certification on “Stress Management”**, IIT, Kharagpur, Aug-18 to Sep-18.
2. **Seven days Faculty Development Programme on “Quality Measures in Higher Education”**, FDP Cell, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-18 to 9-Dec-18.
3. **Seven Day FDP on “NAAC Revised Accreditation Frame Work and OBE Assessment Methodology”**, Faculty Development Cell & IQAC, Dr. N.G.P. Arts and Science College, Coimbatore, 27 May – 2 Jun 2019.
4. **Firefox Training**, Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India, Jul 2019.
5. **Tux Typing**, Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India, Jul 2019.
6. **KTtouch Training**, Spoken Tutorial Project, IIT Bombay funded by National Mission on Education through ICT, MHRD, Government of India, Jan 2020
7. **NPTEL Online Certification on “Human Behaviour”**, IIT, Guwahati, Jan-20 to Mar-20.
8. **One week FDP Programme on “Quality Initiatives in Higher Education”**, Dr. N.G.P. Arts and Science College, Coimbatore, 13-Apr-20 to 20-Apr-20.

9. **IIC Online sessions to promote “Innovation, IPR, Entrepreneurship and Start-ups”**, IIC MHRD, New Delhi, 28-Apr-20 to 22-May-20.
10. **One-week online FDP Programme on “Spoken Tutorial Free Open-Source Software”**, Dr. N.G.P. Arts and Science College, Coimbatore, Spoken Tutorial, IIT, Bombay and National Mission on Education through ICT, MHRD, GoI, 04-May-20 to 10-May-20.
11. **Online Course for Aspirants of CSIR-NET in Life Sciences**, PG and Research Department of Zoology, Jamal Mohamed College, Tiruchirappalli, 5-11 May 2020.
12. **Certificate course on “Bionanotechnology”**, Association of Indian Biologists, Chennai, 15-May-20 to 11-Jun-20.
13. **e-Faculty Development Programme cum Workshop on “Waste to Bioenergy”**, Sharda University, Uttar Pradesh and Maharashtra Institute of Technology, Aurangabad, 28-Jun-20 to 04-Jul-20.
14. **One week online Certificate Course on “Digital Teaching Techniques”**, ICT Academy, hosted by Dr.N.G.P Educational Institutions, 10-15 Aug 2020,
15. **Online FDP on “Intellectual Property Rights”**, Department of B.Com (Accounting & Finance) & B.Com (Business Analytics), 19 Aug 2020.
16. **Faculty Development Programme on “Nanotechnology in Agriculture”**, NPTEL-AICTE, Sep-20 to Nov-20.
17. **AICTE sponsored One week Short Term Training Programme on “Practical Approaches for Next Generation Sequencing Technologies and Data Analysis towards Health care”**, Department of Biotechnology, K.S.R College of Technology, Tiruchengode, Namakkal, 4-9 Jan 2021.
18. **Six days FDP on “Research at a glance: Current Protocols”**, Sinhgad Institutions, Vadgaon, 18-Jan-21 to 23-Jan-21.
19. **Two Days Virtual FDP on “Bio-innovation, Patenting and Entrepreneurship Opportunities in Biotechnology for Sustainable Environment”**, Department of Biotechnology, The Oxford College of Engineering, Bommanahalli, Bengaluru, 29-30 Mar 2021.
20. **Five Day Faculty Development Programme on “Impact of Covid on Higher Education and Research Initiatives”**, Sri Venkateshwaraa College of Engineering and Technology, Puducherry, 24-May-21 to 28-May-21.
21. **ATAL online FDP on “Productivity Enhancement through Meditation”**, Jaipur Engineering College and Research Center, Jaipur, 24-28 May 2021.

22. **ATAL online FDP on Recent Trends in Precision Agriculture**, Sant Longowal Institute of engineering and Technology, Longowal, 31-May-21 to 04-Jun-21.
23. **ATAL online FDP on Personal effectiveness**, International Management Institute, Kolkata, 07-Jun-21 to 11-Jun-21.
24. **ATAL online FDP on Green Technology and Sustainable development**, Amity University, Jaipur, 14-Jun-21 to 18-Jun-21.
25. **Seven day online Faculty Development Programme on “Research Methodology and Pedagogy for Tertiary Education”**, IQAC and Center for Faculty Development, Dr. N.G.P. Arts and Science College, Coimbatore, 15-Jun-21 to 21-Jun-21.
26. **ATAL online FDP on Drug Engineering through Bioprospecting**, Dr. N.G.P. Arts and Science College, Coimbatore, 12-Jul-21 to 16-Jul-21.
27. **FDP on How to Open Trading and Demat Account**, Department of Commerce (BPS) and Centre for Faculty Development, Dr. N.G.P. Arts and Science College, Coimbatore, 7 Oct 2021.
28. **FDP on Introduction to Computers**, Dr.N.G.P Arts and Science College with course material provided by Spoken Tutorial Project, IIT Bombay, 4 Aug – 29 Dec 2021.
29. International Short Term Training Programme-4 on **“Methods, Modeling, Data and Tools of Environmental Conservation”**, Raj Rishi Govt. Autonomous College, Alwar, Rajasthan, 1-7 Nov 2022.
30. Seven Days FDP on **“OBE – Road Ahead to Advance Educational Quality and Enhance Global Motility”**, IQAC and CDC, Kongunadu Arts and Science College, 10-17 Nov 2021.
31. **“Ten Days National Level Lecture Series”** on the occasion of Birth Anniversary of Late Shri. Bhikulalji Nabira, PG Department of Chemistry in association with IQAC, Nabira Mahavidyalaya, Katol, 21-30 Jan 2022.
32. Short Term Course entitled **“Characterization of Active Phytochemicals using Modern Techniques**, Department of Biotechnology, FASCM, Karpagam Academy of Higher Education, 14-20 Nov 2022.
33. Three Days Virtual FDP on **“Emerging Technologies for Education and Research”**, Department of CSE, ECE & EEE, Sree Sakthi Engineering College, Coimbatore, 30 Jan – 1 Feb 2023.
34. Six Days FDP on **“Effective Use of MOODLE for NBA & NAAC Accreditation”**, LLAGT, 6-11 Feb 2023.

35. **Kayakalpa Course**, Temple of Consciousness (Arivuthirukoil), Veerampalayam, Coimbatore, affiliated to The World Community Service Centre, Thiruvannamiyur, Chennai, 30 Nov 2024.
36. **One week FDP on “AI Powered Learning: Shaping the Future of Education”**, Department of Computer Science & Applications, Vivekanandha Arts and Science College for Women, Sankagiri, 20-25 Jan 2025.

Conference / Seminar / Workshop Organized

1. Organising Member, National Symposium on Frontiers in Biotechnology, Department of Biotechnology, Bharathiar University, Coimbatore, 27-28 Oct 2004.
2. Organizer, National Level Conference on “Perspectives of Biotechnology for Healthcare Management” MARINA-2011, Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 29-Dec-11 to 30-Dec-11.
3. Co-ordinator, Dr. NGP Endowment Lecture, Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 13 Feb 2012.
4. Organizer, State level intercollegiate meet, BIO GENII’ 14, Department of Biotechnology, Maharaja Co-education Arts and Science College, Perundurai, 22-Jan-14.
5. Organising member, National Seminar on Nanoparticles in Textiles and Health care in the Department of Biotechnology, Nandha Arts and Science College, Erode, 2015
6. Organising Committee member, 9th National Conference on “Genomics and Proteomics in Bioprospecting – Role in Healthcare Development (MARINA’16), Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 21 Dec 2016.
7. Organiser, DST Inspire Internship Science Camp, Dr. N.G.P. Arts and Science College, Coimbatore, 26-Dec-16 to 30-Dec-16.
8. Organizer, Science Academies Lecture Workshop on DNA Technologies in Revisiting Biology, Department of Biochemistry, Dr. N.G.P. Arts and Science College, Coimbatore, 27-Jul-19 to 29-Jul-17.
9. Joint Secretary, 10th National Conference on “Bioprospecting – Indian perspectives, challenges & opportunities (MARINA’17), Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 28 Dec 2017.
10. Organising Committee member, National Workshop on Data Analytics and its applications in Biotechnology (sponsored by DBT, New Delhi), Department of Computer Technology and Department of Biotechnology at Dr. N.G.P. Arts and Science College, Coimbatore, 14-Feb-19 to 15-Feb-19.

11. Organising Committee member, National Seminar on Biodiversity and its Prospecting (NSBP-19) under DBT STAR College Scheme, Department of Microbiology and Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 28-Feb-19.
12. Organising Committee member, 11th National Conference on “Recent trends in Bioprospecting and its challenges” (MARINA’19), Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 16-Oct-19.
13. Organizer, National Symposium on Graduate Research – 20 (NSGR-20), DBT STAR College Scheme, Department of Biochemistry, Biotechnology, Microbiology and Food Science & Nutrition, Dr. N.G.P. Arts and Science College, Coimbatore, 21-22 Feb 2020.
14. Organising Member, National Conference on “Futuristic Approaches in Transformation of Bioscience Research”- (FATBR-2020), Faculty of Biosciences, Dr. N.G.P. Arts and Science College, Coimbatore, 6-7 Mar 2020.
15. Organising Member, International Conference on “Expedition of Bioprospecting and its Emerging Trends” (ICEBET-2023), (MARINA’23), DBT STAR College Status, Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 30 Sep 2023.
16. Organizing Member, International Conference on “Integrating Indian Knowledge Systems (IKS) with Cutting-Edge Biotechnology and Innovative Technologies to achieve Sustainable Development Goals (ICONIKS – BIOTECH 2025)”, DBT STAR College Status, Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, 22 Mar 2025.
17. Department Co ordinator, DBT STAR College Scheme, Department of Biotechnology, Dr.N.G.P. Arts and Science College, Coimbatore, from 2018 to 2023.
18. Department Co ordinator, DBT STAR – Status, Department of Biotechnology, Dr.N.G.P. Arts and Science College, Coimbatore, from Nov 2023 to Jun 2024, May 2025 till date.

Invited Speaker / Session Chair- Conference / Seminar / Workshop

1. Chairperson, Quiz competition - Student Development Programme (SCIFITECH2K15), Department of Biochemistry, Dr. N.G.P. Arts and Science College, Coimbatore
2. Speaker, Soft skill development, Student Induction Programme, Dr.N.G.P. Arts and Science College, Coimbatore, 2019
3. Invited speaker, Biotechnology in India – current scenario, Department of Biotechnology, Dr. R.V. Arts and Science College, Karamadai, 22-Jul-19.
4. Invited speaker, Cancer Day 2020 – I am and I will, Department of Biotechnology, Karpagam academy of Higher Education, Coimbatore, 10-Feb-20.
5. Doctoral Committee member at Dr.G.R.D College of Science, Coimbatore, 2020

6. BoS Member – Consortium Colleges, Sri Ramakrishna College of Arts and Science, Coimbatore, 2020-21
7. Invited Speaker, Food and Mood, Department of Biotechnology, Sree Narayana Guru College, Coimbatore, 28-Jun-21.
8. Chief Guest, Inaugural Function of Science Club, Dr.N.G.P College of Education, Coimbatore, 29 Dec 2021.
9. Judge for Oral Presentation, XIV Louis Pasteur International Symposium on “Role of Multidisciplinary Research in Microbiology for Sustainable Development” (RSMD-2023), Department of Microbiology, Dr.N.G.P. Arts and Science College, Coimbatore, 9-10 Mar 2023.
10. Resource Person, Guest Lecture on “Sustainable Living”, Department of Biotechnology, Nandha Arts and Science College, Erode, 4 Sep 2024.
11. Resource Person, Invited lecture on “Maximizing Impact: A Guide to DBT Star Scheme Programmes and Expenditure”, Bon Secours College for Women, Thanjavur, 5 Sep 2024.
12. Advisory Committee Member for DBT STAR College Scheme, Department of Biotechnology, Bon Secours College, Thanjavur Oct 2024 till date.
13. Chair Person for a Session, XVIII Louis Pasteur National Symposium on “Alternative Medicine for Combating Infectious Diseases” (AMCID-2025), Department of Microbiology, Dr.N.G.P. Arts and Science College, Coimbatore, 28 Feb 2025.

Membership in Professional Bodies

1. Annual Member in Association of Biotechnologists, Coimbatore (CPMB, TNAU) from 2002 - 2003.

Camps Attended

1. Ten Day Special Camp at Bommanampalayam, N.S.S, Avinashilingam University, Coimbatore, 13 – 22 Dec 2000.

Reviewer in Journals

1. Indian Journal of Physiology and Allied Sciences.

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Proficiency holder (Biotechnology)	Avinashilingam University for Women, Coimbatore	2002
Winner	Creative Pitch Deck on Sustainable Agriculture organized by IGEN Nobel Laureate Lecture Series and KPRIET	25-Aug-2020
World Record event Participation	Longest Virtual Event on Vision 2030: Importance of enhancing Life skills for reaching Higher Heights organized by Tamil Nadu Teachers Education University, Karapakkam, Chennai	18-Jun-21 to 20-Jun-21
Achiever in Meritorious Achievements	Achievers Day-2022, Dr.N.G.P Arts and Science College, Coimbatore	2020-21
Best Work Paper Award	Sri Nalla Gounder Research & Innovation Awards, Dr.N.G.P Arts and Science College, Coimbatore	2022-23
Best Professor – Research Contribution Award	Sri Nalla Gounder Research & Innovation Awards, Dr.N.G.P Arts and Science College, Coimbatore	2022-23