FACULTY PROFILE

1. Name : Dr. R. Nathiya

2. Designation : Assistant Professor

3. Qualification : M.Sc., M.Phil., Ph. D.

4. Mobile number : +91 9787498587

5. E-mail id : nathiyamb@auxiliumcollege.edu.in / nathiya85@gmail.com

6. Teaching Experience : 5 years and 5 months (as on 29.09.2025)

7. Area of specialization : Clinical microbiology, Endophytes, Molecular biology,

Nanoemulsion formulation, animal handling and experimentation.

8. Research Experience and Guidance : 12.8 years of research experience

9. No. of Papers Published : 09 Research Papers published, 02 gene sequence published in

NCBI (GenBank accession number: KX499521.1, KX345373.2)

10. No. of Papers Presented in the International Conferences: 7

11. No. of Seminars/Workshops/Conferences organized : 1

12. No. of Books Published/Edited/Co-edited : 1 book chapter published

13. Current Responsibilities : NIRF, Association activities

14. Honors & awards received (Descriptive) : Secured 2nd prize for best poster presentation in National seminar

on "Mycotic Diseases in the 21st Century" under the topic

Nanotechnology at Sri Sankara Arts and Science College, Kanchipuram

Research Award received 2015, 2016, 2017 and 2018 at VIT for

contribution to research

PUBLICATIONS

Publications in Journals

- Nathiya R, Gayathri Mahalingam, Indu Purushothaman, Vidya A and Sangeetha K. 'Evaluation of in vitro antibacterial activity of Anticonvulsant drugs'. Journal of Pharma Research, ISSN: 2319-5622, Jan-2015, Vol. 4, issue 1, pp 13-15
- Gayathri GA, Mahalingam G, **Nathiya R**. 'Quantitative phytochemical analysis, *in vitro* reducing power and anti-oxidant activity of methanol leaf extract of *Acanthus ilicifolius*'. Int J Pharmacogn Phytochem Res, ISSN: 2319-5622, Feb-2015, Vol. 7, Issue 1, pp 181-186
- Nathiya R, Gayathri M. 'Evaluation of Antidiabetic Effect of Polyherbal Formulations in STZ-Induced Mice'. Int J Pharm Sci Rev Res, ISSN 0976 044X, Feb-2016, Vol. 37, issue 2, pp 93–97
- **Nathiya R**, Gayathri Mahalingam. 'Secondary metabolites from mangrove endophytes: their significance against carbapenemase resistant Enterobacteriaceae' a review. Int J Pharm Bio Sci, ISSN: 0975-6299, Jul-2016, Vol. 7, issue 3, pp 384 391
- Tiwari P, **Nathiya R**, Mahalingam G. 'Antidiabetic activity of endophytic fungi isolated from *Ficus religiosa*'. Asian J Pharm Clin Res, ISSN 2455-3891, Jan-2017, Vol. 10, issue 4, pp. 59-61
- Nathiya R, Mahalingam G. 'Screening and isolation of therapeutic agent for type 2 diabetes mellitus from endophytic fungal metabolites of mangrove plants'. Res J Biotechnol, ISSN: 2278 4535, Oct-2018, Vol. 13, issue 10, pp 73-86
- Ranganathan N, Mahalingam G. 2019. 'Secondary metabolite as therapeutic agent from endophytic fungi Alternaria longipes strain VITN14G of mangrove plant *Avicennia officinalis*'. J Cell Biochem, Jan-2019, ISSN:1097-4644, Vol. 120, issue 3, pp 4021–4031. (Impact factor: 3.448)
- Ranganathan N, Mahalingam G. '2,4,6-Triphenylaniline nanoemulsion formulation, optimization, and its application in type 2 diabetes mellitus'. J Cell Physiol ISSN: 1097-4652, Apr-2019, Vol. 234, issue 12, pp 22505–22516. (Impact factor: 4.522)
- Ranganathan N, Mahalingam G. 'Validation of the antidiabetic potential of isolated and nanoemulsified endophytic fungal metabolite 2,

4, 6-triphenylaniline through AMPK activation pathway'. J Mol Liq, ISSN 0167-7322, Jul-2020, Elsevier B.V. 316, pp 113836. (Impact factor: 5.065)

Publication accepted in Journals

• Nathiya R, Avipsha Sarkar, Vickram A S, Saravanan A, Hitesh Chopra. 'Targeting lung cancer: Signalling or Metabolism?' *Journal of current pharmaceutical design.* (Impact factor 2.8)

Book Chapter Published

• Nathiya, R. and Mahalingam, G., Role of mangrove endophytic fungi in diabetes mellitus - *Biotechnological Utilization of Mangrove Resources* - ISBN 9780128195321 - 2020 - (pp. 435-460). Academic Press - https://doi.org/10.1016/B978-0-12-819532-1.00021-4

Book Chapters Accepted for Publications

- Nathiya Ranganathan, Geetha J and Sridevi B. Innovative treatment strategies for arthropods borne viruses. In Recent advances in Microbial sciences. JPS scientific publications, India
- Nathiya Ranganathan, Sridevi B and Geetha J. Role of biofilm in antimicrobial resistance and its therapeutic approach. In Recent advances in Microbial sciences. JPS scientific publications, India.
- Nathiya Ranganathan, Geetha J and Sridevi B. Microbial derived nanocomposites and nanoparticles: Innovative solutions for sustainable waste management. In Sustainable Waste Management: A Green Approach. Apple Academic Press
- Nathiya Ranganathan, Geetha J and Sridevi B. Advances in Bacterial Bioremediation of Polycyclic Aromatic Hydrocarbons (PAHs): Global case studies and Techniques. In Recent advances in Polycyclic Aromatic Hydrocarbons: Contamination, Toxicity, and Bioremediation Approaches. Apple Academic Press
- Nathiya Ranganathan and Geetha J. An innovative Nanoparticle approaches for Lung cancer: Diagnostics and Therapeutic applications. In Nanoengineered therapeutics for lung cancer

FDP's/ Seminars/ Workshops/Webinars

FDP

- 26.12.2024 to 31.12.2024 5 days online national level faculty development program on "Beyond boundaries: Driving innovations in research" organized by Auxilium College (Autonomous), Vellore
- **09.04.2024 to 16.04.2024 7 days online International faculty development program** on "Advanced techniques in research methodology" organized by Department of Microbiology, Sacred Heart College (Autonomous), Tirupattur, Vellore
- 09.10.2023 to 08.1.2023 Four weeks online international faculty development programme on Medically important bacteria Phase I) organized by PG and Research Department of Commerce, Patrician College of Arts & Science, Chennai
- 23.10.2024 to 27.10.2024 5 days online FDP program on Research & Soft skill development organized by the council for science and development & BPT Publications
- 19.01.2015 One day Faculty Development Programme (FDP) on "Emotions and Behavior: Are they written in our genes? An introduction to genomics of human psychology" at Academic staff college, Vellore Institute of Technology, Vellore
- 12.02.2015 One day Faculty Development Programme (FDP) on "Edmodo" at Academic staff college, Vellore Institute of Technology, Vellore
- 01.07.2015 to 02.07.2015 Two days Faculty Development Programme (FDP) on "Statistics and its application using SPSS software" at Academic staff college, Vellore Institute of Technology, Vellore
- 07.07.2015 One day Faculty Development Programme (FDP) on "Usage of Apps in the classroom" at Academic staff college, Vellore Institute of Technology, Vellore

Online Courses attended

• 21.07.2025 to 25.08.2025 - Five weeks online course Bhanaras Hindu University (BHU), MOOCs on "Life Skills" - organized by IIT Khanpur

• 15.10.2024 to 19.11.2024 - Five weeks online course Bhanaras Hindu University (BHU), MOOCs on "Entrepreneurship Development" - by IIT Khanpur

Lectures given

• 29.9.2024 - Given invited talk on Ph.D. Webinar series organized by Microbiological Society of India (MBSI), Mumbai

Workshop attended

• 01.12.2024 - 3 hours' workshop on "Artificial Intelligence Tools" organized by IGNITE Life Skill Academy, Sacred Heart College (Autonomous), Kochi

Seminar / Conference presentations

- R.Nathiya and Gayathri.M. National conference on innovations in life sciences for sustainable development (ILSSD) in association with Zoological Society of India, at T.S.Narayanaswami College of arts and science, Navalur, Chennai on 29.01.2015. Oral presentation on "Prevalence of antibiotic-resistant uropathogens from patients with complicated and uncomplicated Urinary Tract Infections in Vellore"
- **R.Nathiya** and Gayathri.M. International conference on recent discoveries of diabetic biomarkers and challenges ahead (ICDB 2015) at B.S.Abdur Rahman University, Vandalur, Chennai on 02.03.2015 to 03.03.2015. Oral presentation on Identification of potential DPP-4 inhibitors from plant compounds by *in silico* analysis to treat Diabetes Mellitus
- Shalini N.R, Paridhi Pillai, **R.Nathiya**, Mahalingam Gayathri. National Conference on Recent Innovations in Biotechnology (RIBT-2016) held at Aarupadi Veedu Institute of Technology, Vinayaka Mission's University, Paiyanoor, Kancheepuram on 18th April 2016. Poster presentation on Antibacterial Activity of Mangrove Endophytes Isolated from *Avicennia marina*
- **R.Nathiya** and Gayathri.M. International conference on applications of natural products and opportunities ahead (ICAN 2016) on August 2-3, 2016 at B.S. Abdur Rahman University in association with University of East London Presented paper on *In-vitro* analysis of screened and isolated endophytes from mangroves against type 2 diabetes

- Nathiya R and Mahalingam Gayathri, at International conference on current trends & emerging challenges in biological sciences (CTECBS) 15-16th Feb 2018 at DKM college for women, Vellore, India on Evaluation of antidiabetic efficacy of new alkaloid isolated from *Alternaria longipes strain VITN14G* by *in vitro* and *in silico* analysis
- Nathiya R and Mahalingam Gayathri, 8th Annual Research Day on October 10, 2017, at CMC, Vellore Poster presentation on Validation of invitro antidiabetic activity of the screened, isolated endophytic fungi and its extracted secondary metabolites from selected mangrove plants

Seminars / Symposia / Conference Attended

- 3 days symposium on 'The winter symposium and south zone MICRON-2024 (1st to 3rd Feb 2024) organized by CMC, Vellore
- 1 day International conference on Modern Microbiology 2024 (26.09.2024) organized by KMG College of Arts & Science, Gudiyattam
- **January 2015,** 30th Anniversary International conference on Internalization of Higher Education and Quality Assurance Trends & Challenges (IHEQA'15) at VIT on 9-10, January 2015
- March 2016 National conference on new horizons in plant biotechnology: Innovative products and applications by Department of Biotechnology, School of Biosciences and Technology, VIT on March 11-12, 2016
- **December 2016** International conference on current trends in biotechnology (ICCB-2016) on Dec 8-10, 2016 at VIT in association with The Biotech research society, India
- July 2017, NUS-VIT Symposium on "Theranostics in Health and Disease" at VIT on 20.07.2017 to 22.07.2017
- November 2017, Seminar on "Healthcare KPO Medical coding" at VIT on 08.11.2017
- October 2018, International virtual symposium on "Microbial Prospecting and Synthetic Biology" at VIT on 20.10.2018

Workshop

Workshop on BD Vacutainer, Good Pre-analytical practices conducted by Becton, Dickinson and Company (BD), Bengaluru at Sri
Narayani Hospital & Research Center, Thirumalaikodi, Vellore on 21st April 2014

Project Sanctioned

• A project entitled "Medicinal plant extracts and green synthesized nanoparticles and its biological applications" was sanctioned under Student Project Scheme (2024 – 2025) and successfully completed. The project was granted by the Nature science foundation (NSF), Coimbatore and was carried out from May 2024 – December 2024.