

## FACULTY PROFILE

1. Name : Dr. R. Nathiya
2. Designation : Assistant Professor
3. Qualification : M.Sc., M.Phil., Ph. D.
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6. Teaching Experience : 3 years and 4 months
7. Area of specialization : Clinical microbiology, Endophytes, Molecular biology, Nanoemulsion formulation, animal handling and experimentation.
8. Research Experience and Guidance: 7.8 years of research experience
9. No. of Papers Published : 9
  - 09 Research Papers
  - 02 gene sequence published in NCBI (GenBank accession number: KX499521.1, KX345373.2)
10. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences: 7
11. No. of Seminars/Workshops/Conferences organized: 1
12. No. of Books Published/Edited/Co-edited : 1 book chapter
13. Honors & awards received (Descriptive) :
  - Secured 2<sup>nd</sup> 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.
  - VIT 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**)

#### **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>

#### **FDP's/ Seminars/ Workshops/Webinars**

##### **FDP**

- 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** on 19.01.2015
- One day Faculty Development Programme (FDP) on “Edmodo” at Academic staff college, **Vellore Institute of Technology** on 12.02.2015
- Two days Faculty Development Programme (FDP) on “Statistics and its application using SPSS software’ at Academic staff college, **Vellore Institute of Technology** from 01.07.2015 to 02.07.2015
- One day Faculty Development Programme (FDP) on “Usage of Apps in the classroom” at Academic staff college, **Vellore Institute of Technology** on 07.07.2015

#### **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 Technolgy, 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) – 15-16<sup>th</sup> 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**

- **January 2015**, 30<sup>th</sup> 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