

CURRICULUM VITAE



Dr. V. VAITHIYANATHAN, M.Sc., M.Phil., Ph.D.,

Email Id : svvs79@gmail.com

Mobile : +919003795584

Residential Address

Dr. V. Vaithiyanathan
S/O Veluchamy. S,
A.D School place,
Kottur,
Theni (Dt), 625534.

EDUCATIONAL QUALIFICATION

Name of the Examination	Year of passing	Name of the Institute	Marks obtained
Ph.D., (Biotech)	2017	Annamalai University	72 % (Awarded)
M.Phil., (Biotech)	2013	Annamalai University	72 %
M.Sc., (Biotech)	2011	Annamalai University	61 %
HSC	2005	S.U.M. Higher Secondary School, Rayappanpatti, Theni.	79%
SSLC	2003	S.U.M. Higher Secondary School, Rayappanpatti, Theni.	81%

M.Sc., PROJECT TITLE

18 Beta- Glycyrrhentic acid protects cellular integrity during 7,12- dimethyl benz(a) anthracene- induced hamster buccal pouch carcinogenesis.

M.Phil., RESEARCH TITLE

Dietary chemoprevention of fresh fruit juice of *Phyllanthus emblica* against 7,12- dimethyl benz(a) anthracene induced Rat mammary carcinogenesis.

Ph.D., RESEARCH TITLE

Comparative studies on anticancer potential of ethyl acetate and methanolic extracts of *Pergularia daemia* (Forsk.) Chiov. on oral cancer model - *in vitro* and *in vivo* approach.

PROJECT FELLOWSHIP (DST-SERB)

Chemopreventive potential of *Pergularia daemia* (Forsk) Chiov. on 7,12- dimethyl benz(a)anthracene (DMBA) induced hamster buccal pouch carcinogenesis.

AREA OF INTEREST

- Animal and Plant cell culture, Oncology, Genetic Engineering, Food Fermentation and preservation, Bio processing Technology.

SEMINARS & CONFERENCES (13)

1. Participated the UGC-SAP Sponsored National Conference on “**Diabetes and Cancer**” [Dia-Can 07] during 15& 16th December 2007, organized by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram.
2. Participated the ‘**National conference on ‘Frontiers in Biology& 18th Annual meeting of the Society of Biological chemist**’ held on 14th February 2009, organized by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram.
3. Participated the CSIR-ICMR-TNSCST Sponsored National Conference on “**Diabetes and Cancer**” [Dia-Can 09] during 19 & 20th December 2009, organized by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram.
4. Participated the ‘**National conference on Molecular and cellular mechanisms of diseases: Intervention with Natural products & 22nd Annual meeting of the Society of Biological chemist**’ held on 7& 8th April 2012, organized by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram.
5. **V.Vaithiyanathan** and S.Mirunalini* Participated and presented a paper entitled “**Amla fruit juice inhibits 7,12- dimethyl benz(a)anthracene induced rat mammary carcinogenesis**” and accepted on a **proceeding** of the **49th convention of chemists in National institute of technical teacher training and research (NITTR)**, held on 12 -15th December 2012, organized by Indian chemical society (ICS), Bhopal.
6. Participated the ‘**National conference on Phytomedicine Research and challenges & 23rd Annual meeting of the Society of Biological chemist**’ held on 30th March 2013, organized by the Department of Biochemistry and Biotechnology, Annamalai University, Chidambaram.
7. **Vaithiyanathan V** and S.Mirunalini*. Participated and presented a paper entitled “**Phyto chemical investigation of Pergularia daemia (Forsk). chiov: a novel medicinal herb**” in **International Conference on**

- Biotechnology and Human Welfare** held on 6-8th December 2013, organized by Department of Biotechnology, Sastra University, Tanjore, Tamilnadu.
8. **Vaithiyanathan V** and S.Mirunalini*. Participated and presented a paper entitled “***In vitro* antioxidant, antibacterial and acute toxicity studies of methanol, ethyl acetate extracts of *Pergularia daemia* (Forsk)**” and **got best paper award** in **International Conference on Food Technology : Impact on Nutrition and Health** (ICFIN-2013) held on 23& 24th December 2013, organized by Jawaharlal Nehru University, New Delhi.
 9. Participated the UGC Sponsored Academic industry meet on “**Trends in Medical Biotechnology: Opportunities and challenges (TMBT-2014)** held on 7&8th March 2014, organized by the Department of Biochemistry and Biotechnology, Annamalai University. Chidambaram.
 10. **V.Vaithiyanathan** and S.Mirunalini*. Participated and present a paper entitled “**Assessment of Anticancer activity: A comparison of dose response effect of Ethyl acetate and methanol extracts of *Pergularia daemia* (Forsk)**” in International conference on current status, opportunities and challenges in medicinal plants and natural product research (ICMPNPR- 2014) held on September 24-26th 2014, organized by C.G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli, Surat, Gujarat, India.
 11. **S.Mirunalini*** and **V.Vaithiyanathan**. Participated and orally present a paper entitled “**Antiproliferative potential of *Pergularia daemia* (Forsk) Chiov. on human oral cancer cell line (KB) and hamster buccal pouch carcinogenesis by inducing cyto toxicity, genotoxicity, oxidative stress and modulating detoxifying enzymes**” in National conference on challenges and future prospects of applied research in life sciences (NCCFPARLS-15) held on 06.02.2015, organized by Bharathidasan University, Tiruchirappalli.
 12. **V.Vaithiyanathan** has participated one day webinar on ‘Cancer care in the Covid-19 Era organized by the Department of Microbiology and Biotechnology, S.V.N College of arts and Science, Nagamalaiputhukottai, Madurai on 28.05.2020.
 13. **V.Vaithiyanathan** has participated one day webinar on ‘**CRISPR- Cas system and its Applications: A modern era tool in Molecular Biology**’ conducted by the Department of Biotechnology, Dr. M.G.R Educational and Research Institute, Chennai held on 21.11.2020.

CONFERENCE/SEMINAR/WEBINAR ORGANIZED (02)

1. **V. Vaithiyanathan** organized a National webinar on “**Safety foods for Healthy life**” on behalf of ‘Ribosol’ club, Department of Biotechnology, Mary Matha college of Arts and Science, Periyakulam, Theni (Dt), Tamilnadu held on 09.11.2022.
2. **V. Vaithiyanathan** organized a National conference on Emerging Trends in Biotechnology (NCETB- 2023) on behalf of ‘Ribosol’ club, Department of Biotechnology, Mary Matha college of Arts and Science, Periyakulam, Theni (Dt), Tamilnadu held on 17.03.2023.

FACULTY DEVELOPMENT PROGRAMS ATTENDED (01)

1. **V. Vaithiyanathan** attended five days Faculty development program organized by Madurai Kamaraj University under the scheme of Naan Mudhalvan entitled ‘**Medical coding for employability**’ held from 06.02.2023 to 10.02.2023.

PARTICIPATED WORKSHOPS (6)

1. **V.Vaithiyanathan.** Participated the hands on workshop on ‘Diploma in Bio Techniques’, Held on 20-26th May 2012, organized by Easma Biotech, Aravakurichi, Karur (Dt).
2. **V.Vaithiyanathan.** National workshop on statistical analysis and its interpretation using SPSS and AMOS, NWSAI-2012, held on 7&8th December 2012, organized by Department of statistics, Indira Gandhi college of Arts and science, Kathirkamam, Puducherry.
3. **V.Vaithiyanathan.** Participated in National Workshop in Medicinal mushroom cultivation training program” held on 15th April 2013, organized by Department of Biochemistry, Kongunadu arts and science college, Coimbatore.
4. **V.Vaithiyanathan.** Participated hands on workshop in ‘Leaf to drug’, held on 17 & 18th May 2014, organized by Biozone life sciences, Chennai.
5. **V.Vaithiyanathan.** Participated UGC sponsored XXIVth Prof. K.S. Sonachalam memorial workshop on Research Methodology, held on 6-9th January 2015, organized by Department of Economics, Annamalai University, Chidambaram- 608 002.
6. **V.Vaithiyanathan** has participated three days international e-workshop on ‘**Docking, QSAR and Molecular Dynamics**’ jointly organized by Department of Biotechnology, Ramaiah Institute of Technology and Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Ramaiah University of

Applied Sciences, Bengaluru, Karnataka in association with IEEE-EMB MSRIT Student chapter and SRIGEN-society of Biotechnologists from 29 to 31 July 2020.

PUBLICATIONS (10)

		Since 2018
Citations	114	69
h- index	6	6
i10- index	6	3

<https://scholar.google.com/citations?hl=en&user=FcuHSQwAAAAJ>

1. Sankaran Mirunalini*, **Velusamy Vaithiyanathan** and Mani Krishnaveni (2012). "Amla: a novel ayurvedic herb as a functional food for health benefits"- A Mini Review. *Int J Pharm Pharmaceu Sciences*. 5(1):1-4, **Impact Factor- 1.1**.
2. Sankaran Mirunalini*, Karthishwaran K and **Velusamy Vaithiyanathan** (2013). The chemoadjuvant potential of *Pergularia daemia* (forsk.) on expression pattern in experimental oral carcinogenesis. *Asian Jour Clin Phar Res* Vol 6 (3): 91-97, **Impact Factor- 0.52**
3. **Veluchamy Vaithiyanathan**, Sankaran Mirunalini* (2013). Chemo preventive potential of fruit juice of *Phyllanthus emblica* Linn. (amla) against mammary cancer by altering oxidant/antioxidant status, lipid profile levels and estrogen/progesterone receptor status in female Sprague–Dawley rats. *Biomedicine and preventive nutrition*; 3: 357-366. **Impact Factor- 1.13**
4. **Veluchamy Vaithiyanathan**, Sankaran Mirunalini* (2014). The crucial role of Biomarkers in oral cancer review. *Asian J Biochem and Pharma Res*;4: 193-210 **Impact Factor: 0.45**
5. Sankaran Mirunalini*, Kandhan Karthishwaran, **Veluchamy Vaithiyanathan**. Antiproliferative potential of *Pergularia daemia* (Forsk.) on Human oral epidermoid carcinoma (KB) cells by inducing apoptosis and modifying oxidant antioxidant status. *Asian Jour Clin Phar Res* 2014; 7(5): 89-95. **Impact Factor: 0.52**
6. **Vaithiyanathan Veluchamy** and Mirunalini Sankaran*(2015). Quantitative variation of bioactive phyto compounds in ethyl acetate and methanol extracts of *Pergularia daemia* (Forsk.) Chiov.. *J Biomed Res*. 29 (2): 169-172. **Impact Factor: 1.009**
7. **Vaithiyanathan Veluchamy** and Mirunalini Sankaran* (2015). Assessment of Antioxidant Potential and Acute Toxicity Studies of Whole

- Plant Extract of *Pergularia Daemia* (Forsk). *Toxicol International*. 22:54-60. **Impact Factor: 1.25**
8. **Vaithiyathan Veluchamy** and Mirunalini Sankaran* (2016). Assessment of anticancer activity: A comparison of dose response effect of ethyl acetate and methanol extracts of *Pergularia daemia* (Forsk). *Oral science International*. 13:24–31. **ISSN: 1348-8643**.
 9. Sankaran Mirunalini*, Stainsloss Isabella and **Veluchamy Vaithiyathan** (2016). Antiproliferative Effect of Alpha Amyrin on Hep2 Cells by Inducing Cytotoxicity and Oxidant Antioxidant Status Modifications. *Indian Journal of Research in Food Science and Nutrition*, 3(2), 44-47.
DOI: 10.15613/fjrfn/2016/v3i2/139485.
 10. **Vaithiyathan Veluchamy** and Mirunalini Sankaran* (2018). Impact of whole plant extract of *Pergularia dameia* on Glyco proteins in DMBA induced hamster buccal pouch carcinogenesis. *Avicenna J Med Biochem* 6(1): 15-20. **Impact Factor: 1.56**

BOOKS/ CHAPTERS (01)

1. G. Susmitha and **V. Vaithiyathan** (2023). Methods and applications of protein engineering. Science and Humanities, MMC Publications, ISBN-

TEACHING EXPERIENCE (7 Years)

Three years of experience in teaching (Assistant Professor & Head) at **Theni college of Arts and Science**, Veerapandi, Theni (Dt). (20.05.2016 to 30.04.2019)

Four months of experience in teaching (Assistant Professor & Head) at **Pavendar Bharathidasan College of Arts and Science**, Thiruchirappalli. (12.07.2019 to 26.11.2019)

Currently Working as Assistant Professor & Head, Department of Biotechnology at **Mary Matha college of Arts and Science**, Periyakulam, Theni (02.01.2020 – Till now).

EXTERNAL ACTIVITIES AS A TEACHER DURING THE SERVICE

1. **J. Charles** and **A. Vijayakumar** participated the National level hands on workshop entitled 'Kinetics of marine natural products' conducted by Thiagarajar College, Madurai, funded by National center for excellency, New Delhi, held on 21.11.2016.

2. **J. Charles** participated 'Bharathi Vizha potti' organized by Kovai Bharathi Pasarai, conducted in Nirmala women's College, Coimbatore, held on 08.09.2016.
3. **J. Charles and A. Vijayakumar** participated the National level workshop entitled 'Introduction to modern biology' conducted by American College, Madurai, held on 19.01.2017- 21.01.2017
4. **J. Charles, A. Vijayakumar, Jayaram and R. Boopalan** participated the National level seminar entitled 'Recent trends in plant science' conducted by Department of Botany and microbiology, Lady Doak college, Madurai, held on 19.01.2017- 21.01.2017. Out of 32 students were participated in that event our college got **II place** for best poster presentation done by **Mr. J. Charles**.
5. **J. Charles** participated and present a paper entitled "Nanobiotechnology: A precise system of Biopharmaceuticals" in National seminar on Recent advances in biological Science held on 22.09.2017, organized by Department of Biochemistry and Microbiology, Sourashtra college, Madurai.
6. **R. Dhurga Devi** participated and present a poster entitled "Method and Applications of Protein Engineering" in National seminar on Recent advances in biological Science held on 22.09.2017, organized by Department of Biochemistry and Microbiology, Sourashtra college, Madurai.
7. **N. Josebin Daniel** participated and present a poster entitled "Symbiotic Nitrogen fixation by Rhizobia" in National seminar on Recent advances in biological Science held on 22.09.2017, organized by Department of Biochemistry and Microbiology, Sourashtra college, Madurai.
8. **V. Bavadharani** participated and present a poster entitled "Biotechnology: The future of Evolution" in National seminar on Recent advances in biological Science held on 22.09.2017, organized by Department of Biochemistry and Microbiology, Sourashtra college, Madurai.
9. **A. Vijayakumar** participated and present a poster entitled "Recent trends in Food Production and Preservation" in National seminar on Recent advances in biological Science held on 22.09.2017, organized by Department of Biochemistry and Microbiology, Sourashtra college, Madurai.
10. **S.R.Parthasarathi, J.Charles and A.Vijayakumar** participated the national level hands on workshop on 'Molecular Techniques' organized by department of Biotechnology, Thiyagarajar college, Madurai held on 23.11.2017 - 28.11.2017.
11. Motivation program was conducted in Government higher secondary school, Koduvilarpatti held on 15.11.2017 on behalf of the Department of Biotechnology.
12. Motivation program was conducted in Government higher secondary school, Dharmapuri, Theni (Dt) held on 21.11.2017 on behalf of the Department of Biotechnology, Theni college of Arts and science, Veerapandi, Theni (Dt).
13. **J.Charles, and S.R. Parthasarathi** participated the 'G.K.D memorial quiz' organized by G.V.M college, Kovilpatti.

14. **M. Mathankumar** participated and got **GOLD MEDAL** for the National level Silambam competition organized by Rural games Association, Hosur, held on 22.02.2017. **J.Charles** participated and got **BRONZE MEDAL** for the same event.
15. **S.R. Parthasarathi, P. Thangapandi, J. Charles and K. Sanjaykumar** participated the mime competition and **K. Satheeshwaran, J. Boopalan and K.Sendrayaperumal** participated the turn coat competition organized by Department of Biotechnology, Thiyagarajar college, held on 22.02.2018.
16. **J. Charles, S.R. Parthasarathi, A.Vijayakumar and P. Thangapandi** participated and got **1st place** for Mime competition about the Bioconservation and **R. Dhurgadevi, V. Bhavadharani and N. Josebin Daniel** participated the Eco greeting card competition about the Bioconservation, the event organized by the Department of Botany, Thiyagarajar college, Madurai, held on 23.01.2018.
17. Job awareness program was conducted for 1,2 & 3rd year students, held on 16.02.2018, conducted by **Mr. V.K. Samy and Mr. S. Sarveshwaran** at Department of Biotechnology, Theni college of arts and science, Veerapandi.
18. **Research club** was started on 15.03.2018 and successfully launched mushroom cultivation unit and spawn production unit as club activities. The members of the club as follows
 1. S.R. Parthasarathi
 2. K. Sanjaykumar
 3. S. Nagajothi
 4. J. Charles
 5. A. Vijayakumar
 6. K. Sendrayaperumal
 7. G. Veluchamy
 8. K. Santhiyadevi
 9. N. Lakshmana Perumal
 10. G. Powrnamiraja
 11. N. Josebin Daniel
19. Mushroom culture program was conducted by **Tamilnadu agriculture university, Department of Horticulture, Periyakulam**, held on 11.07.2018. All the students were participated in this event.
20. Azola culture training program was conducted for all the students conducted by **Mrs. S. Vijayarani**, held on 12.07.2018.
21. Industrial visit to **Pasteur Institute, Ooty** on 24.03.2019.
22. Industrial visit to **Rajshree Sugar Industry, Theni** on 14.04.2019.

TECHNICAL SKILLS

PHYTOCHEMISTRY

1. Active compound isolation
2. Thin layer chromatography (TLC)
3. Column chromatography
4. GC-MS
5. HPTLC

ANIMAL CELL CULTURE

1. Maintenance and sub culturing of animal cell line (KB, MCF7, HEP2 and HELA)
2. MTT assay (Cell viability)
3. Fluorescent assay (ROS and MMP)
4. Comet assay (Single cell gel electrophoresis)
5. Flow cytometry for cell cycle analysis
6. Fluorescence microscope handling

EXPERIMENTAL ANIMAL HANDLING

Expertise in proper animal husbandry and handling

1. Administration of drugs
2. Experience in induction of oral, skin and mammary cancer experimentally

PLANT TISSUE CULTURE

1. Micropropagation (Root and shoot induction)

MICROBIOLOGY

1. Isolation and maintenance of Microbes
2. All the staining methods (Simple and Differential)

STAINING TECHNIQUES

1. Histo pathology (staining only)
2. Immunohisto analysis
3. Chromosomal aberration and micro nuclei formation (Genotoxic staining)

MOLECULAR BIOLOGY TECHNIQUES

1. DNA and Protein isolation
2. SDS-PAGE
3. Agarose gel electrophoresis (AGE)
4. Western blotting
5. ELISA
6. RT-PCR

MAJOR EQUIPMENT HANDLING

1. Semi auto analyser
2. Rotary vaccum evaporator
3. CO₂ incubator
4. Laminar air flow
5. UV- visible spectrophotometer
6. Freeze dryer

SOFTWARE SKILLS

1. MS- Word, Exel, Powerpoint
2. Adobe Photoshop
3. CASP
4. SPSS
5. AUTO DOCK

PERSONAL DETAILS

1. Date of Birth : 01.07.1988
2. Nationality : Indian
3. Marital Status : Married
4. Sex : Male
5. Known Languages : Tamil and English
6. Community : SC, Devendra Kula Velalar

REFERENCES

Dr. S. MIRUNALINI (Research Supervisor)

Assistance Professor,
Department of Biotechnology and Biotechnology
Annamalai University.
Chidambaram, Tamilnadu- 608 002
E-mail- mirunasankar@gmail.com
Mobile- +91 9442424438.

Dr. N. RAJENDRA PRASATH

Associate Professor,
Department of Biotechnology and Biotechnology
Annamalai University.
Chidambaram, Tamilnadu- 608 002
E-mail- drprasadnr@gmail.com
Mobile- 09842305384

Dr. R. VIVEKANANDAM

Principal,

Theni College of Arts and Science,
Veerapandi, Theni , Tamilnadu (625534).

E-mail- sykmbbs@gmail.com

Mobile : +91 9943847914

+91 7502975443

Dr. K. CHELLAMUTHU,

Principal,

Theni College of Arts and Science,
Veerapandi, Theni , Tamilnadu (625534).

Mobile : +91 9442976954

Dr. A. PRASANNA PRIYADHARSHINI

Principal,

Pavendhar Bharathidasan College of Arts and Science,
Trichirappalli.

Mobile : +91 9952227766

DECLARATION

I am hereby declaring that the informations provided above are correct to the best of my knowledge.

(Dr. V. VAITHIYANATHAN)

Date: