

Dr. M. VENKATESAN, M.Sc., Ph.D.

Associate Professor & Head Department of Botany Sourasthra College (Autonomous) Madurai – 625 004, Tamil Nadu, India E-Mail: <u>swertia@gmail.com</u>; Mobile: 8903111353



## **TEACHING EXPERIENCE: 15years**

Working as Associate Professor in the Department of Botany, Sourashtra College, Madurai, since 2023-till date.

Working as Assistant Professor in the Department of Botany, Sourashtra College, Madurai, since 2013-2023.

Worked as Assistant Professor in the Department of Biotechnology, Sri Kaliswari College, Sivakasi, 2012–2013.

Worked as Assistant Professor in the Department of Plant Biology and Biotechnology, Arignar Anna College, Aralvoymoli, 2009–2012.

Worked as Lecturer in the Department of Biotechnology, J.J. College of Arts and Sciences, Pudukkottai, 2009.

### **RESEARCH EXPERIENCE: 14 years**

**Ph.D:** 1 (Under guidance) **M.Phil.** 2 (Guided)

# Patent Filled – 1

Title of the Invention: "METHOD FOR TREATMENT OF HEPATOCELLULAR CARCINOMA"

### **aEDUCATIONAL QUALIFICATIONS**

**Ph.D (Botany ) – 2009** (Highly Commended)\* Sri Paramakalyani Centre for Environmental Sciences, Manonmaniam Sundaranar University, Alwarkuruchi- 627 412, Tamil Nadu, India.

\*Phytochemical, pharmacognostical and pharmacological investigations in some ethnomedicines of southern India <u>http://hdl.handle.net/10603/61300</u>

### M.Sc (Botany ) - 2000

Madurai Kamaraj.University Perungudi – 625 022, Madurai, Tamil Nadu, India.

### B.Sc (Botany ) - 1997

Saraswathi Narayanan College, Madurai Kamaraj.University Perungudi – 625 022, Madurai, Tamil Nadu, India.

NPTEL ONLINE CERTIFICATION (Funded by MHRD, Govt. of India)

Wildlife Ecology – Jan- Apr. 2019 with 76% (12 weeks course)

### HONOURS/ AWARDS

Prize: Received a prize for standing **FIRST** in overall academics during the **I year PG** Award: The JRF award received in the year 2001- 2002, TNFD, FREEP

## PROFESSIONAL SERVICE

Reviewer: Natural Product Research (since 2011) Bio Med Research International (since 2013) International Journal of Agricultural waste and organic recycling (since 2014) Indian Journal of Forestry (since 2021) Plant Science Today (since 2022)

## CHAIR PERSON

- UGC sponsored National Level Conference on Innovation and Future Trends in Biology. National College, Trichy.24 & 25.07.2014.
- National Conference on Botanicals and Phytochemicals: The Challenges and Promise for health care and Drug development. Rev. Jacob Memorial Christian College, Ambilikkai. 4.02.2016

## **BOARD OF STUDIES**

Chairman of Botany since 2013 in Sourasthra College, Madurai

Chairman of Value education since 2014 in Sourasthra College, Madurai

Chairman of Environmental Studies since 2013 in Sourasthra College, Madurai

Member of Biotechnology at Sri Kaliswari College, Sivakasi.

Member of Botany at Sri Kaliswari College, Sivakasi.

### MEMBERSHIPS

- 4 Life time Member in Spectroscopy Asia
- 4 Annual Member in Indian Science Congress Association (2010-2011)
- Annual Member in American Chemical Society (ACS) (2020)

## **SEMINAR & WEBINAR ORGANIZED**

- Convener & organizing secretary for the One day students' Seminar on "Conservation of medicinal plants and Biodiversity" held on 25th February 2016 at Sourashtra College, Madurai-625 004, Tamil Nadu.
- Convener & organizing secretary for the One Day virtual seminar on "Tackling of Environmental Challenges for Sustainable Future" was organized by Internal Quality Assurance Cell (IQAC) & Department of Botany of Sourashtra College (Autonomous), Madurai, Tamil Nadu - 625 004, on the occasion of World Environment Day, 5th June, 2021.
- Convener for the state level webinar on impact of food adulterants on human health jointly organized by citizen consumers club and internal quality assurance cell of Sourashtra College (Autonomous), Madurai, Tamil Nadu - 625 004 on 30-09-2021

### **INVITED LECTURES**

- A guest lecture was delivered on "Screening and Evaluation of Phytochemicals" in the Department of Biotechnology at Sri Kaliswari College, Sivakasi on 18.07.2014.
- A demonstration of Mushroom cultivation to Self-help group and students of Sri Kaliswari College, Sivakasi on 10.07.2015.
- > A guest lecture was delivered on "Acid rain" in the Department of Botany SVN College, Madurai on 05.01.2017.
- A guest lecture was delivered on "Recent trends in Medicinal Plants" in the Department of Botany SVN College, Madurai on 8.02.2018.
- A guest lecture was delivered on "Plants and the Environment" for the students of Senthamari College Madurai on 16.02.2018.
- A guest lecture was delivered on "Plant Chemicals: Isolation, Identifiation and Significances" for the students of V.V.V. College, Virudhunagar, Tamil Nadu, on 10.08.2018.
- A Invited lecture was delivered on "Phytochemistry and Drug design" in the SPKCES Alumini lecture series at Sri Paramakalyani Centre for Environmental Sciences, Manonmaniam Sunndaranar University, Alwarkurichi, Tamil Nadu, on 05.12.2019.
- A guest lecture was delivered on "Global Environmental Issues- Causes and Effects" for the students of V.H.N. Senthikumara Nadar College (Autonomous), Virudhunagar, Tamil Nadu, on 20.12.2019.
- A special lecture was delivered "Plant based drug discovery and development" on 28.02.2021 organized by Tamil Nadu Open University, National Webinar series on "Recent Trends in Applied Sciences" during the occasion of 'National Science Day' 26 to 28 February, 2021 through virtual platform.
- A guest lecture was delivered on Sustainable livelihood using Eco-friendly Biomaterials on 09.03.2022 at V.V.V. College, Virudhunagar, and Tamil Nadu.
- A Talk "Phytochemicals as Lead Compounds for New Drugs from Traditional Medicines" delivered in UGC- STRIDE sponsored Two days National conference on Traditional Medicines, Cultural Heritage, Innovations, Drug Delivery & IPR organized by St. Andrew's College, Gorakhpur, UP, INDIA. During 21, 22.09.22.

## **ORIENTATION/REFRESHER PROGRAMME**

- UGC Sponsored **28** days **Orientation Programme** attended at UGC- Academic staff college, Madurai Kamaraj University during 17.12.2014 to 13.01.2015.
- UGC Sponsored 21 days Refresher Course in Life sciences (ID) attended at UGC- HRDC, Bharadhidasan University during 19.06.2018 to 9.07.2018.
- UGC Sponsored 14 days Refresher Course in Botany attended at UGC- HRDC, Bharathiar University during 12.09.2019 to 25.09.2019.

- SWAYAM ARPIT ONLINE COURSE CERTIFICATION: Climate Change: a Guide for Teachers of all Disciplines Indian Institute of Science Education and Research (IISER), Pune.
- UGC-STRIDE Sponsored 14 days Online Refresher Course on 'Research Methodology: Tools & Techniques' attended at UGC- HRDC Mizoram University during 7.7.2020 to 20.7.20202.
- MHRD sponsored a inter-disciplinary 14 days Refresher Course on Environmental Science (Online mode) at Central University of Kerala and Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Education, Govt. of India during 09.03.2021 to 22.03.2021.

#### WORKSHOP

- DBT Sponsored 15 days Workshop on Agroindustrial Applications of Plant Tissue Culture and Agrobacterium Mediated Gene Transfer and PCR Techniques, conducted by Saraswathi Narayanan College, Perungudi, Madurai-625 022 (Tamil Nadu) from Nov. 24 – Dec.08, 2011.
- MHRD sponsored Five days Workshop on "Learning to Address Climate Change" (For College Faculties) at Central University of Kerala, Kasaragod, Kerala, from 27-31, January 2020.
- MHRD sponsored Five days Online Faculty Development Programme on "Emerging Pollutants and their Challenges on Earth Ecosystem" (16.11.2020 to 20.11.2020) organized by the Department of Environmental Science, Central University of Kerala and Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Education, Govt. of India.

#### **RESEARCH ARTICLES PUBLISHED IN NATIONAL / INTERNATIONAL JOURNALS**

- Viswanathan, M.B., S. Ramakrishnan, B. Jeyasuresh, N. Andal & M. Venkatesan. 2004. Amendment to an Endemic species *Dalbergia tinnevelliensis* Thoth., family Fabaceae on its rediscovery from Kalakkad-Mundanthurai Tiger Reserve, India. Journal of the Bombay Natural History Society, 101(1): 191-194. *Impact factor: 0.11*
- Venkatesan, M., M.B. Viswanathan, N.Ramesh and P. Lakshmanaperumalsamy. 2005. Antibacterial and Phytochemical studies on the stem of *Suregada angustifolia* from Peninsular India. Pharmaceutical Biology, 43(3): 201-204. *Impact factor:* 3.503
- Venkatesan, M., M.B. Viswanathan, N.Ramesh and P. Lakshmanaperumalsamy. 2005. Antibacterial Potential from Indian *Suregada angustifolia*. Journal of Ethnopharmacology, 99: 349-352. *Impact factor:* 4.36.

- Senthil Murugan, Viswanathan, M.B. and Venkatesan, M. 2009. Free radical scavenging activity of *Phyllantus longiflorus*. Asian Journal of Microbiology, Biotechnology and Environmental Sciences, 11: 339-342.
- Sivapriya, O., Viswanathan, M.B., Balakrishna, K. and Venkatesan, M. 2011. Chemical constituents and invitro antioxidant activity of *Phyllanthus wightianus*. Natural Product Research, 25 (10): 948-959. *Impact* factor: 2.861
- Sivapriya, O., Viswanathan, M.B. and Venkatesan, M. 2011. Wound Healing Activity of Solvent Extracts of *Phyllanthus Wightianus* (Whole Plant). Journal of Basic and Applied Biology, 5: 336-343.
- Ebbie, M.G., R. Rajarajeshwari and M. Venkatesan. 2011. Antibacterial effect of an endemic medicinal plant *Jatropha maheswari* Subram and Nayar. Proceedings of National Conference on Biotechnology for Sustainable Development. Department of Biotechnology D.D.U. Gorakhpur University. Pp. 19-23.
- Thangaraj, N., Louis Jesudass, L. Venkatesan, M. 2013. Protective Effects of *Phyllanthus polyphyllus* Extract on Carbon Tetrachloride - Induced Hepatotoxicity in Rats. International Journal of Research in Engineering and Bioscience, 1(Special issue 1): 129-135.
- Satish Kumar, P. M.B. Viswanathan, M. Venkatesan, and K. Balakrishna. 2017. Bauerenol, a triterpenoid from Indian Suregada angustifolia: Induces reactive oxygen species – mediated P38MAPK activation and apoptosis in human hepatocellular carcinoma (HepG2) cells. Tumour Biology1-15. Impact factor: 3.65.
- M.G. Ebbie, K. A. S. Grace, S. Ravi Shankar & M. Venkatesan. 2022. Histological and in vitro seed culture studies on *Biancaea sappan* (L.) Tod. (Caesalpiniaceae). Plant science Today, 9(3): 564-567. *Impact factor: 0.9.*
- M Gobi, M Sujatha, V Pradeepa, M Muralidharan, M Venkatesan 2023. Green synthesis of iron oxide nanoparticles (FeONPs) and its antibacterial effect using *Chamaecrista nigricans* (Vahl) Greene (Caesalpiniaceae). Biomass Conversion and Biorefinery, 1-8 *Impact factor: 4.06*.

#### BOOK

Venkatesan, M., Plant Diversity - I for B.Sc., Botany Course (Code: BBOTS – 11). 2022 (First Edition). Tamil Nadu Open University, Chennai-600 015. ISBN No.: 978-93-95841-48-1.

### **CHAPTERS IN BOOKS/EDITED VOLUMES**

 Venkatesan, M., Viswanathan, M.B, and. Ebbie, M.G. 2013. Hepatoprotective potential of Swertia corymbosa (Gentianaceae) against carbon tetrachloride (CCL<sub>4</sub>)-induced hepatitoxicity. In: A treatise on Medicinal plants and Herbal products. (Mehalingam, P. Rajarathinam and Jayakumar, M. (eds.), VHNSN College (Autonomous), Virudhunagar, Tamil Nadu, India. (ISBN: 978-93-81723-18-0).

- Ebbie, M.G., Karthick, G. and Venkatesan, M. 2013. Invitro culture studies of an endemic medicinal plant Jatropha maheswari. In: A treatise on Medicinal plants and Herbal products. (Mehalingam, P. Rajarathinam and Jayakumar, M. (eds.), VHNSN College (Autonomous), Virudhunagar, Tamil Nadu, India. (ISBN: 978-93-81723-18-0)
- Tamil Selvi, S., Viswanathan, M.B. and Venkatesan, M. 2014. Phytochemical and Antimicrobial investigations in *Pseudarthria viscida* (Fabaceae). Pp. 525-529. In: NanobioPharmaceutical Tehnology -Applicationsand Perspectives. Latha Subbiah, Selvamani Palanisamy and Subramanian Natesan (Eds), Elsevier, Adivision of ReedElsevier India Pvt. Ltd. (ISBN: 978-935-107-293-5).
- K.M. Poornima, K.P. Gnanesh, G.R. Shyamala, M. Balaji, M. Rajasekaran and M. Venkatesan. 2015.
  Environmental Studies. Shanlax press, Madurai 625003. Pp.23-34. (ISBN No. 978-81-929458-1-1).
- Thangaraj, N., Louis Jesudass, L. Venkatesan, M. 2016.Chemical constituents from Phyllanthus polyphyllus Willd. (Euphorbiaceae). C166-170. In: Botanicals and Phytochemicals: The Challenges and Promise for health care and Drug development. Baby Shakila, P. (Ed.), Rev. Jacob Memorial Christian College, Ambilikkai. (ISBN: 978-93-82323-60-0).
- Viswanathan, M.B. and Venkatesan, M. 2018. Vegetation analysis for assessing impact of ecodevelopment initiatives in the Kalakkad-Mundanthurai Tiger Reserve (KMTR) in India. In: Trends in Plant Systematics. Viswanathan, M.B. (Ed.), Bharathidasan University, Tiruchirapalli, Tamil Nadu. (ISBN:978-93-5300-462-0).
- ப்பிப்பிப்பி, பி. 2018. களக்காடு முண்டந்துறை காடுகள் இயற்கையின் பொக்கிஷம். MURALIDHARAN.M. (Ed.), SPKCES, M.S. University, ALWARKURICHI, Tamil Nadu (ISBN:978-93-81402-47-4).

#### **CONFERENCE / SEMINAR PRESENTATIONS**

Venkatesan, M. and Siva priya, O.2009. Intellectual Property Rights (IPR), Biotechnology, Biodiversity: An Overview. National Conference on Recent trends in Chemical and Biological Sciences (CHEM BIO'S CON-2009), K.M.G. College of Arts and Science, Gudiyattam, 23.01.2009 to 24.01. 2009.

- M.Venkatesan, M.B. Viswanathan, K. Balakrishna, R. Govindarajan and A. Patra. 2009. Biological Evaluation of MBVMV isolated From *Suregada Angustifolia*. International Herbal Conference – 2009, Herbal Medicine – Evaluation of Quality, Efficacy and Safety, Banglore, India, 26.02.2009 to 28.02.2009.
- Venkatesan, M. and Viswanathan, M.B. Pharmacognostical Profiling of Roots of Suregada angustifolia (Baill. ex Muell. Arg.) Airy Shaw (Euphorbiaceae). National Symposium on Standardisation of Crude Drugs, M.S. University, Tirunelveli, Tamil Nadu, 23<sup>rd</sup> December 2009.
- Venkatesan, M., Viswanathan, M.B. and Siva priya, O. Pharmacognostic analysis of leaves of Suregada angustifolia (Baill. ex Muell. Arg.) Airy Shaw (Euphorbiaceae). Phytocongress 2010: An International Conference on Herbs and Herbo Mineral Formulations. Shanmugha Arts, Science, Technology & Research Academy [SASTRA], Thanjavur, Tamil Nadu, India, 6.2.2010 to 7.2. 2010
- Venkatesan, M., Viswanathan, M.B. and Siva priya, O. Chemical Investigations and Antibacterial Activity of Roots of Suregada angustifolia (Euphorbiaceae). International conference on Medicinal plants and Herbal drugs: Challenges and opportunities in cultivation, sustainable utilization and conservation. ICMPHD-2010.Pachaiyappas college, Chennai, from 4.3.2010 to 6.3.2010
- Venkatesan, M., Viswanathan, M.B, and Ebbie, M.G. 2013. Hepatoprotective potential of Swertia corymbosa (Gentianaceae) against carbon tetrachloride (CCL<sub>4</sub>)-induced hepatitoxicity. National Conference on "Emerging Trends in Medicinal Plants and Herbal Products" VHNSN College (Autonomous), Virudhunagar, Tamil Nadu, 12<sup>th</sup> and 13<sup>th</sup> December, 2013.
- Muralidharan, M. and Venkatesan, M. 2014. Invasive species and their impact on water quality of Tamiraparani riverine wetlands. National Seminar on Water Resources and Management of Tamil Nadu. Jamal Mohamed College, Trichy, Tamil Nadu, 3<sup>rd</sup> March 2014.
- Thangaraj, N., Louis Jesudass, L. Venkatesan, M.2014. HPLC Analysis and Quantification of Tannins from *Phyllanthus Polyphyllus*. National Conference of Innovations in Biological Sciences. National College, Trichy. 24 & 25.07.2014.
- Bioremediation of Tannery Effluent by using Rhizopusand Aspergillussps. 2014. International conference on Solutions to Ecoloical Challenes: Multidimensional Perpectives. Fatima College, Madurai. 11.12.2014 to 13.12.2014.
- Thangaraj, N., Louis Jesudass, L. Venkatesan, M. 2016.Chemical constituents from Phyllanthus polyphyllus Willd. (Euphorbiaceae). C166-170. National Conference on Botanicals and Phytochemicals: The Challenges and Promise for health care and Drug development. Rev. Jacob Memorial Christian College, Ambilikkai. 4.02.2016.

### TRAINING

- Attended Short Course on Chromatography (HPLC and GC) Conducted by the Chromatography Society of India at Indian institute of Technology (IIT), Chennai, 16<sup>th</sup> and 17<sup>th</sup> February 2004.
- Attended Workshop on Phamacoinformatics in Drug Design at National Institute of Pharmaceutical Education and Research (NIPER), Chandigarh, from April 14-16, 2005.
- Attended a Workshop on Advanced Techniques in Microbiology and Biotechnology conducted by Selvam Arts and Science College, Namakkal, from June 9-11, 2005.
- Attended a Workshop on Skill -Based Subjects: Personality Development and Effective Communications" conducted by M. S. University, Tirunelveli, Tamil Nadu at S.T. Hindu college, Nagercoil on 14.12.2009 & 15.12. 2009.
- Attended a Workshop on Techniques in Marine Pharmacology (TMP-2011) conducted by CAS in Marine Biology, Faculty of Marine Sciences, Annamalai University, Parangipettai, 19th and 20th March 2011.
- Attended a National Training cum Workshop on Analytical and Technical Advancement in AAS and GC (WATA-AG), conducted by Department of Marine Sciences, Bharadidhasan University, Trichy (Tamil Nadu), 24<sup>th</sup> and 25<sup>th</sup> January 2012.
- Faculty Development Programme on "Teaching Methods and Inter-Personal Relationships" held at Sourashtra College, Madurai on 15.03.2014.
- One day Orientation Programme to Teachers on Teacher Effectiveness" held at Sourashtra College, Madurai on 07.03.2015.
- One day Faculty Development Programme on "redefined role of of teachers" held at Sourashtra College, Madurai on 05.03.2016.
- One day Faculty Development Programme on "Digital Learning & Quality" held at Sourashtra College, Madurai on 11.03.2017.
- One day Faculty Development Programme on Management of Self- A Holistic approach organized by SCAAN & IQAC held on 29.08.2017 at Sourashtra College, Madurai
- Attended a Science Academie's Lecture workshop on Introduction to Modern Biology organized by The American College, Madurai, from 19.1.2017 to 21.01.2017.
- Attended a Science Academie's Lecture workshop on Biodiversity and Bioprospectation organized by Hindusthan College of Arts and Science, Coimbatore, from 2.3.2018 to 3.3.2018.
- Attended a Two days International workshop on Biomedical Applications in Translational Research (BATR-2019). Alagappa University, karaikudi, Tamil Nadu, 6th & 7th June 2019.

- Attended one day workshop on "Application of PCR Techniques for Sytematics and Biogeography of plants" organized by KSCSTE- Jawaharlal Nehru Tropical Botanic Garden and Research Institute, palode, Thiruvanthapurm on 14<sup>th</sup> November, 2019.
- Attended DST & ACS sponsored one day "Publishing workshop" organized by Bharadidhasan University, Trichy (Tamil Nadu), December 9, 2019.
- Attended in National Workshop on Woody Plant Tissue Culture organized by The Gandhigram Rural Institute (Deemed to be University), Tamil Nadu, 03/03/2022 & 04/03/2022.

### PARTICIPATIONS

#### Seminar, Symposium and Conferences

- National Symposium on Thermal Ecology organized jointly by Board of Research and Nuclear Science, Govt. of India and Manonmaniam Sundaranar University, Tirunelveli, on 1<sup>st</sup> and 2<sup>nd</sup> February, 2002.
- National seminar on Medicinal Plants and Herbal Exhibition organized by TNSCST, Chennai and Kandaswamy Kandar College, Namakkal on 12th February 2005.
- National Conference on Recent trends in Chemical and Biological Sciences (CHEM BIO'S CON-2009), K.M.G. College of Arts and Science, Gudiyattam, 23, 24 January 2009.
- Ahimsa and animal alternatives- The implications and benefits of teaching humane science. Gandhi-Gruber-Doerenkamp Chair for Alternatives in Life Science Education and In vitro Toxicology & Mahatma Gandhi Doerenkamp Center (MGDC)for Alternatives to Use of Animals in Life Science Education, Bharathidasan University, Tiruchirappalli - 620 024, India ON 2.10.2009.
- International conference on Herbal Medicine Evaluation of Quality, Efficacy and Safety, International Herbal Conference – 2009, The Lalit Ashok, Banglore, India, 26-28, February, 2009.
- National Symposium on Standardisation of Crude Drugs, M.S. University, Tirunelveli, Tamil Nadu, 23<sup>rd</sup> December 2009.
- Phytocongress 2010: An International Conference on Herbs and Herbo Mineral Formulations. Shanmugha Arts, Science, Technology & Research Academy [SASTRA], Thanjavur, Tamil Nadu, India, 6<sup>th</sup> & 7<sup>th</sup> February 2010
- International conference on Medicinal plants and Herbal drugs:Challenges and opportunities in cultivation, sustainable utilization and conservation. ICMPHD-2010. Pachaiyappas college,Chennai, March-4-6<sup>th</sup>, 2010.

- National Conference on "Emerging Trends in Medicinal Plants and Herbal Products" VHNSN College (Autonomous), Virudhunagar, Tamil Nadu, 12<sup>th</sup> and 13<sup>th</sup> December, 2013.
- National Seminar on Water Resources and Management of Tamil Nadu. Jamal Mohamed College, Trichy, Tamil Nadu, 3<sup>rd</sup> March 2014.
- > National Conference of Innovations in Biological Sciences. National College, Trichy. 24 & 25.07.2014.
- International conference on Solutions to Ecoloical Challenes: Multidimensional Perpectives. Fatima College, Madurai. 11-13.12.2014
- International Symposium on Emerging Trends in Bio-Chem Nutraceuticals. Fatima College, Madurai.
  4.12.2015.
- National Conference on Botanicals and Phytochemicals: The Challenges and Promise for health care and Drug development. Rev. Jacob Memorial Christian College, Ambilikkai. 4.02.2016
- National Conference on Recent Trends in Modern Biology & 47th Aqua Terr Annual Conference. Madurai Kamaraj University, Madurai. 27, 28.02.2016
- National seminar on "Social relationship between Microbes, Human and Environment. Srikaliswari College, Sivakasi, Tamil nadu. 18th & 19th July 2019.

### ADDITIONAL RESPONSIBILITIES

- ✤ Convenor for Non-Major Elective (NME) 2014-2016 & 2020-2022.
- ✤ Convenor for Part V 2014-2016.
- Convenor for Citizen Consumer Club 2019-2022
- ✤ Convenor for Eco-club 2021- till date