

BIODATA

Name & Qualification : **Dr. R. Manikandan M.Sc., Ph.D**
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PROFESSIONAL MEMBERSHIP:

Total Teaching Experience : 14.2 Years Industry Experience if any : Nil
Research Experience : 7 Years Guideship : -
No. of Scholars who have taken their doctorates under my guidance and their details : -
No. of Scholars who have taken their M.Phil under my guidance and their details : -
No. of research articles published in UGC CARE/ SCOPUS/ WEB of SCIENCE indexed journals : UGC CARE – 10; SCOPUS - 08
Number of Research articles Published : 28
Book Chapters : 05
Google Scholar Citations : 325 Scopus Citations: 89
h-index: 10 h-index: 05
i10-index: 10

LIST OF ARTICLES PUBLISHED IN JOURNALS IN CHRONOLOGICAL ORDER:

- Arumugam Vijaya Anand, **Ramasamy Manikandan**, TajuddinNargis Begum, KalaiyarasanVijaya Kumar, Govindarajan Akilandeswari, Maria Britto Jerline and Palanisamy Sampath Kumar (2011). Hypertension, diabetes, metabolic syndrome, inflammation and the risk of stroke. *Int J Biol Med Res.* 2(1): 429-432.
- G. DuraiMuthumani, A.Vijaya Anand and **R.Manikandan** (2013). Antioxidant, antihelmintic and antimicrobial activity of *Euphorbia thymifolia* Linn whole plant. *Int.J.Curr.Microbiol.App.Sci.* (2013) 2(1): 66-79.
- **R.Manikandan**, A.Vijaya Anand and G. DuraiMuthumani. (2013) Phytochemical and *in vitro* anti-diabetic activity of methanolic extract of *Psidium guajava* leaves *Int.J.Curr.Microbiol.Appl.Sci.* 2(2): 15–19.

- Shakeera Bhanu M, Sujatha K, Sridharan G and **Manikandan R.** (2013). Antihyperglycemic and antihyperlipidemic potentials of *Psidium guajava* in alloxan induced diabetic rats. *Asian journal of pharmaceutical and clinical research.* 6(1).
- B. Varalakshmi, A. Vijaya Anand, T. Karpagam, J. Suguna Bai and **R. Manikandan.** (2014). *In vitro* antimicrobial and anticancer activity of *Cinnamomum zeylanicum* linn bark extracts. *Int J PharmPharmSci.* 6(1). 12-18.
- **R. Manikandan,** A. Vijaya Anand, K. Vijayakumar. (2014). A review on Hepatoprotective activity of *Psidium guajava*. *Am. J. PharmTech Res.* 4(5).
- **R. Manikandan** and A. Vijaya Anand. (2015). A review on antioxidative activity of *Psidium guajava*. *Research J. Pharm. And Tech.* 8(3).
- K. Vijayakumar, A. Vijaya Anand and **R. Manikandan** (2015). *In vitro* antioxidant activity of ethanolic extract of *Psidium guajava* leaves. *International journal of Research Studies in Biosciences.* 3(5).
- **R. Manikandan** and A. Vijaya Anand. (2016). Evaluation of Antioxidant activity of *Psidium guajava* Linn in streptozotocin induced diabetic rats. *Free Radical and Antioxidant Journal.* 6(1).
- **R. Manikandan,** A. Vijaya Anand, P. Sampathkumar and Pushpa (2016). Phytochemical and *in vitro* anti-diabetic activity of *Psidium guajava* leaves. *Pharmacognosy Journal.* Vol. 8(4): 392-394.
- Vijaya Anand, **Manikandan,** Vijaya Kumar, Sampath Kumar, Pushpa and AgaathHedina. (2017). Phytopharmacological overview of *Psidium guajava* Linn. *Pharmacognosy Journal.* Vol. 8(4): 314-320.
- **Ramasamy Manikandan,** Arumugam Vijaya Anand, Rengasamy Lakshminarayan Rengarajan, Puthamohan Vinayakamoorthi, Radhakrishnan Ramalingam. (2017). *In vitro* Antioxidant activity of Extracts of *Psidium guajava* leaves. *PTB Reports.* 3(3): 50-54.
- **R. Manikandan,** A. Vijaya Anand, P. Sampathkumar and N. Manoharan. (2018). Protective effect of *Psidium guajava* leaf ethanolic extract against streptozotocin induced diabetes and lipidosis in rats. *Indian Journal of Animal Research.* Vol. 52 (8): 1198-1205.
- Panneerselvam Punniyakotti, Rengasamy Lakshminarayanan Rengarajan, Shanmugam Velayuthaprabhu, Kalaiyaran Vijayakumar, **Ramasamy Manikandan** and Arumugam Vijaya Anand. (2019). Protective effect of Terminalia catappa leaves and Terminalia chebula fruits on the enzymatic and non-enzymatic anti-oxidants levels in the doxorubicin induced toxicity rats. *Pharmacognosy Journal.* Vol. 11(2): 346-349.
- **Ramasamy Manikandan** and Kalaiyaran Vijayakumar (2020). *In vitro* anti-diabetic activity of *Syzygium cumini* seeds. *Asian Journal of Medical and Health Research.* 2020. 5(2):1-6.
- **R. Manikandan,** A. Vijaya Anand, S. Velayuthaprabhu, R.L. Rengarajan and V. Bharathi. Acute toxicity and dose fixation of the ethanolic extract of *Psidium guajava*. *Journal of Natural Remedies.* 21(4-S2): 2020.

- J. Jaychitra, M. Akshaya, V. Bharathi, C. Ruth Christiya and **R. Manikandan**.(2020). Phytochemical Analysis and GC-MS analysis of herbal formulation powder. *Journal of Natural Remedies*. 21(4-S2): 43-49.
- G. Akilandeswari, A. Vijaya Anand, K.M. Saradevi, R. **Manikandan** and V. Bharathi. An intended review on phytopharmacology of *Rhinacanthus nasutus* (Linn) Kurz. *Journal of Natural Remedies*. 21(4-S2): 2020.
- Jayachithra, Janani, Bharathi and **Manikandan**. (2020). Phytochemical analysis and mineral composition of methanolic extract of *Boerhavia diffusa* L. *Research Journal of Pharm and Tech*. 13(10): October-2020. Accepted.
- K. Vijayakumar, A. Vijaya Anand, **R. Manikandan**, N. Manoharan, P. Sampathkumar and T. Nargis Begum. (2020). Hepatoprotective effects of *Psidium guajava* on mitochondrial enzymes and inflammatory markers in carbon tetra chloride induced hepatotoxicity. *Drug Development and Industrial Pharmacy*. (Taylor & Francis).
- B. Varalakshmi, Jannathul Firdous, T. Karpagam, A. Shanmugapriya V. Sugana, P. Anitha, S. Gomathi, **R. Manikandan**, T. Abarna, N. Abirami and Jeyarani. (2021). Nano phytoremediation for textile dye degradation using abutilon indicum silver nanoparticles: photo catalytic activities. *Jouranl of Medical Pharmaceutical and Allied Sciences*. 10.22270/jmpas.2021.V1016.1939.
- Gurupalraj Durai Muthu Mani, Balasubramaniam Balamuralikrishnan, **Ramasamy Manikandan**, Palanisamy Sampathkumar, Meyyazhagan Arun, Rengasamu R Lakshminarayanan, Wen-Chao Liu and Arumugam Vijaya Anand. (2022). Effects of *Euphorbia thymifolia* and *Euphorbia hirta* leaf extracts on membrane-bound, mitochondrial enzymes and lipid profile of carbon tetrachloride-induced hepatotoxicity rats. *Natural Resources for Human Health*. <https://doi.org/10.53365/nrfhh/146770>.
- **Ramasamy Manikandan**, Balamuralikrishnan Balasubramanian, Panneerselvam Punniyakotti, Arumugam Vijaya Anand, Arun Meyyazhagan, Shanmugam Velayuthaprabhu, Rengasamy Lakshminarayanan Rengarajan, Utthapon Issara and Wen-Chao Liu. (2022). Cardio-protective effects of *Terminalia catappa* leaves and *Terminalia chebula* fruit extract in doxorubicin-induced cardiomyopathy in rats. *Biomarkers*. <https://doi.org/10.1080.1354750X.2022.2064550>.
- Balamuralikrishnan Balasubramanian, wen-Chao Liu, Vijaya Anand Arumugam, Durai Muthu Mani Gurupalraj, **Manikandan Ramasamy** and Shenbagam Madhavan. (2022). Protective effect of *Euphorbia thymifolia* and *Euphorbia hirta* against carbon tetrachloride-induced hepatotoxicity in Wistar rats. *Drug Development and Industrial Pharmacy*. <https://doi.org/10.1080/03639045.2022.2122985>.
- **Ramasamy Manikandan**, Balamuralikrishnan Balasubramanian, Arthi Boro, Pushparaj Karthika, Arun Meyyazhagan, Shanmugam Velayuthaprabhu, Arunkumar Malaisamy, Rengasamy Lakshminarayanan Rengarajan. and Arumugam Vijaya Anand. (2023). Impact on cardioprotective effet of *Psidium guajava* leaves extract in streptozotocin-induced Wistar mice with molecular in silico analysis. *Quality Assurance and Safety of Crops and Foods*. 15(2):209-221.
- Maria Jerline, **Ramasamy Manikandan**, Muthukrishnan Saradhadevi, Balasubramanian Balamuralikrishnan, Mohd Younis and Arumugam Vijayaanand. (2023). Influences of Ehtanolic extract of *Peltophorum pterocarpum* leaves and bark on lipid profile, liver and carbohydrate metabolizing enzymes on toxin-induced wistar rats. *Free Radicals and Antioxidants*. 13(1): 1-7.

- **Ramasamy Manikandan**, Arumugam Vijaya Anand, Purushothaman Gajalakshmi, Natarajan Divya, Thirunethiran Karpagam, Angappan Shanmuga Priya, Badrinarayanan Varalakshmi, Vasudevan Suganya. (2023). Anti-diabetic potential of *Macrotyloma uniflorum* leaves in an in vitro and in vivo model. *Studies on Ethno-Medicine*. 17(3-4): 133-139 (2023).

LIST OF PAPERS PRESENTED IN INTERNATIONAL CONFERENCE

- Paper entitled on Compound identification and *in-silico* anti-diabetic potential of caryophyllene from *P. guajava* leaves. Integrated nature of life science and its challenges in Research, organized by Dept of Biochemistry (DST-FIST sponsored department), Theivanai Ammal College for Women, Villupuram, held on 06.09.2019.
- Paper entitled on Activity of *P. guajava* leaves and caryophyllene on hepatic enzymes in stz-induced diabetic rats. Novel approach in cancer research and therapy, organized by PG & Research Department of Biochemistry, STET women's college, Mannargudi, held on 26.09.2019.
- Paper entitled on Impact of *P. guajava* leaves extract on the streptozotocin-induced diabetic rats. 5th International Symposium on Phytochemicals in Medicine and Food. Nanchang University, China, held on 25.08.2021 – 01.09.2021
- Presented a poster in “ International Conference on Research Trends Strategies and Technical Advancements in Biomedical Sciences for Sustainability” on 14.12.22 and 15.12.22, Organized by Research Department of Zoology, SRC, Trichy.
- Paper presented in “International Conference on Phytotherapeutics (ICPT-2023) on 10th February, organized by STET College, Mannargudi.

Seminar's, FDP and Workshop Attended

- State level seminar on Recent Trends in Pharmacotherapeutics
- State level seminar on Nanotechnology in Biology and Medicine
- Participant in Science exhibition, “MIETY EXPO – 2007”.
- Attended one day (07-01-2011) State Level Seminar on Recent Research in Biological Science organized by Biological and Bioinformatics Research Centre, Trichy.
- Attended faculty development program on Investor Education-Bishop Heber's College, from 02.02.22 to 09.02.22.
- Attended the Faculty Development Program on Aligning with the new educational Era- Primax Foundation from 21.02.22 to 26.02.22.
- Attended the Faculty Development Program on “Innovative Pedagogies of the Future in Teaching Learning Process. SIGC, Trichy, from 17.03.22 to 19.03.22.

- Attended Seven days national level Faculty Development Program on “ Basics of Research and Funding Opportunities”- Organized by IOT Academy, from 4th July-2022 to 12th July-2022.
- Shape Yourself with Siddha, Organized by Department of Chemistry, SIGC, Trichy on 14-07-22.
- Participated in IP awareness program under “National Intellectual Property Awareness Mission. Organized by Intellectual Property Office, India, on 26.04.2023

Journal Reviewer:

- Archives of Physiology and Biochemistry.
- Indian Journal of Human Genetics.
- Asian Journal of Research in Biochemistry.

Book Publications:

- **R. Manikandan.** Cell and Molecular Biology. ISBN:978-93-87654-15-9. JAMI Publications.
- **R. Manikandan.** Basics of BioMolecules. ISBN : 978-93-87360-37-2. JAZYM Publications.

Book Chapters:

- Review of Psidium guajava. Plants, Animals and Microbes. IOT Academy.
- Acute toxicity of the ethanolic leaf extract of Euphorbia thymofilia- Thanuj International Publishers.
- “Neuroendocrinology of Fishes” – Aquaculture Science and Engineering. Springer Publication. Pg: 209-234.
- “The Different and Basic Functions of Organ system of Fishes”- Aquaculture Science and Engineering. Springer Publication. Pg: 255-274.

Invited Talks:

- Delivered an invited talk on “Nucleic acid and its important” held on 01.12.2018 conducted by the Department of Biochemistry, RVS Agricultural College, Tanjore.

Patents:

- Protective effect of Psidium guajava leaf ethanolic extract against streptozotocin-induced diabetes and lipodosis in rats. (Application. No: 202341037659). Status: **Published**
- Investigate the potential anti-diabetic and hypolipidemic effects of Psidium guajava leaf ethanolic extract against streptozotocin-induced diabetes and lipodosis in rats. (Application No: 202341037660). Status: **Published.**
- Smart Device for Detecting Frozen Shoulder. (Design number: 392678-001)

Organize the Funding Programs:

- Organize the one day National Seminar entitled “Impact of Non-Communicable Diseases in India”.
Funded by **Indian Council of Social Science Research (ICSSR)**, New Delhi. Sanctioned Amount: Rs. 90,000/ Date of program: 11.10.23