Dr. Vasanth Dhakshinamoorthy
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BIOSKETCH

Dr. Vasanth Dhakshniamoorthy is a toxicologist by training and his expertise is being implemented in materials safety and environmental risk assessment using in vitro and in vivo (animal) models. He has been working as an Assistant Professor (Sr. Gr) in the Department of Nanobiotechnology, PSG Institute of Advanced Studies, Coimbatore since Sep 2023. His research mainly focuses elucidation of molecular adverse outcome pathways and development of alternative testing strategies to assess the toxicity of emerging contaminants and hazardous environmental pollutants. He completed his post-graduate degree from National Dairy Research Institute (ICAR-NDRI), Haryana and PhD from Bharathiar University, Coimbatore followed by Postdoctoral research from IIT Madras.

Educational Profile

- **Doctor of Philosophy (Ph.D.) in Biotechnology**
  Year of Passing: 2013
  Molecular Toxicology Laboratory
  Bharathiar University, Coimbatore

- **Master of Science (M.Sc.) in Animal Biotechnology**
  Year of Passing: 2004
  Animal Biotechnology Division
  National Dairy Research Institute (NDRI), Haryana

- **Bachelor of Science (B.Sc.) in Biochemistry**
  Year of Passing: 2001
  St. Joseph's College of Arts and Science, Cuddalore
  University of Madras

Positions Held

Sep 2023 – Present	Assistant Professor (Sr. Gr) Department of Nanobiotechnology PSG Institute of Advanced Studies Peelamedu, Coimbatore, TN
Feb 2021 – Aug 2023	Assistant Professor PG & Research Department of Biotechnology & Microbiology National College (Autonomous) Tiruchirapalli, TN

Dec 2019 – Aug 2020	Project Officer Department of Civil Engineering Indian Institute of Technology Madras, TN
Jan 2014 – Nov 2019	Guest Lecturer Department of Microbial Biotechnology Bharathiar University, Coimbatore, TN

Research Areas

- Environmental risk assessments of emerging contaminants and hazardous pollutants
- Chemicals / Materials: Safety, efficacy and toxicity
- Alternative testing strategies for toxicological assessments

Awards & Achievements

1. National Junior Research Fellowship -ICAR-NDRI- 2001
2. University Research Fellowship –Bharathiar University-2008
3. International Travel Grant-European Commission 6th Framework Marie Curie Grant, Germany

Invited Talks

1. "Environmental Risk Assessments of Emerging Contaminants" at the 41st Annual Convention and National Seminar on Hydrology with special reference to Hydrological Solutions for Sustainable Development, organized by the **Association of Hydrologists of India (AHI)** & PSG Institute of Advanced Studies, Coimbatore (Dec 2023)

2. Short-term Course on "Academic and Research Report Writing" organized by the PG & Research Department of Biotechnology and Microbiology, National College (Autonomous), Trichy, Tamil Nadu, India (3-8 Jan 2022).

3. Laboratory Animal Webinar Series (LAWS-2021) Organized by Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai, India (22-27th Nov 2021).

4. Quality Improvement Programme on Advances in Biological Systems and Material Science in NanoWorld organized by Coimbatore Institute of Technology (CIT), Coimbatore, Tamil Nadu, India (17- 22nd April 2017).

Journal Publications

1. **Vasanth Dhakshinamoorthy,** S. P. R. Vishali, Sriramakrishnan Elumalai & Ekambaram Perumal (2025). Acute exposure to environmentally relevant concentrations of pharmaceutical pollutants induces neurobehavioral toxicity in zebrafish (Danio rerio), **Drug and Chemical Toxicology**, 48 (1): 37-50. https://doi.org/10.1080/01480545.2024.2382451 (IF: 2.1)

2. Sathish Sankar, **Vasanth Dhakshinamoorthy**, Govindasamy Rajakumar (2023). PARP in the neuropathogenesis of cytomegalovirus infection – Possible role and therapeutic perspective. Microbial Pathogenesis, 176, 106018. https://doi.org/10.1016/j.micpath.2023.106018 (IF: 3.3)

3. Sathish Sankar, Pitchapillai Ganesh and **Vasanth Dhakshinamoorthy** (2022). Malignant odontogenic tumors: Epigenetics in disease and therapy. Acta Odontologica Scandinavica, 81 (1); 93-97. https://doi.org/10.1080/00016357.2022.2092649 (IF: 2.0)

4. **Vasanth Dhakshinamoorthy**, Vijayprakash Manickam, Ekambaram Perumal (2019). Iron Oxide Nanoparticles Affects Behavior and Monoamine Levels in Mice. ***Neurochemical Research, 44(7), 1533-1548.*** https://doi.org/10.1007/s11064-019-02774-9 (IF: 3.8)

5. Vijayprakash Manickam, **Vasanth Dhakshinamoorthy**, Ekambaram Perumal (2018). Iron Oxide Nanoparticles Induces Cell cycle-dependent Neuronal Apoptosis in Mice. ***Journal of Molecular Neuroscience, 64(3), 352-362.*** https://doi.org/10.1007/s12031-018-1030-5 (IF: 2.8)

6. **Vasanth D,** Vijayprakash M, Ekambaram P (2017) Neurobehavioral Toxicity of Iron Oxide Nanoparticles in Mice. ***Neurotoxicity Research*, *32*(2), 187-203.** https://doi.org/10.1007/s12640-017-9721-1 (IF: 3.4)

7. Vijayprakash Manickam, Madhivadhani Periyasamy, **Vasanth Dhakshinamoorthy,** Lakshmikanthan Panneerselvam, Ekambaram Perumal (2017) Recurrent Exposure to Ferric Oxide Nanoparticles Alters Myocardial Oxidative Stress, Apoptosis and Necrotic Markers in Male Mice. ***Chemico-Biological Interactions*, *278*, 54-64.** https://doi.org/10.1016/j.cbi.2017.10.003 (IF: 5.4)

8. Muthukirshnan Saradhadevi, Murugesan Gnanadesigan, Gnanajothi Kapildev, **Dhakshinamoorthy Vasanth** (2017) Dataset on antitumor properties of silver nanoparticles from *Gloriosa superba* (L) seed on Dalton Lymphoma Ascites (DLA) tumor: Facile and biocompatible approach. ***Data in Brief,*** 14, 524. https://doi.org/10.1016/j.dib.2017.08.003 (IF: 1.4)

9. Sujatha Purushothaman, Azhwar Raghunath, **Vasanth Dhakshinamoorthy**, Lakshmikanthan Panneerselvam & Ekambaram Perumal (2014) Acute exposure to titanium dioxide (TiO2) induces oxidative stress in zebrafish gill tissues**.** ***Toxicological and Environmental Chemistry, 96(6), 890-905.*** https**:**//doi**.**org/10**.**1080/02772248**.**2014**.**987511 (IF**:** 1.1)

10. P Ekambaram, T Namitha, S Bhuvaneswari, S Aruljothi, **D Vasanth**, M Saravanakumar (2010) Therapeutic efficacy of Tamarindus Indica (L) to protect against Fluoride-Induced Oxidative Stress in the liver of female Rats. *FLUORIDE,* 43(2)**:**134-140 (IF**:** 1**.**342)