

Chengalvarayan Dhakshayani

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Residential address

No. 33C, III cross street, PTC quarters,

Okkiam Thuraippakkam, Chennai- 600097, India

Scholastic record

Doctor of Philosophy (Ph.D.), (2010), University of Madras, Chennai

Ph.D. Thesis: Microbe-Earthworm interactions and the impact of exotic earthworm (*Eudrilus eugeniae* Kinberg) on the endemic earthworms (*Lampito mauritii* Kinberg and *Perionyx excavatus* Perrier) and their microbial community structure.

Master of Science in Applied Microbiology (M.Sc.) (2001), University of Madras, Chennai

Master's Thesis: An *in vitro* study on the antimicrobial effect of raw and cooked garlic (*Allium sativum*) extract against enteric pathogens and dermatophytic fungi.

Bachelor of Science in Microbiology (1999) University of Madras, Chennai

Higher Secondary Education (1994) – Ranimeyyammai Girls Hr. Sec. School, Chennai - 600028

Work Experience

2008 - till date

Employer: Natur-tec, Harita-NTI, a JV company of TVS group with Northern Technologies International in the U.S.

Designation: Asst. Manager, R&D, in a Biopolymer manufacturing industry for packaging sector.

2004 – 2008

Employer: Dr. MGR Janaki College of Science for women, Chennai 600 028.

Designation: Lecturer, Department of Microbiology

2003 -2004

Employer: New Prince Shri Bhavani College of Arts and Science, Chennai

Designation: Lecturer, Department of Microbiology

2001 – 2002

Employer: Shri AMM Murugappa Chettiar Research Centre, Taramani, Chennai 600 113.

Designation: Research Scholar

2002-2003

Employer: Justice Basheer Ahmed Syed College for women, Teynampet, Chennai- 600018

Designation: Research scholar

2005- 2011

Guest faculty in the Department of Biotechnology, The New College, Chennai.

Projects Handled

Industrial Infrastructure set up

- ✚ Designing, implementation and execution of testing infrastructure for biodegradation study of biopolymers as per standards such as ISO 14855 –Automated aerobic controlled composting facility; ISO 16929 – Aerobic composting for disintegration study, OECD 207 – Earthworm toxicity test.
- ✚ Present project: Designing, implementation and trial run of Automated large scale Biopolymer testing infrastructure for CIPET to develop the testing infrastructure for Bioplastics in India; project funded by UNIDO
- ✚ Designing, installation and Implementation of solid waste management facility to corporate companies to demonstrate the use of biopolymers and its role in composting
 - Client companies: Godrej & Boyce, Cognizant technology solutions, Grundfos pumps, Central Institute of Plastics engineering and technology, Chennai.
- ✚ Played a key role in the development of new products such as cutleries, packaging films and their testing facilities for the products developed.

Social Projects

- ✚ Worked in a social Project funded by Dept. of Science &Technology “Awareness programmes on vermicomposting and its applications for 50 household in Chennai” educating on the Knowhow and applications of composting process.
- ✚ Associated with domestic and Industrial Solid waste Management

List of publications and conference papers

1. **Dhakshayani, C.,** Dawood, N and Ismail, SA. 2013. Interactions between endemic and exotic earthworms in India with respect to microbial populations of their compost. Indian Journal of Environmental Sciences. 17 (1), 41-47.

2. **Dhakshayani, C.**, Ismail, SA. 2013. Microbial dynamics of endemic earthworms on soil health and sustainable agriculture. Nature Environment and pollution technology, Manuscript accepted for publication.
3. **Dhakshayani C**, Tamilselvan P, Karthika P, Balakrishnan S. Biopolymers – An effective tool for decentralised organic waste management and carbon foot print reduction. International conference on “Advancements in polymeric materials”, February 2012, CIPET, Ahmedabad, India.
4. **Dhakshayani C**, Tamilselvam P, Karthika P, Balakrishnan S. Determination of ultimate biodegradability of compatibilized blends of PLA-PBAT composite as per ISO 17088 specifications. International conference on “Advancements in polymeric materials”, February 2012, CIPET, Ahmedabad, India.
5. **Dhakshayani C**; Microbe-Earthworm interactions and the impact of exotic earthworm (*Eudrilus eugeniae* Kinberg) on the endemic earthworms (*Lampito mauritii* Kinberg and *Perionyx excavatus* Perrier) and their microbial community structure. Ph.D. thesis, University of Madras, 220 pp.
6. **Dhakshayani C**, Balakrishnan S; Say ‘Yes’ to this Plastic (Bioplastics)! Volume 3, Issue 11, February 2011, Special Report, Terragreen, TERI Press.
7. **Dhakshayani C** and Sultan Ahmed Ismail; Entrepreneurial development of Self Help Groups in Agriculture - Role for women scientists : Women in Agriculture and Rural Development; Edited by Shakunthala Sridhara, B. Nagachaitanya, A.K. Chakravarthy, M.K. Nagamani and T.K. Prabhakara Shetty, New India Publishing Agency, 2009, xxii, 358 p, ISBN : 8189422998
8. Ismail S A, Jebakumari, P, **Dhakshayani, C**. Status of Composting in India - An Indian earthworm’s eye-view; International Seminar 2010 on Climate Change and Environmental Challenges of 21st Century; 7-9 December 2010, University of Rajshahi
9. **Dhakshayani, C**. Sultan Ismail, Earthworms and Microorganisms – A synergistic role in improving soil fertility; Proceedings of the National Seminar on Environment Biotechnology, 2003, JBAS College, Chennai, India.

Personal information

Date of Birth : 2nd October 1978

Gender : Female