

CONTACT

+61 403 266 425

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FLETCHER NSW

Dr Logeshwaran Panneerselvan

EDUCATION

Ph.D. Environmental Remediation and Public Health

University of South Australia
2010-2013

Postgraduate Diploma in Nanobiotech.

Life Science Foundation of India
2009-2010

Masters in Agriculture (Microbiology)

Tamil Nadu Agricultural University
India
2005-2007

Bachelors in Horticulture

Tamil Nadu Agricultural University
India
2001-2005

TEACHING EXPERIENCE

Lecturer

- Biomedical Applications of Nanomaterials (MATS6006)
- Soil Properties and Processes (GEOS2060)
- Ecological Risk Assessment (ERAR6006)
- Enviromics and Biostatistics (ERAR6008)
- Applied Microbiology and Biotechnology (ERAR6010)
- Industrial Biotechnology (ABT404)

Course co-ordinator

- Research project (ERAR6110,20,30,40)

LOGESHWARAN PANNEERSELVAN

ENVIRONMENT AND SUSTAINABILITY

PROFILE

Environmental science professional since 2010 with special interests in sustainability and environmental risk assessment and remediation and experience in project(s) management, stakeholder, and community engagement. Being an effective communicator and team person, I have coordinated and carried out projects involving students, researchers, government, and industrial collaborators. My aim is to utilise my skills towards clean and sustainable solutions to existing environmental concerns through research, education, and awareness.

CAREER JOURNEY

- EPIC, THE UNIVERSITY OF NEWCASTLE** 2022 - PRESENT
RESEARCH FELLOW & FACILITY MANAGER (NATA ACCREDITED)
 - Development and optimisation of sustainable & compostable plastic alternative sustainable biopolymers and biocolourants.
 - Compostability of biopolymers (home and industrial conditions) as per Australian and International Standards.
 - Textile waste recycling for closing the loop through CRFs and composting.
 - Standardisation of compostability of textile wastes for a circular economy.
 - Studying the impacts of plastics (nano- and micro) on the environment (soil and water).
 - Facility manager of Biodegradation Testing Laboratory (NATA Accredited).
 - Managing EPIC research operations, reporting on budgets, work schedules and outcomes.
- GCER & CRC CARE, THE UNIVERSITY OF NEWCASTLE** 2020 - 2022
RESEARCH FELLOW
 - Developed guidance document for risk-based management of petroleum hydrocarbon contaminated groundwater.
 - Risk assessment of petroleum hydrocarbons and their impacts on groundwater fauna (stygo fauna) and microbial diversity in groundwater aquifers.
 - Assessing the suitability of surrogate organisms for assessing impacts of emerging priority pollutants on stygo fauna.
 - Bioremediation and phytoremediation of emerging priority pollutants.
- GCER & CRC CARE, THE UNIVERSITY OF NEWCASTLE** 2015 - 2019
RESEARCH ASSOCIATE
 - Assessed the ecotoxicity of fluorinated and non-fluorinated bush firefighting chemicals (Class A and B).
 - Standardized extraction of organic contaminants from various biological matrices.
- CERAR & CRC CARE THE UNIVERSITY OF NEWCASTLE** 2013 - 2015
RESEARCH ASSISTANT
 - Assessed the ecotoxicity of PFASs, insensitive munitions, and illicit drugs chemicals.
 - Standardised genotoxicity assessment studies of PFASs ecotoxicity.
 - Novel finding on phytoremediation of PAHs based on C3 and C4 photosystems.

STUDENT SUPERVISION

Ph.D. Co-supervision

Current - 4 students (2024)

Completed - 3 students (Until 2023)

Honours supervision

Current - 2 students (2024)

Completed - 3 students (Until 2023)

GRANTS & FUNDINGS

- Number of grants to date: 7
- Total funding: >1.3 M

AWARDS

- International Postgraduate Research Scholarship (IPRS)
- CRC CARE Top-Up Scholarship

PUBLICATIONS

Google scholar h-index: 21 (2025)



REFERENCES

Assoc. Prof. Thava Palanisami

Environmental Plastics and Innovation Cluster (EPIC)

The University of Newcastle

Phone: +61 431 300 521

Email: Thava.Palanisami@newcastle.edu.au

Laureate Prof. Ajayan Vinu

Director

Global Innovative Centre for Advanced Nanomaterials (GICAN)

The University of Newcastle

Phone: +61 406 010 879

Email: ajayan.vinu@newcastle.edu.au

- **TAMIL NADU AGRICULTURAL UNIVERSITY (INDIA)** 2008 - 2009
SENIOR RESEARCH FELLOW
 - Studied the environmental impacts of sugarcane industry effluents.
- **TAMIL NADU AGRICULTURAL UNIVERSITY (INDIA)** 2007 - 2008
SENIOR RESEARCH FELLOW
 - Assessed the efficacy of *cry* proteins on cotton insect pests.

MANAGEMENT, LEADERSHIP, & SAFETY

- Facility Manager (NATA accredited & DIN CERTCO).
- ISO17025 Compliance.
- Member of the Institutional Biosafety Committee (IBC) at UON.
- Responsible for the implementation of WHS guidelines.

COMMUNICATION SKILLS

VERBAL SKILLS

- Presented my research work on environmental pollution, environmental risk assessment and remediation, toxicology, eco-friendly materials, and waste utilisation at Australian conferences.

WRITING SKILLS

- Published over 20 articles, including journal papers, book chapters and conference proceedings/presentations.
- The publications were in several high-impact journals on environmental science, pollution research, microbial ecology, bioremediation, toxicology, phytoremediation, algal technologies, circular economy, textile waste recycling and environmental sustainability.
- Credits for my writing skills are reflected in the successful Grants.
- Standard operating procedures and risk assessment document preparation.

KEY SKILLS

- **Project Management:** Liaising with collaborators, government personnel, and stakeholders; writing grant proposals; finance management (purchasing); Experience in supervising research & field teams (various locations in NSW and overseas); reporting project outcomes; organising project meetings & coordinating discussions; governance.
- **Engagement:** Facilitation of conferences/workshops/programs; stakeholder interactions; community engagement; surveys (in-person/online).
- **IT Skills:** Microsoft Office Suites, IBM TechOne, AWS, GitHub, Data analysis and visualisation, CANVA, experience in working with online and offline databases
- **Graph skills:** SigmaPlot, OriginPro
- **Working knowledge** in NSW platforms: Planning & Legislation.