

Short Curriculum Vitae and Summary of Scientific Activities



Dr. P. Thangavel

Assistant Professor

Department of Environmental Science, Periyar University,
Periyar Palkalai Nagar, Salem - 636 011, Tamil Nadu, India
Mobile: +91 (0) 9688222646 Email: thanvel@yahoo.com

Education

- 1996-2002 Ph.D. in Environmental Sciences, Bharathiar University, Coimbatore, India.
- 1998-1999 Diploma in Industrial Pollution Control, Annamalai University, India.
- 1992-1993 M.Phil. in Zoology (interdisciplinary with Environmental Sciences), Bharathiar University, Coimbatore, India.
- 1990-1992 M.Sc. in Zoology, Bharathiar University, Coimbatore, India.
- 1987-1990 B.Sc. in Zoology, Bharathiar University, Coimbatore, India.

Positions

- since 2013 Assistant Professor, Department of Environmental Science, Periyar University, Periyar Palkalai Nagar, Salem, Tamil Nadu, India.
- 2011-2013 Guest Lecturer, Department of Environmental Science, Periyar University, Periyar Palkalai Nagar, Salem, Tamil Nadu, India.
- 2009-2010 Post Doctoral Research Associate, School of Environmental Science and Engineering, Sun Yat-Sen University, Guangzhou 510275, PR China.
- 2005-2007 Visiting Scientist, United States Department of Agriculture (USDA) Forest Service, Northern Research Station, Durham, New Hampshire, USA
- 2004-2005 Research Associate (CSIR), Bharathiar University, Coimbatore, TN, India.
- 2002-2003 Senior Research Fellowship (Extended) (CSIR), Bharathiar University, Coimbatore, Tamil Nadu, India.
- 1996-1999 Senior Research Fellowship (CSIR), Bharathiar University, Coimbatore, Tamil Nadu, India.

Fields of Competence

- ❖ Soil Ecology & Phytoremediation
- ❖ Environmental Impact Assessment
- ❖ Biofuels & Biofortification

Professional Experience

Teaching Experience: **8 years**

Research experience: **21 years; 12 years (after Ph.D)**

Scientific visits

- ❖ Harvard Forest (Harvard University), Petersham, MA, USA
- ❖ University of New Hampshire, NH, USA
- ❖ State University of New York, Syracuse, NY, USA
- ❖ Binghamton University, NY, USA
- ❖ University of Guelph, Ontario, Canada
- ❖ Sun Yat-Sen University, Guangzhou, PR China
- ❖ Kestsart University, Thailand
- ❖ Kangwon National University, South Korea

Executive summary of scientific production and impact

❖ Research Publications in Journals	33
❖ Book Chapters	6
❖ Cumulative Impact Factor	39.967
❖ Cumulative SNIP Factor (CWTS Journal Indicators)	22.126
❖ Cumulative SJR Factor	18.095
❖ h index	10
❖ i-10 index	11
❖ Number of citations	328
(http://scholar.google.co.in/citations?user=F4N5oCAAAAAAJ&hl=en)	
❖ Books Edited	3
❖ Presentations in Conferences	45
❖ Participations in Conferences/Workshops	39
❖ Training / Soft Skills development Programmes	6
❖ Conference/Seminar/Workshop Organized	3
❖ Special Lecture Programme Organized	12
❖ Invited Talks	21
❖ Scientific Talks in Media	6

Awards/Fellowships

1. Awarded **Senior Research Fellowship (SRF)** from Council for Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, New Delhi (from October 1996 to September 1999).
2. Awarded **Senior Research Fellowship (Extended)** from Council for Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, New Delhi (from September 2002 to August 2003).
3. Awarded **Research Associateship (RA)** from Council for Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, New Delhi (from October 2004 to January 2005).
4. Received **Foreign Travel Grant** from Council for Scientific and Industrial Research (CSIR), Department of Science and Technology (DST), Committee on Science and Technology in

Developing Countries (COSTED) and Bharathiar University to attend the “6th International Conference on the Biogeochemistry of Trace Elements (ICOBTE, 2001)” held on July 29 – August 2, 2001 at University of Guelph, Ontario, Canada.

5. Received **Foreign Travel Grant** from Department of Science and Technology (DST), to attend the “2nd International Conference on Contaminated Land, Ecological Assessment and Remediation (CLEAR 2014) held on October 05-08, 2014 at Kangwon National University, Seoul, South Korea.

Research Projects

Response of non-protein thiols and polyamines in Cd and Zn defense mechanism in multi-metal hyperaccumulators *Potentialla griffithii* and *Picris divaricata* (*China Postdoctoral Science Foundation 2010*, Sanction # 20100470944 dated June 10, 2010 for 30,000 RMB).

Professional contributions

- ❖ Editorial Board, *Frontiers in Environmental Science (Wastewater Management)*, Switzerland. 2013
- ❖ Editorial Board, *African Journal of Agricultural Research*. 2007 - Till
- ❖ Editorial Board, *International Journal of Nutrition and Metabolism*. 2009 - Till
- ❖ Editorial Board, *International Journal of Plant Physiology and Biochemistry*. 2009 - Till

· Served as a reviewer of scientific contributions to the journals and books in:

- ❖ Elsevier
- ❖ Springer
- ❖ Taylor & Francis
- ❖ Wiley-VCH
- ❖ INSA
- ❖ Academic Journals

Professional affiliations

1. American Society of Plant Biologists (ASPB), USA (Member ID: 70948)
2. Ecological Society of America (ESA), USA (Member ID: 131948)
3. International Phytotechnology Society (IPS), USA
4. PHYTONET- Phytoremediation Electronic Newsgroup Network, Italy
5. AQUAPHYTE – University of Florida, USA
6. International Serpentine Ecology Society (ISES), USA
7. Indian Network for Soil Contamination Research (INSCR), New Delhi.
8. International Society of Environmental Botanists (ISEB), Lucknow.
9. Indian Science Congress Association (ISCA), Kolkata.

Significant Publications

1. Wu, Q., S.Wang, **P.Thangavel**, Q.Li, H.Zheng, J.Bai, R.Qiu (2011) Phytostabilization potential of *Jatropha curcas* L. in polymetallic acid mine tailings. *Int. J. Phytorem.* 13: 788-804 [ISSN: 1522-6514 (Print) 1549-7879 (Online)] **IF: 1.298**
2. Qiu, R., **P.Thangavel**, P-J.Hu, P.Senthilkumar, R-R.Ying, Y-T.Tang (2011) Interaction of cadmium and zinc on accumulation and sub-cellular distribution in leaves of

hyperaccumulator *Potentilla griffithii*. J. Hazard. Mater. 186: 1425-1430 (ISSN: 0304-3894) **IF: 4.173**

3. Minocha, R., S.Long, **P.Thangavel**, S.C.Minocha, C.Eagar and C.T.Driscoll (2010) Elevation dependent sensitivity of northern hardwoods to Ca addition at Hubbard Brook Experimental Forest, NH, USA. For. Ecol. Manag. 260: 2115-2124 (ISSN: 0378-1127) **IF: 2.487**
4. Mohapatra, S., S.Cherry, R.Minocha, R.Majumdar, **P.Thangavel**, S. Long, S.C.Minocha (2010) The response of high and low polyamine-producing cell lines to aluminum and calcium stress. Plant Physiol. Biochem. 48: 612-620. (ISSN: 0981-9428) **IF: 2.838**
5. **Thangavel, P.**, K.Sumathiral, S.Maheswari, S.Rita and M.Ramaswamy (2010) Hormone profile of an edible, freshwater teleost, *Sarotherodon mossambicus* (Peters) under endosulfan toxicity. Pestic. Biochem. Physiol. 97: 229-234. (ISSN: 0048-3575) **IF: 1.713**
6. Minocha, R., **P.Thangavel**, O.P.Dhankher and S.Long (2008) Separation and quantification of monothiol and phytochelatins from a wide variety of cell cultures and tissues of trees and other plants using high performance liquid chromatography. J. Chromatogr. A 1207: 72-83. (ISSN: 0021-9673) **IF: 4.531**
7. **Thangavel, P.**, S.Long and R.Minocha (2007) Changes in phytochelatins and their biosynthetic intermediates in red spruce (*Picea rubens* Sarg.) cell suspension cultures under cadmium and zinc stress. Plant Cell Tiss. Org. Cult. 88: 201-216. [ISSN: 0167-6857 (Print) 1573-5044 (Online)] **IF: 3.090**
8. **Thangavel, P.**, K.Sumathiral, S.Karthikeyan and M.Ramaswamy (2005) Endocrine response of the freshwater teleost, *Sarotherodon mossambicus* (Peters) to dimecron exposure. Chemosphere 61 (8): 1061-1214. (ISSN: 0045-6535) **IF: 3.206**
9. **Thangavel, P.**, M.Ramaswamy, K.Sumathiral and K.Amutha (2005) Individual and combined effects of dimecron-ziram on the levels of serum prolactin and selected minerals of an edible freshwater fish, *Oreochromis mossambicus* (Peters). Pestic. Biochem. Physiol. 81: 24-31. (ISSN: 0048-3575) **IF: 1.713**
10. **Thangavel, P.**, H.Nivedhitha and M.Ramaswamy (2004) Comparative study on individual and synergistic effects of dimecron and ziram on some parameters of carbohydrate metabolism in different tissues of a freshwater teleost, *Sarotherodon mossambicus* (Peters). Bull Environ. Contam. Toxicol. 72 (2): 365-372. [ISSN: 0007-4861 (Print) 1432-0800 (Online)] **IF: 1.018**
11. **Thangavel, P.** and C.V.Subbhuraam (2004) Phytoextraction: role of hyperaccumulators in metal contaminated soils. Proc. Indian Natn. Sci. Acad. B 70 (1): 109-130. (ISSN: 0073-6600) Indian National Science Academy, New Delhi. (*Invited Review for Phytoremediation Special Issue*)
12. Anandi, S., **P.Thangavel** and V.Subburam (2002) Influence of aluminium on the restoration potential of a terrestrial plant, *Portulaca oleracea* L. as a biomonitoring tool of fresh water aquatic environments. Environ. Monit. Assess. 78 (1): 19-29. [ISSN: 0167-6369 (Print) 1573-2959 (Online)] **IF: 1.400**
13. Nivethitha, P., **P.Thangavel**, SPM.Prince W and V.Subburam (2002) Identification of heavy

metal accumulating plants and their use in reclamation of soil contaminated with heavy metals. *Eco. Env. & Cons.* 8 (3): 249-251. (ISSN: 0971-765X)

14. Ramaswamy, M, **P.Thangavel** and N.Panneer Selvam (1999) Glutamic oxaloacetic transaminase (GOT) and glutamic pyruvic transaminase (GPT) enzyme activities in different tissues of *Sarotherodon mossambicus* (Peters) exposed to a carbamate pesticide, carbaryl. *Pestic. Sci.* 55: 1217-1221. [ISSN: 1526-4998 (Print) 1526-498X (Online)] **IF: 2.251**
15. **Thangavel, P.**, A.Shahira Sulthana and V.Subburam (1999) Interactive effects of selenium and mercury on the restoration potential of leaves of the medicinal plant, *Portulaca oleracea* Linn. *Sci. Total. Environ.* 243/244: 1-8. (ISSN: 0048-9697) **IF: 3.286**
16. Nivedhitha,H., **P.Thangavel**, A.Shaik Dawood and M.Ramaswamy (1998) Adaptive changes in the patterns of carbohydrate metabolites in blood, liver, muscle and heart tissues of *Sarotherodon mossambicus* (Peters) exposed to a carbamate fungicidal product, cuman L. *Pestic. Sci.* 52: 133-137. [ISSN: 1526-4998 (Print) 1526-498X (Online)] **IF: 2.251**
17. **Thangavel, P.** and V.Subburam (1998) Effect of trace metals on the restoration potential of leaves of the medicinal plant, *Portulaca oleracea* Linn. *Biol. Trace Elem. Res.* 61 (3): 313-321. [ISSN: 0163-4984 (Print) 1559-0720 (Online)] **IF: 1.923**
18. Ramaswamy, M., **P.Thangavel**, S.Dhanalakshmi, P.Govindaraj and D.Karuppiah (1996) Comparative study on the synergistic and individual effects of dimecron and cuman L on oxygen uptake and haematological parameters of a fresh water edible fish, *Sarotherodon mossambicus* (Peters). *Bull. Environ. Contam. Toxicol.* 56: 796 - 802. [ISSN: 0007-4861 (Print) 1432-0800 (Online)] **IF: 1.018**

Book Chapters

1. **Thangavel, P.**, G. Sridevi and K. Muthuchelian (2013) Faunal diversity in India – An overview. *In:* K. Muthuchelian (ed.), *Glimpses of Animal Biodiversity*, Daya Publishing House, A Division of Astral International (P) Ltd., New Delhi. Pages 1-18 (ISBN: 978-81-7035-825-1).
2. Gill, S.S., N. A. Anjum, I. Ahmad, **P. Thangavel**, G. Sridevi, M. Pacheco, A.C. Duarte, S. Umar, N.A. Khan and M.E. Pereira (2012) Metal hyperaccumulation and tolerance in *Alyssum*, *Arabidopsis* and *Thlaspi*: An overview. *In:* N.A. Anjum, I. Ahmad, M.E. Pereira, A.C. Duarte, S. Umar, N.A. Khan (eds.), *'The Plant Family Brassicaceae – Contribution Towards Phytoremediation'*. Springer Dordrecht, Heidelberg. Pages 99-138 [(ISSN: 1566-0745; ISBN: 978-94-007-3912-3; ISBN: 978-94-007-3913-0 (eBook))].
3. **P. Thangavel**, G. Sridevi, N. A. Anjum, I. Ahmad and E. Pereira (2012) Metals and metalloids detoxification mechanisms in plants: Physiological and biochemical aspects. *In:* N.A. Anjum, M.E. Pereira, I. Ahmad, A.C. Duarte, S. Umar, N.A. Khan (eds.), *'Phytotechnologies: Remediation of Environmental Contaminants'*. CRC Press, Boca Raton, Florida. Pages 497-520 (ISBN: 9781439875186).
4. Qiu, R-L., Y-T.Tang, X-W.Zeng, **P.Thangavel**, L.Tang, Y-Y.Gan, R-R.Ying, S-Z.Wang (2012) Mechanisms of Cd hyperaccumulation and detoxification in heavy metal hyperaccumulators: how plants cope with Cd. *In:* U.Lüttge, W.Beyschlag, B.Büdel, D.Francis (eds.), *Progress in Botany* 73 (3): 127-159, Springer-Verlag, Berlin-Heidelberg. (ISSN: 0340-4773; ISBN: 978-3-642-22745-5)

5. **Thangavel, P** (2005) Primary production of natural and contaminated aquatic ecosystems. [Recent Advances in Water Pollution Research](#) pp. 285-303. Enviromedia, Karad, India. Book Enclave Publishers, India (ISBN: 81-8152-072-6)