NEHRU MEMORIAL COLLEGE (AUTONOMOUS)

PUTHANAMPATTI-621007

STAFF PROFILE DECEMBER - 2021



NAME OF THE STAFF : Dr.A.BOOPATHY RAJA

DESIGNATION : Assistant Professor

DEPARTMENT : Zoology

1. CONTACT

Address : PG and Research Department of Zoology,

Nehru Memorial College (Autonomous),

Puthanampatti -621007, Tiruchirappalli, Tamil

Nadu, India.

Contact Phone (Mobile) : 7904157199

Contact e-mail(s) : boopathyraja07@gmail.com

2. ACADEMIC QUALIFICATIONS

Degree	College/University/Board	Year of Passing/ Awarded
Ph.D	Annamalai University	2010
M.Phil	Sri vasavi college, Erode	2003
M.Sc	Sri vasavi college, Erode	2001
B.Sc	Sri vasavi college, Erode	1999

3. TEACHING EXPERIENCE

S. No.	Institution	Duration	No. of Years	
S. NO.	Institution	Duration	UG	PG
1.	Nehru Memorial College (Autonomous), Puthanampatty-621 007, Trichy - Dt.	16.06.2010 to Till date.	11.6	11.6
2.	SJES Education Institution, Medahalli, Bengaluru - 560049	28.4.2014 to 10.4.2015	1	-

4. RESEARCH EXPERIENCE (in years)

15 years

5. AREA OF RESEARCH

Phytochemistry and Nanotechnology

6**. RESEARCH GUIDANCE (In Numbers)

Program of Study		Completed	Ongoing
Research	Ph. D.	1	1
Research	M. Phil.	20	
Project	PG	30	2

7**. PUBLICATION(S) (In Numbers)

Journal(s)		Proceeding(s)		Book(s) /
International	National	International	National	Chapter(s) / Monograph(s) / Manual(s)
15	2	2	1	3

Cumulative Impact Factor (as per JCR)	15.645
h-index	3
Total Citations	34

8**. PRESENTATION(S) (In Numbers)

Events	International	National	State	Regional
Conference(s)	2	5		
Seminar(s)		8		

9**. PARTICIPATION (In Numbers)

Events	International	National	State	Regional
Conference(s)	4	12		
Seminar(s)		7	1	
Workshop(s)		12		
Symposium(s)	2			

10**. PROFESSIONAL DEVELOPMENT (In Numbers)

Orientation	Refresher	Faculty	Short Term	Online Course(s)
Programme(s)	Course(s)	Development	Course(s)	
		Programme(s)		
		7	1	1 (On going)

11. FUNDED RESEARCH PROJECT(S)

List of Completed Project	(s)

S. No.	Agency Period		Project Title	Grant Allocated (Rs. In Lakhs)	
		From	To		
1	Science and Engineering Research Board, New Delhi.	2012	2015	Evaluation of antidiabetic effect of <i>Bougainvillea glabra</i> flower extract and Mg doped ZnS nano particle in different cell lines	Rs.21,46,000.00
2.	University Grants Commision, New Delhi	2012	2015	Evaluation of Antidiabetic efficacy of <i>Bougainvillea glabra</i> flower extract in different cell lines	Rs.1,75,000.00

12. DISTINCTIVE ACHIEVEMENT(S) / RECOGINITION(S) / AWARD(S)

Gene Bank Submissions

1.rbcL Gene sequence of *Dictyota barteyresiana* Accession number - BankIt2309533 Bharathi MT015586.

2.rbcl gene sequencing of *Dictyota dichotoma* Accession number - BankIt2309676 BSeq#1 MT015587

13. EVENT(S) ORGANIZED

S. No.	Name of the Programme	Role of Responsibility held	Name of the Resource Person	Date of the Event
1.	National Seminar on "Emerging	Organizing Secretary	Dr.P.Basker Senior	29 th to 30 th
	Trends in Control of Vectors and		Entomologist,	September,
	Vector Borne Diseases		Department of Public	2016
			Health and Preventive	
			Medicine, Zonal	
			Entomological Team	
			(ZET), Cuddalore-607	
			001	
2.	Science Academies Lecture	Co-Ordinator	Dr.Ragavendra Rao	17 th & 18 th ,
	Workshop on "Frontiers in Life		INSA Honorary Scientist	January,
	Sciences"		Bangalore.	buildury,
				2017.
				1

14. ACADEMIC / ADMINSTRATIVE RESPONSIBILITIES HELD

- 1.Exam Paper evaluator in Bharatidasan University.
- 2. Served as Deputy Warden for 4 years in Mens Hostel.
- 3. Question paper setter for various institutions
- 4. Doctoral Committee member Arignar Anna Government College, Musiri.
- 5. Served as Web Team member in Nehru Memorial College (Autonomous).

15. SERVED AS A RESOURCE PERSON (INVITED TALKS / GUEST LECTURES)

Delivered a Guest lecture on "Sericulture" at CARE institute, Namakkal.

16. DETAILS OF MEMBERSHIP

Academic Bodies (Board of studies)	Board of Studies Member for UG and PG Boards at	
	Nehru Memorial College (Autonomous)	
Professional Bodies	Life Member in OISCA International South India	
	Chapter	

17. DETAILS OF RESEARCH GUIDANCE

M. Phil. (Completed)				
S.No.	Name of the Student	Title	Year of award	
1.	G.Kavinilavu	Evaluation of antioxidative and antibacterial role of zinc nanoparticle	2014	
2.	V.Anbuselvi	Evaluation of antioxidant and antibacterial activity of serine doped zinc nanoparticle against different bacterial strains	2015	
3.	A.Shanthi	Estimation of antioxidant and antibacterial activity of L-glutamate doped ZnS nanoparticle against different bacterial strains	2016	
4.	V.Kannappan	Estimation of antioxidant and antibacterial activity of arginine doped Ti nanoparticle against different bacterial strains	2016	
5.	M.Sivagnanam	Estimation of antioxidant and antibacterial activity of glycine doped Ti nanoparticle against different bacterial strains	2016	
6.	V.Chinnachamy	Toxicity evaluation of RNA coated ZnS nanoparticle against freshwater fish "Labeo rohita"	2017	
7.	P.Kandasamy	Toxicity evaluation of RNA coated CuO nanoparticle against fresh water fish "Catla catla"	2017	
8.	R.Sivanesan	Evaluation of antioxidant and antibacterial activity of RNA doped Bi nanoparticle against different bacterial strains	2017	
9.	K.Ganesan	Evaluation of bioactivity of Zn-Cu co-doped MgS nanoparticle against human cell lines	2017	
10.	K.Kumar	Evaluation of Bioactivity of Zn-Mg Co- Doped MnS Nanoparticle against Different Cell Lines	2017	
11.	N.Sathyapriya	Evaluation of Antioxidative, Cytotoxic and Antibacterial Activity of Zn-Cu Co-Doped MgS Nanoparticle	2017	
12	K.Umamaheswari	Effect of ZnO/SiO2 nanocomposite against Aedes aegypti and Culex quinquefasciatus mosquito vectors	2018	
13.	M.Muruganandam	Evaluation of Anticancer Activity of Nano	2018	

		Synthetic Drug Against Dalton's Lymphoma	
		Ascites (Dla) Cells	
14.	R.Ponnuraja	Studies on the impact of ZnO/SiO2 nanocomposite on some biochemical aspects of freshwater fish, Labeo rohita	2018
15.	V.Magudeeswaran	Evaluation of Antidiabetic Activity of Manganese Zinc Ferrites Bionanoparticle against L6 Cell Line	2018
16.	S.Ramesh	Evaluation of antidiabetic activity of Fe3o4/Sio2 nanocomposite against Hela and L6 cell lines	2019
17	G.Murugan	Evaluation of antioxidative and antibacterial activity of Fe and Cu doped Zn bionanoparticles against some bacterial pathogens	2019
18	T.Ananth	Studies on anti-inflammatory and antibacterial activity of biosynthesized Fe and Cu doped Zn nanoparticles by hydrilla plant extract	2019
19	L.Anitha	Evaluation of Antioxidative, Anti- Inflammatory and Antidiabetic effect of Iron Nanoparticle and the Ethanolic Extract of <i>Hibiscus cannabinus</i>	2021
20	R.Rani	Evaluation of Larvicidal, Ovicidal and Antibacterial Activity of CuO Nanoparticle synthesized with <i>Manikara zapota</i>	2021

18. DETAILS OF PUBLICATIONS

- (a) JOURNAL(S)
- 1. **BOOPATHY RAJA, A** and NAGARAJAN, K.2004.Studies on the effects of dyeing effluent on certain physiological aspects of fresh water fish "*Catla catla*". *J. Exp. Zool.India.*, Vol. 7(1):101-104.
- 2. **BOOPATHY RAJA, A.**, ELANCHEZHIYAN, C. and NAGARAJAN, K. 2007. Studies on the effects of dyeing factory effluents on selected tissues on histopathological changes of the fresh water fish "Catla catla". J. Exp. Zool. *India*, 10(2):395-399.
- 3. **BOOPATHY RAJA, A.**, ELANCHEZHIYAN, C., MANOHARAN, S., SURESH, K., BALAKRISHNAN, S. AND SETHUPATHY, S. 2008. Evaluation of antihyperglycemic potential of *Helicteres isora* in streptozotocin induced diabetic wistar rats. Journal of Cell and Tissue Research, 9(2):1925-1928.
- 4. **BOOPATHY RAJA, A.**, ELANCHEZHIYAN, C. and SETHUPATHY, S. 2009. Hepatoprotective effect of *Helicteres isora* fruit extract on streptozotocin induced diabetic rats. The Bioscan, 4(4): 577-580.
- 5. **BOOPATHY RAJA, A.**, ELANCHEZHIYAN, C. and SETHUPATHY, S. 2010. Antihyperlipidemic activity of *Helicteres isora* fruit extract on streptozotocin

- induced diabetic male wistar rats. European Review for Medical and Pharmacological Sciences. 14: 191-196.
- 6. **BOOPATHY RAJA, A** and C. Elanchezhiyan. 2011. Analysis of toxic nature of mg doped zns nanoparticle and detoxification activity of flower extract of *Bouigainvillea glabra*. *International Journal of Current Research*, 3(8): 235 239.
- 7. Krishnapriya, K., Muralikrishnan, V., **BOOPATHY RAJA**, A. and Shoba. V. 2012. Role of Effective Microorganisms on the Growth of Paddy. E-Journal of Life Sciences (EJLS), 1 (2):89-96.
- 8. Krishnapriya, K., Muralikrishnan, V., **BOOPATHY RAJA**, **A** and Shoba, V. 2012. Effect Of Effective Micro-Organisms On The Development Of Black Gram (*Vigna mungo* L). International Journal of Recent Scientific Research. 3(7): 585 589.
- 9. Punitha, P., Shoba, V., Krishnapriya, K. and **BOOPATHY RAJA**, A. 2014. Impact of Various Plant Extracts along with CuS and AIS Nanoparticle Combinations on Antioxidant activity and Antibacterial activity. International Journal of Pharmaceutical & Biological Archives; 5(2): 1231 1240.
- 10. Punitha, P., Shoba, V., Krishnapriya, K. and **BOOPATHY RAJA**, A. 2014. Toxicity evaluation of Mg doped ZnS nanoparticles and *Bougainvillae glabra* flower extract on fresh water fish *Oreochromis mossambicus*. *Int. J. Modn. Res. Revs.* 2(8):246-250.
- 11. Ashokkumar, M. and **BOOPATHYRAJA**, A. 2018. Structural and optical properties of Mg doped ZnS quantum dots and biological applications. Superlattices and Microstructures, 113: 236-243.
- 12. SWARNA BHARATHI and **BOOPATHYRAJA**, A. 2019. Chemically synthesized Silica-Zinc Nanocomposite Acts as Potential Antibacterial Agent against Urinary Pathogen. Journal of Engineering Sciences, 10(10): 143-152.
- 13. SWARNA BHARATHI and **BOOPATHYRAJA**, **A**. 2020. In silico studies on colon cancer against hexadecane, hexadecanoic acid methyl ester and quinoline, 1,2-dihydro-2,2,4-trimethyl compounds from brown seaweed. International Journal of Research in Pharmaceutical Sciences. Manuscript ID 2514. In Press.
- 14. **Boopathy Raja**, A. 2021. Evaluation of Therapeutic Effect of Mg doped ZnS Nano Particle and *Bougainvillea glabra* Flower Fraction on HepG2 Cell Lines. Asian Journal of Biological and Life Sciences, Vol 10 (1): 191-196.
- 15. Bharathi, D. & **Boopathy raja**, A. & Nachimuthu, Suganthi & Kannan, Karthik. (2021). Green Synthesis, Characterization and Antibacterial Activity of SiO2–ZnO Nanocomposite by Dictyota bartayresiana Extract and Its Cytotoxic Effect on HT29 Cell Line. Journal of Cluster Science. 10.1007/s10876-021-02170-w.
- 16. Ganesan K, Boopathy Raja A (2021) Synthesis and characterization of copper oxide nanoparticles using *Dictyota dichotoma* extract. International Journal of Botany Studies. 6(3), Page No. 156-159. (UGC Care list- Web of Science ISSN: 2455-541X).

17. Ganesan K, **Boopathy Raja A** (2021) evaluation of phyto-compounds from *Dictyota dichotoma* extract using Gas Chromatographic and Mass Spectroscopic technique. International Journal of Modern Agriculture,10 (2); 2544-2548. (UGC Care List - Web of Science – ISSN: 2305-7246)

(b) **PROCEEDING(S)**

- 1. **BOOPATHY RAJA, A.,** MOHANAMBAL, T., SHOBA, V. and ELANCHEZHIYAN, C. 2012. Antioxidative role of *Helicteres isora* fruit extract on streptozotocin induced diabetic rats. International Conference on Science and Technology for Clean and Green Environment. July 27 &28th, 2012 (Proceedings Annexure) Zoology Wing, Annamalai University, Tamil Nadu, India.
- SHOBA, V., ELANCHEZHIYAN, C., BOOPATHY RAJA, A., BILAL AHMAD BHAT, GOWRI, K. and KRISHNAPRIYA, K. 2012. FT-IR Spectroscopy for phytopesticide Nimbecidine induced biochemical changes in the seminal vesicle of aquatic predatory bug *Sphaerodema rusticum* (FABR). International Conference on Science and Technology for Clean and Green Environment. July 27 &28th, 2012 (Proceedings Annexure) Zoology Wing, Annamalai University, Tamil Nadu, India.
- 3. SHOBA, V., ELANCHEZHIYAN, C., SELVI SABHANAYAKAM., HEMALATHA, S., **BOOPATHY RAJA**, A., and GOWRI, K. 2012. Sub-lethal effect of phytopesticide nimbecidine on scanning electron microscopic (SEM) changes in the fat body of aquatic predatory bug *Sphaerodema rusticum* (FABR). Advances in Environmental Research: An interdisciplinary Approach. Excel India Publishers. Department of Zoology, Annamalai University, Tamil nadu, India.

(C) BOOK(S) / CHAPTER(S) / MONOGRAPH(S) / MANUAL(S)

- Recent Scientific Studies On Antioxidant Activity Of Herbal Plants A Review.
 Recent Progress in Phytochemistry and Pharmacognosy.
 www.drbgrpublications.in.
- 2. COVID-19 lockdown impacts on environmental changes and improvement of personal hygiene. https://www.immortalpublications.com/
- 3. Loss of Seaweed Biodiversity: Worldwide Survey on Coastal Areas and Their Terrible Consequences. http://bhartipublications.com/

19. DETAILS OF PRESENTATION(S)

(Conference(s) / Seminar(s))

1. Evaluation of dyeing effluent... *Catla catla*". Current trends in Environmental and Biosafty-2008, Department of Zoology, Annamalai University, Annamalai nagar-608 002. March, 8-9, 2008.

- 2. Larvicidal efficacy of the efficacy of the organophosphate pesticide, Temephos against the dengue vector *Aedes aegypti*. Current trends in Environmental and Biosafty-2008, Department of Zoology, Annamalai University, Annamalai nagar-608 002. March, 8-9, 2008.
- 3. "Evaluation of biochemical parameters on *H.isora* extract treated normal and STZ intoxicated wistar rats". Recent trends in Bioscience (BIOS), March, 6-7, 2009, Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 4. Effect of *Helicteres isora* fruit extract in hepatic marker enzymes on streptozotocin induced diabetic rats. Advances in Biological sciences (ABS-2010). 22 and 23 January, 2010. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 5. Lipid profile changes in *Helicteres isora* fruit extract treated streptozotocin induced diabetic rats. Advances in Biological sciences (ABS-2010). 22 and 23 January, 2010. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 6. Impact of temephos on histological changes on the selected tissues of *Aedes aegypti* (LINN). International conference on Biotechnology, Food and Bioengineering-Emerging trends and future prospects (ICBFBE-2010). 25-26th, February, 2010. PRIST university, Thanjavur, Tamil Nadu and Indian Institute of Crop processing Technology, Thanjavur, Tamil Nadu, India.
- 7. Antidiabetic role of *Helicteres isora* fruit extract on streptozotocin induced diabetic rats. National conference on aggrandize of Life scinces (ALISCI-2010). 29th- 30th March, 2010. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- Effect of α-Tocopherol supplementation on hyperlipidemia in high fat diet fed rats. National conference on aggrandize of Life scinces (ALISCI-2010). 29th- 30th March, 2010. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 9. Sub-Lethal effect of phytopesticide nimbecidine on biochemical changes in the adult male insect *Sphaerodema rusticum*. National seminar on Environmental Awareness and Research for Sustainable development (EARSD-2010). 20-21st Auguest, 2010. Zoology wing-DDE, Annamalai University, Annamalai nagar-608 002. Tamil nadu.
- 10. Studies on the impact of saponin separated from *Helicteres isora* fruit extract on streptozotocin induced diabetic rats. UGC sponsored National conference on Advances in Environmental Research: An interdisciplinary-2011. 11th and 12th March, 2011. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 11. Impact of Mg doped ZnS nanoparticle on cultured E.coli population. UGC sponsored National conference on Advances in Environmental Research: An interdisciplinary-2011. 11th and 12th March, 2011. Department of Zoology, Annamalai University, Annamalai nagar-608 002.
- 12. Evaluation of antibacterial activity of *Bougainvilla glabra* extract on different bacterial strains. National Seminar on recent trends in Biological sciences (NSRTBS-2013). 7-8th March, 2013. PG and Research Department of Zoology, Nehru Memorial College, Trichy, Tamil Nadu, India.
- 13. Phytochemical studies on ethanolic fruit extract of *Helicteres isora*. National seminar on frontiers in Biotechnology (NSFB-2013). 8- 9th August, 2013. PG and Research Department of Biotechnology, Nehru Memorial College, Trichy, Tamil Nadu, India.

- 14. FT-IR studies on the CuS nanoparticle doped *Leucas aspera* extract on larva of *Anopheles stephensi*. National Conference on Dengue and Chikungunya epidemiology and their management in India. Department of Zoology, Scott Christian College, Nagercoil, Tamil Nadu and Centre for Research in Medical Entomology (CRME), Indian Council of Medical Research, Madurai, Tamil Nadu. 30-31st August, 2013.
- 15. Diabetic complications and MicroRNA expressions. International Conference on Herbal Medicine and Neuroendocrinology (InChMan-2014). Department of Zoology, Annamalai University, Annamalai nagar-608 002. October, 13th, 2014.

20. DETAILS OF PARTICIPATION

(Conference(s) / Seminar(s) / Workshop(s) / Symposium(s))

Workshops

- 1. XVII interdisciplinary research methodology workshop, April 27-30, 2007. Department of Economics, Annamalai University, Annamalai nagar-608 002.
- 2. National workshop on Application of Bioinformatics in Drug discovery & Drug development,19-31,December 2007,Department of Microbiology & Biotechnology, Presidency College,Chennai-5.
- 3. Current Tools for Genotoxicity Assessment in Fishes.19-26 February, 2009, National bureau of Genetic Resources, Lucknow.
- 4. Antidiabetic Medicinal Herbs: Screening and Assessment.27-28 March, 2009, Department of Biochemistry & Biotechnology, Annamalai University, Chidambaram.
- 5. The fifth UGC-Networking Resource Centre Workshop in Biological Sciences. May 1-25, 2012. Division of Biological Sciences, Indian Institute of Science, Bangalore.
- 6. Short Term Training Programme (STTP) on Bionanomaterials for Pest and Disease Management. May 14-30, 2013. Crop Protection Research Centre, Department of Zoology, St. Xavier's College (Autonomous), Palayamkottai, Tamil Nadu, India.
- 7. DBT Sponsored National Workshop on Advanced Techniques in Fish Immunology and Immunotechnology. September 5-9, 2013. Centre for Advanced study in Marine Biology, Faculty of Marine Sciences, Annamalai University, Parangipettai, Tamil Nadu, India.

21. DETAILS OF PROFESSIONAL DEVELOPMENT

(Orientation / Refresher Course / FDP / Short Term Course / Online Course)

- Participated in the 'Faculty Development Programme on Higher Education' organized by the Internal Quality Assurance Cell of Nehru Memorial College (Autonomous), Puthanampatti 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 21st January 2012.
- 2. Participated in the Faculty Development Programme on 'Impact of Research on Teaching in Higher Education' organized by the Internal Quality Assurance Cell of Nehru Memorial College (Autonomous), Puthanampatti 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 11th June 2014.
- 3. Participated in the Faculty Development Programme on 'Sustenance/Enhancement of Quality in Higher Education' organized by

Nehru Memorial College (Autonomous), Puthanampatti – 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 5th **August 2015**.

4. Participated in the Faculty Development Programme on 'Revisiting Examination System in the Current Scenario' organized by Nehru Memorial College (Autonomous), Puthanampatti – 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 19th March 2016.

Participated in the Faculty Development Programme on 'Effective Teaching' organized by Nehru Memorial College (Autonomous), Puthanampatti – 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 12th June 2017.

 Participated in the "Two Day Faculty Development Programme" organized by Nehru Memorial College (Autonomous), Puthanampatti – 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 11th and 12th June 2018.

7. Participated in the "One Day Faculty Development Programme on "Student Skills: mentoring and Counselling" organized by Nehru Memorial College (Autonomous), Puthanampatti – 621 007, Trichy district, Tamilnadu under the aegis of UGC Autonomous Grant on 30th May 2019.

DECLARATION

I hereby declare that all particulars given above are true, complete and correct. I understand that in the event of any information being found false or incorrect my candidature is liable to be cancelled/rejected.

Yours faithfully

Station: Puthanampatti.

Date : December 2021

(A. BOOPATHYRAJA)