



Dr. P. Rameshthangam
Assistant Professor

Contact

Address : Department of Biomedical Sciences
Science Campus
Alagappa University
Karaikudi - 630 003
Tamil Nadu, INDIA

Employee Number : 51510

Date of Birth : 04 - 04 - 1978

Contact Phone (Office) : +91 4565 - 225326

Contact Phone (Mobile): +91 9444834424

Contact e-mail(s) : rameshthangam@alagappauniversity.ac.in
rameshthangam@gmail.com

Skype id : rameshthangam78

Academic Qualifications: M.Sc., Ph.D.

Degree	Subject	University	Year of Study
Ph.D.	Biotechnology	University of Madras	2002- 2008 (January)
M.Sc.	Biochemistry	Bharathidasan University	1999 -2001
B.Sc	Biochemistry	Bharathidasan University	1996-1999

Teaching Experience: 10 Years 4 months

Research Experience: 10 Years 4months

S. No	Position	Organization	Period
1.	Assistant Professor	Department of Biomedical Sciences, Alagappa University, Karaikudi	04-06-2018 to till date
2.	Assistant Professor	Department of Biotechnology, Alagappa University, Karaikudi	25-02-2016 to 03-06-2018
3.	Assistant Professor of Biotechnology	Directorate of Distance education	17-02-2009 to 24-02-2016
4.	Research Associate	Madras Diabetic Research Foundation (MDRF), Chennai	15-02-2008 to 16-02-2009

5.	Teaching cum research Fellow (TRF)	Department of Biotechnology, University of Madras, Chennai	2002 - 2008
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Areas of Research

The major research interest of our research group is to fabricate the chitin nanoparticles and its composites from natural resources and to explore its enormous biological and environmental applications. Chitin is a linear polysaccharides, comprised of two monomeric units namely N-acetylglucosamine and glucosamine. We have isolated chitin nanoparticles (CNP) from shrimp shells and incorporated silver nanoparticles into chitin matrixes and produced a new class of technologically important material. Incorporation of silver with chitin leads to dramatic enhancement of antibacterial, antifungal and anticancer properties of the chitin. In addition, we have also fabricated CNP/Copper nanocomposite for the development of highly sensitive nonenzymatic glucose sensor. The study evidenced that CNP/copper could be a potential low cost material, which holds a significant promise in the development of non-enzymatic glucose sensors. Recently, our research group also focused on the synthesis of metallic nanoparticles from plant extracts for the development of novel nanoparticles with potential anticancer and sustained drug delivery properties.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	2	2
	M.Phil.	1	-

Details of Ph.Ds Awarded/Submitted

Name of the Scholar	Title of the Thesis	Submitted/Awarded	Name of the University	Month and Year	No. of Research articles with the student
D. Solairaj Reg. No: 600	Synthesis, Characterization, Applications of Chitin Nanoparticles and its Composites	Awarded	Alagappa University	13 th November 2017	6

J. Chitra Reg. No: 10478	Synthesis of nanoparticles from leaf extracts of <i>Ocimum Sanctum</i> for enhanced chemical and biochemical activities	Awarded	Manonmaniam Sundaranar University	12 th March 2017	5
A. Arulkumar Reg. No: 747 (Co-Supervisor)	Studies on the Biogenic amine forming bacteria and levels of biogenic amines in fish and fishery products with reference to their control, using natural preservatives.	Submitted	Alagappa University	December 2017	3

Details of M.Phil. Awarded

<i>Name of the Scholar</i>	<i>Title of the Thesis</i>	<i>Name of the University</i>	<i>Month and Year</i>
S. MANJU Reg. No: 048M08A31001	Impact of biosurfactant producing microorganisms on biodegradation of oil contaminants	PRIST University	June 2009

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	Alagappa University Research Fund (AURF)	2010	2011	Exploring protein carbonylation as biomarker(s) in serum from subjects with impaired glucose tolerance (prediabetes) and patients with Type 2 diabetes (Principal Investigator)	0.64 lakhs
2	UGC, Govt. of India	2011	2014	Antiviral activity of Chitin Nanoparticles against White Spot Syndrome Virus of <i>Penaeus monodon</i> Fabricius (Principal Investigator)	9.89 lakhs
3	Tamilnadu State Council for Science and Technology, Govt. of Tamilnadu	2009	2011	Genome characterization and molecular docking of Bacillus phages and their inhibitory effects against shrimp pathogenic bacteria (Co- Principal Investigator)	1.89 lakhs

4	UGC, Govt. of India	2011	2014	Molecular characterization, molecular docking studies and biocontrol effect of <i>Vibrio</i> bacteriophages from shrimp aquaculture environment. (Co- Principal Investigator)	8.50 lakhs
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Patents

Title	Applicant	Inventor	Application	Filed	Published	Patent Name
Novel antiviral agent from the plant <i>Pongamia pinnata</i> and a process for the preparation of the said agent	University of Madras, Chepauk, Tamilnadu, India	1) Palaniappan Ramasamy 2) Palanivel Rameshthangam	1390/CHE/2005	2005-09-30	2007-09-28	BIG PATENTS, INDIA

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
26	27	-	16	6

Citation indices

Cumulative Impact Factor (as per JCR)	: 35.845
H-index	: 7
i10 index	: 5
Total Citations	: 250

Research Publications: 26

1. P. Rameshthangam, D. Solairaj, A. Gnanapragasam, P. Ramasamy (2018), "Chitin and Chitinases: Biomedical and environmental applications of chitin and its derivatives" *Journal of Enzymes*, 1(1):20-43, [Openaccesspub.org, United States].
2. D. Solairaj, **P. Rameshthangam**, V. Suryanarayanan, S. K. Singh, V. Sri Ramkumar (2018), "In vitro and in silico studies of chitin and chitosan based nanocarriers for curcumin and insulin delivery" *Journal of Polymers and the Environment*, [Springer, United States] (IF-1.877) (In Press).

3. A. Arulkumar, A. Balamurugan, S. Paramasivam, **P. Rameshthangam** & S. Paramithiotis, (2017). "Physicochemical and microbiological changes during drying of Wolf Herring (*Chirocentrus dorab*) and Coastal Trevally (*Carangoides coeruleopinnatus*)", *Journal of Aquatic Food Product Technology* [DOI: 10.1080/10498850.2017.1362683] [Taylor & Francis, United Kingdom](IF- 0.478).
4. J. P. Chitra and **P. Rameshthangam**, B. Usha, (2017), "Green synthesized nickel nanoparticles for targeted detection and killing of *S. typhimurium*" *Journal of Photochemistry and Photobiology B: Biology* 174:58-69 [Elsevier, Netherlands](IF- 2.673).
5. D. Solairaj, **P. Rameshthangam**, A. Gnanapragasam, (2017), "Anticancer effect of chitin encapsulated silver and copper nanocomposites against breast cancer (MCF-7) cells" *International Journal of Biological Macromolecules* 105(1):608-619 [Elsevier, Netherlands] (IF-3.671).
6. A. Arulkumar, S. Paramasivam and **P. Rameshthangam** (2017), "Changes on biogenic, volatile amines and microbial quality of the blue swimmer crab (*Portunus pelagicus*) muscle during storage" *Journal of Food Science and Technology* [DOI: 10.1007/s13197-017-2694-5] [Springer, United States] (IF-1.262).
7. D. Solairaj, **P. Rameshthangam**, P. Muthukumaran and J. Wilson, (2017), "Studies on electrochemical glucose sensing, antimicrobial activity and cytotoxicity of fabricated copper nanoparticle immobilized chitin nanostructure" *International Journal of Biological Macromolecules* 101:668-679 [Elsevier, Netherlands] (IF-3.671; Citation: 2)
8. A. Arulkumar, S. Paramasivam and **P. Rameshthangam** (2017), Effects of turmeric (*Curcuma longa*) on shelf life extension and biogenic amine control of cuttlefish (*Sepia brevimana*) during chilled storage, *CyTA - Journal of Food*, [DOI: 10.1080/19476337.2017.1296495][Taylor & Francis, United Kingdom] (IF- 1.180).
9. **P. Rameshthangam**, J. P. Chitra, (2017), "Synergistic anticancer effect of green synthesized nickel nanoparticles and quercetin extracted from *Ocimum sanctum* leaf extract" *Journal of Materials Science & Technology* [DOI: 10.1016/j.jmst.2017.01.004] [Elsevier, Netherlands] (IF-2.764; Citation: 2)
10. D. Solairaj, **P. Rameshthangam**, (2016), "Silver nanoparticle embedded α -chitin nanocomposite for enhanced antimicrobial and mosquito larvicidal activity" *Journal of Polymers and the Environment* [DOI 10.1007/s10924-016-0822-3] [Springer, United States] (IF-1.877; Citation: 4).
11. J. P. Chitra and **P. Rameshthangam**, (2016), "Application of L-arginine functionalized green synthesized nickel nanoparticles as gene transfer vector and catalyst" *Journal of Experimental Nanoscience* [DOI 10.1080/17458080.2016.1204670] [Taylor & Francis, United Kingdom] (IF- 0.863).
12. J. P. Chitra, **P. Rameshthangam**, D. Solairaj, (2016), "Screening antimicrobial activity of nickel nanoparticles synthesized using *Ocimum sanctum* leaf extract" *Journal of Nanoparticles* 13 Pages [DOI 10.1155/2016/4694367] [Hindawi, Egypt](Citation: 4)
13. P. Muthukumaran, Chikkili Venkateswara Raju, C. Sumathi, S. Ravi, D. Solairaj, **P. Rameshthangam**, J. Wilson, Subbiah Alwarappan, Sathish Rajendran, (2016), "Cerium

doped nickel-oxide nanostructures for riboflavin biosensing and antibacterial applications” *New Journal of Chemistry* 40:2741-2748 [Royal Society of Chemistry, United Kingdom] (IF-3.269; Citation: 2).

14. D. Solairaj, **P. Rameshthangam**, P. Srinivasan, (2016), “Adsorption of Methylene Blue, Bromophenol Blue and Coomassie Brilliant Blue by α -chitin nanoparticles” *Journal of Advanced Research* 7(1):113–124 [Elsevier, Netherlands](Citation: 19).
15. J. P. Chitra, **P. Rameshthangam**, D. Solairaj, (2015), “Green synthesis of nickel nanoparticles using *Ocimum sanctum* and their application in dye and pollutant adsorption” *Chinese Journal of Chemical Engineering* 23(8):1307-1315 [Elsevier, Netherlands](IF-1.174; Citation: 16).
16. A. Sudha, P. Srinivasan, **P. Rameshthangam**, (2015), “Exploration of potential EGFR inhibitors: a combination of pharmacophore-based virtual screening, atom-based 3D-QSAR and molecular docking analysis” *Journal of Receptors and Signal Transduction* 35(2):137-148 [Taylor & Francis, United Kingdom] (IF- 1.782; Citation: 2).
17. P. Srinivasan, **P. Rameshthangam**, N.M. Prabhu, C. Arulvasu, (2012), “Variation in lipid classes and fatty acid content during ovarian maturation of *Albunea symmysta*” *International Journal of Advanced Scientific Research* 3(2):60-64 [ScienSage, India] (Citation: 3).
18. R. Vanajothi, A. Sudha, P. Srinivasan, R. Manikandan, **P. Rameshthangam**, (2012), “*Luffa acutangula* and *Lippia nodiflora* leaf extract induces growth inhibitory effect through induction of apoptosis on human lung cancer cell line” *Biomedicine and Preventive Nutrition* 2(4): 287-293 [Elsevier, Netherlands](Citation: 7).
19. S. Rajamanikandan, R. Vanajothi, A. Sudha, **P. Rameshthangam**, P. Srinivasan, (2012), “*In silico* analysis of deleterious SNPs of the FGFR2 gene” *Journal of Biological Sciences* 12(2):83-90 [Science Alert, Dubai] (Citation: 1).
20. P. Srinivasan, A. Sudha, N. Umamaheswari, R. Vanajothi, **P. Rameshthangam**, (2012), “Modeling of quorum sensing regulatory protein of *Vibrio harveyi* from shrimp aquaculture system and *In silico* prediction of active drugs” *International Journal of Current Science* 2:5-13.
21. **P. Rameshthangam**, P. Srinivasan, C. Arulvasu, D. Gowdhaman, P. Neeraja, (2011), “Protein carbonylation as biomarker(s) in serum patients with Type 2 diabetes” *Journal of Pharmacy Research* 4(2):348-351 [EBSCO online library, United States] (IF: 0.74).
22. **P. Rameshthangam**, P. Srinivasan, P. Ramasamy, (2011), “White Spot Syndrome Virus – An Overview” *International Journal of Current Research*, 2(2):28- 41.
23. P. Srinivasan, A. Sudha, P. Bharathajothi, K. Rajaguru, **P. Rameshthangam**, R. Manikandan, C. Arulvasu, (2010), “Effects of anti-inflammatory and antipyretic activity of *Anisomeles malabarica* R.Br.” *Journal of Pharmacy Research* 3 (7):1598-1601 [EBSCO online library, United States] (IF: 0.74; Citation: 7).
24. **P. Rameshthangam**, P. Ramasamy, (2007), “Antiviral activity of Bis(2-methylheptyl) phthalate isolated from *Pongamia pinnata* leaves against White Spot Syndrome Virus of

Penaeus monodon Fabricius” *Virus Research* 126(1-2):38-44 [Elsevier, Netherlands] (IF: 2.628; Citation: 65).

25. **P. Rameshthangam**, P. Ramasamy, (2006), “Antioxidant and membrane bound enzymes activity in WSSV-infected *Penaeus monodon* Fabricius” *Aquaculture* 254 (1-4): 32-39 [Elsevier, Netherlands] (IF: 2.570; Citation: 46).

26. **P. Rameshthangam**, P. Ramasamy, (2005), “Protein expression in white spot syndrome virus infected *Penaeus monodon* Fabricius” *Virus Research* 110 (1-2):133-141 [Elsevier, Netherlands] (IF: 2.628; Citation: 13).

Academic Bodies (Such as Board of studies)

1. Designed and introduced new course M.Sc. Home Science – Nutrition and Dietetics in DDE
2. Assisted in designing an Innovative Curriculum of B.Sc., & M.Sc. Zoology, DDE.
3. Member of the Board of Studies of B.Sc., Zoology, DDE.
4. Member of the Board of Studies of M.Sc., Zoology, DDE.
5. Member of the Board of Studies of M.Sc., Microbiology, DDE.
6. Member of the Board of Studies of M.Sc., Home Science – Nutrition and Dietetics, DDE.

Books published

Title	Year	Authors	Publisher	ISBN
Pathogenesis and novel herbal drug for White Spot Syndrome Virus	2011	P. Rameshthangam & P. Ramasamy	LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrucken, Deutschland	978-3-8473-1273-4
A basic laboratory manual for Biochemistry	2017	P. Rameshthangam , D. Solairaj & J.P. Chitra	LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrucken, Deutschland	978-3-330-03250-7

DDE course material

Degree	Subject	Title	Year	Authors	Publisher	Theory/ Practical
M. Sc.,	Zoology	Animal Biotechnology	2011, 2017	P. Rameshthangam	Alagappa University	Theory

M.Sc.	Zoology	Environmental Biology, Developmental Biology, Microbiology, Immunology and Animal Biotechnology.	2011	P. Thiruchenthilnathan G. Selvakumar P. Rameshthangam	Alagappa University	Practical
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Sequences submitted

MODELED PROTEIN SUBMITTED IN THE PROTEIN MODEL DATABASE

1.	PM0076840	4.	PM0077293
2.	PM0077294	5.	PM0077249
3.	PM0077291	6.	PM0077338

DNA SEQUENCE DATA SUBMITTED IN THE NCBI GENBANK DATABASE

1.	KJ459007	5.	KJ459011
2.	KJ459008	6.	KP219419
3.	KJ459009	7.	KP219420
4.	KJ459010	8.	KP219421

Book chapters published

1. **Rameshthangam, P.**, Solairaj, D., Chitra J. P. (2017). Properties and Applications of Chitosan Based Nanocomposites in “Marine Polysaccharides- Advances and Multifaceted Applications”, Pan Stanford Publisher and CRC Press. Singapore.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 2

- Organized National workshop on “**Expansion and Enrichment of Distance Learning**” (**EEDL -2012**) held on 27th & 28th March 2012 in the Directorate of Distance Education, Alagappa University, Karaikudi.
- Organizing Member of Two day National Seminar on “Quality Education for the students belonging to the marginalized sectors in India (QESBMS – 2018 held on 15th & 16th March, 2018 in the Directorate of Distance Education. Alagappa University, Karaikudi.

Papers presented in the National and International events

Conferences / Seminars / Workshops: 47

1. D. Solairaj, P. Rameshthangam, V. Suryanarayanan, Sanjev Kumar Singh. *In vitro* and *in silico* studies on insulin delivery potential of chitin and chitosan nanoparticles. Paper presented in the 10th National symposium cum workshop on "[Recent trends in structural bioinformatics and computer aided drug design](#)", held on 20th – 23rd February, 2018, Organised by Department of Bioinformatics, Alagappa University, Karaikudi.
2. J. Chitra, **P. Rameshthangam**, Colorimetric detection of *Salmonella typhimurium* using green synthesized nickel oxide nanoparticles. Paper presented in the 2nd International conference on [Recent trends in Microbiology](#), held on 11th & 12th January 2018, Organized by Department of Microbiology, Alagappa University, Karaikudi. [ISBN -978-93-87102-50-7]
3. D. Solairaj, **P. Rameshthangam**, A. Gnanapragasam. Preparation, characterization and anticancer potential of silver embedded chitin nanocomposite against human breast cancer MCF-7 cells. Paper presented in the 2nd International conference on [Recent trends in Microbiology](#), held on 11th & 12th January 2018, Organized by Department of Microbiology, Alagappa University, Karaikudi. [ISBN -978-93-87102-50-7]
4. R. Saravanan, **P. Rameshthangam**. Screening, isolation and biochemical characterization of transglucosidase producing yeast. Paper presented in the National conference on [Bioprocessing India – Recent trends in Bioprocessing for Healthcare, Energy and Environment](#), held on 9th -11th December 2017, Organized by Indian Institute of Technology, Guwahati.
5. J. Chitra, **P. Rameshthangam**, D. Solairaj. Adsorptive removal of anionic, cationic and azo dyes using green synthesized nickel nanoparticles. Paper presented in International Conference on [Membrane Technology and its Applications \(MEMSEP 2017\)](#), held on 21st – 23rd February 2017. Organized by Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli - 620 024, Tamilnadu, India.
6. A. Arulkumar, S. Paramasivam, **P. Rameshthangam**. Antioxidant effects of red seaweed extract on the preservation of black tiger shrimp (*Penaeus monodon*) during ice storage. Paper presented in [Recent trends in microbiology](#), held on 7th and 8th December 2016. Organized by Department of Microbiology, Alagappa University, Karaikudi 630003, Tamil Nadu, India. (ISBN: 9789384193720)
7. D. Solairaj, **P. Rameshthangam**. Chitin/copper nanocomposite with enhanced antimicrobial activity against bacterial and fungal strains. Paper presented in [Recent trends in microbiology](#), held on 7th and 8th December 2016. Organized by Department of Microbiology, Alagappa University, Karaikudi 630003, Tamil Nadu, India. (ISBN: 9789384193720)
8. J. Chitra, **P. Rameshthangam**, D. Solairaj. Application of *Ocimum sanctum* leaf extract synthesized nickel nanoparticles as antimicrobials. Paper presented in International Conference on [Environment and Health in Changing Climate \(ICEHCC 2016\)](#), held on 14th - 16th September, 2016. Organized by Department of Environmental Biotechnology, School of

Environmental Sciences Bharathidasan University, Tiruchirappalli - 620 024, Tamilnadu, India.

9. A. Arulkumar, S. Paramasivam, R. Rajaram, **P. Rameshthangam**. Concentration of heavy metals and biogenic amines in black tiger shrimp (*Penaeus monodon*) from Palk Strait, India. Paper presented in International Conference on *Environment and Health in Changing Climate (ICEHCC 2016)*, held on 14th - 16th September, 2016. Organized by Department of Environmental Biotechnology, School of Environmental Sciences Bharathidasan University, Tiruchirappalli - 620 024, Tamilnadu, India.
10. **P. Rameshthangam**, D. Solairaj. *In-vitro* and *in-silico* studies on curcumin loaded chitin and chitosan nanoparticles from shrimp shells. Paper presented in 10th International Conference on *Nanomedicine and Nanotechnology in Health Care (Nanomedicine 2016)*, held on 25th to 28th July 2016, Organized by Omics Conference Series LLC, Bangkok, Thailand.(ISSN: 2157-7439).
11. D. Solairaj, **P. Rameshthangam**, J. P. Chitra, P. Muthukumar and J. Wilson, Non-enzymatic sensing of glucose using a glassy carbon electrode modified with chitin/copper nanocomposite. Paper presented in International conference on *Recent Trends in Biosciences (ICRTB 2016)*, held on 07th to 09th April, 2016. Organized by Biosciences Department, Alagappa University, Karaikudi 630003, Tamil Nadu, India (ISBN 978-81-928690-9-4).
12. R. Saravanan, **P. Rameshthangam**, Manish Jain. Screening, isolation and biochemical characterization of transglucosidase producing yeast isolates. Paper presented in International conference on *Recent Trends in Biosciences (ICRTB 2016)*, held on 07th to 09th April, 2016. Organized by Biosciences Department, Alagappa University, Karaikudi 630003, Tamil Nadu, India (ISBN 978-81-928690-9-4).
13. A. Arulkumar, S. Paramasivam and **P. Rameshthangam**, Contribution of psychrophilic and mesophilic bacteria on the formation of biogenic amines in mud spiny lobster (*Pandalirus polyphagus*). Paper presented International conference on *Recent Trends in Biosciences (ICRTB 2016)*, held on 07th to 09th April, 2016. Organized by Biosciences Department, Alagappa University, Karaikudi 630003, Tamil Nadu, India (ISBN 978-81-928690-9-4).
14. Solairaj Dhanasekaran & **Rameshthangam Palanivel**. Electrochemical studies on chitin nanoparticles isolated from shrimp shells. Paper presented in Fourth international Conference on *Frontiers in Nanoscience and Technology (Cochin Nano - 2016)*, held on 20th - 23rd February 2016, Organized by Department of Physics, Cochin University of Science and Technology, Cochin, Kerala, India
15. Chitra JeyarajPandian, **Rameshthangam Palanivel** and Solairaj Dhanasekaran. Synergistic effect of *Ocimum Sanctum* leaf extract synthesized quercetin and nickel nanoparticles on breast cancer cell lines. Paper presented in International Conference on *Frontiers in Life Sciences (ICFLS-'16)*, held on 7th & 8th January, 2016, organized by Department of Botany, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India.
16. **Rameshthangam Palanivel**, Chitra Jeyaraj Pandian and Solairaj Dhanasekaran. Plasmid DNA and green synthesized nickel nanoparticles complexes formulated for gene delivery. Paper presented in *Indian Genetics Congress*, held on 4th - 6th March, 2015, organized by Department of Genetic Engineering, SRM University, Chennai, Tamil Nadu, India.
17. **P. Rameshthangam**, D. Solairaj, S.K. Singh, V. Suryanarayanan and P. Srinivasan. A study on chitin-drug interactions: a computational approach. Paper presented in *Indian Genetics*

Congress, held on 4th – 6th March, 2015, organized by Department of Genetic Engineering, SRM University, Chennai, Tamil Nadu, India

18. Solairaj Dhanasekaran, **Ramesththangam Palanivel** and Srinivasan Pappu. Study on antifungal activity of α -chitin/silver nanocomposite against pathogenic fungi using resazurin microtitre plate assay. Paper presented in *55th Annual Conference of Association of Microbiologists of India & National Conference on Empowering Mankind with Microbial Technologies (AMI-EMMT-2014)*, held on 12th - 14th November, 2014, organized by Tamil Nadu Agricultural University, Coimbatore, India
19. Chitra Jeyaraj Pandian, **P. Rameshthangam** & Solairaj Dhanasekaran. Characterization of nickel nanoparticles synthesised using leaf extract of *Ocimum Sanctum*. 24th Annual conference of *Indian association for Angiosperm Taxonomy (IAAT) and International Conference on Trends in Plant Systematics (TIPS)*, held on 31st October – 2nd November 2014, organized by Department of Plant Science, Bharathidasan University, Tiruchirappalli, Tamilnadu.
20. Solairaj Dhanasekaran & **P. Rameshthangam**. Mosquito larvicidal activity of α -chitin/silver nanocomposite against fourth instar larvae of *Aedes aegypti*. International conference on *Physiology and Medicine*, held on 15th – 17th October, 2014, organized by Department of Zoology, Periyar University, Salem, Tamilnadu.
21. R. Vanajothi, P. Srinivasan & **P. Rameshthangam**. Ligand-based pharmacophore mapping and virtual screening for the identification of potential DDR1 inhibitors. 6th National symposium cum workshop on *Recent Trends in Structural Bioinformatics and Computer Aided Drug Design*, held on February 18th-21st, 2014, organized by Department of Bioinformatics, Alagappa University, Karaikudi, Tamilnadu.
22. S. Rajamanikandan, P. Srinivasan & **P. Rameshthangam**. Discovery of small molecule inhibitors of GacA using molecular modeling and virtual screening approach. 6th National symposium cum workshop on *Recent Trends in Structural Bioinformatics and Computer Aided Drug Design*, held on February 18th-21st, 2014, organized by Department of Bioinformatics, Alagappa University, Karaikudi, Tamilnadu.
23. Solairaj Dhanasekaran, **Ramesththangam Palanivel** and Srinivasan Pappu. Microtiter plate assay to determine antibacterial activity of α -chitin/silver nanocomposite. Paper presented in National conference on *Innovations, implementations and controversies of animal biotechnology*, organized by Laboratory of Aquabiotics/ Nanoscience department of animal science, Bharathidhasan University, Tiruchirappalli, Tamil Nadu. 20th and 21st March 2014.
24. **Rameshthangam, P**, Solairaj, D, Srinivasan, P. Antibacterial activity of α -chitin/silver nano composites against *Proteus Vulgaris*. Paper presented in the 54th Annual conference of Association of microbiologists of India (AMI-2013) & International symposium on *“Frontier discoveries and innovations in microbiology and its interdisciplinary relevance (FDMIR – 2013)*, Organised by Department of Microbiology Maharshi Dayanand University, Rohtak, Haryana, 17th – 20th November, 2013.
25. **Rameshthangam, P** & Solairaj, D. Effect of pH, Time and Concentration in Methylene Blue Dye Adsorption by α -Chitin Nanoparticles Isolated from Shrimp Shells. Paper presented in the International Seminar on *“Recent trends in Aquatic animal biotechnology” (RTAAB’ 2013)*, Organised by Department of Animal Health & Management, Alagappa University, Karaikudi, 21st – 22nd October 2013.
26. **Rameshthangam, P** & Solairaj, D. Isolation and Characterisation of α -Chitin nanoparticles from the shells of *Penaeus Monodon* fabricius from the Gulf of Mannar, India. Paper presented in the

National Symposium on *Nanosciences and Nanotechnology*, Organised by Karunya University, Coimbatore, September 30th – October 1st 2013.

27. Srinivasan, P., Sudha, A., Umamaheswari, N., and Vanajothi, R., **Rameshthangam, P.** Modeling of Quorum Sensing Regulatory Protein of *Vibrio harveyi* from shrimp aquaculture system and *In silico* Prediction of Active Drugs. Paper presented in the *9th Asian Fisheries & Aquaculture Forum*, Organized by Shanghai Ocean University, China, April 21st – 25th. 2011.
28. Vanajothi, R., Sudha, A., Manikandan, R., **Rameshthangam, P.**, and Srinivasan, P. PCR based genetic variability analysis of spotted bollworm *Earias Vitella*. Paper presented in the National Conference on *“Emerging trends in Biological Research”*, Organized by Department of Zoology, University of Madras, during 21-22, February 2011.
29. S. Rajamanikandan, R. Vanajothi, A. Sudha, **P. Rameshthangam**, P. Srinivasan. Computational detection of deleterious SNPS and their effect on sequence and structural level of the FGFR2 gene. International conference on *Bioinformatics and systems Biology (INCOBS)* organized by Zoology wing – DDE Annamalai University, Annamalai Nagar during 16th -17th February 2011.
30. M. Nishandhini, K. Sureka, A. Sudha, **P. Rameshthangam**, P. Srinivasan. Homology modelling of Protease from *Proteus mirabilis* and molecular docking for exploration of drugs. National Symposium cum Workshop on *“Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD’2010]* during December 20th- 22nd, 2010.
31. A. Sudha, **P. Rameshthangam** and P. Srinivasan. Anti-HRV 2 evaluation of MDL-860 and its analogues by structure- based virtual screening. *National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” [SBCADD’2010]* December 20th- 22nd, 2010.
32. K. Rajaguru, P. Srinivasan and **P. Rameshthangam**. Applications of Bioinformatics. *World Tamil Conference* 2010 held at Coimbatore, Tamil Nadu during June 2010.
33. K. Rajaguru, V. Suryanarayanan, P. Srinivasan, **P. Rameshthangam**, R. Manikandan and P. Ramasamy. Inhibition of *Vibrio* species by medicinal plants through molecular docking studies. *World Tamil Conference* 2010 held at Coimbatore, Tamil Nadu during June 2010.
34. **P. Rameshthangam**, P. Srinivasan and K. Rajaguru. Applications of Biotechnology in Shrimp Culture Development. *World Tamil Conference* 2010 held at Coimbatore, TamilNadu during June 2010.
35. **P. Rameshthangam**, P. Srinivasan and P. Ramasamy. Prevention and Control of White Spot Syndrome Virus in Shrimp. *World Tamil Conference* 2010 held at Coimbatore, Tamil Nadu during June 2010.
36. **P. Rameshthangam** and P. Srinivasan. Modern approaches in Biotechnology. National Seminar on *Evolving strategies for employability of students in higher education* organized by Department of Life Long Learning, Alagappa University, Karaikudi during 23rd & 24th April 2010.
37. K. Rajaguru, S. Vishnu Priya, **P. Rameshthangam** and P. Srinivasan. Comparative analysis of the effect of natural and synthetic compounds to control pathogenic bacterium *Proteus mirabilis* by molecular docking studies. *Third Indo-Korean joint seminar on Medicinal Plant Research* held at Avinashilingam University, Coimbatore on 23rd February 2010.
38. K. Rajaguru, M. Pradeeba, **P. Rameshthangam** and P. Srinivasan. Restriction of the Pathogen, *Burkholderia pseudomallei* with natural derived compounds from the Medicinal Plants, *Tamarindus indica* and *Dimocarpus longan* by Molecular Docking Studies. International Conference on *Bioinformatics and System Biology* held at Annamalai University during February 19-21, 2010.

39. P. Srinivasan, K. Rajaguru, R. Manikandan, C. Arulvasu, **P. Rameshthangam**. In silico determination of inhibition of target proteins by 1, 2 disubstituted idopyranose in diabetes mellitus. International Symposium on *Emerging Trends in Biomedical and Nanobiotechnology: Relevance to Human* at Acharya Nagarjuna University, Guntur during 19-21, December, 2009.
40. A. Sudha, P. Srinivasan, K. Rajaguru, and **P. Rameshthangam**. Protective effect of *Achras zapota* Linn. seed extract in carbon tetrachloride induced hepatotoxicity in rats. International Symposium on *Emerging Trends in Biomedical and Nanobiotechnology: Relevance to Human* at Acharya Nagarjuna University, Guntur during 19-21, December, 2009.
41. **Rameshthangam, P** and P.Srinivasan. Environmental Impact of Aquaculture during shrimp production. UGC sponsored seminar on *Promoting Environmental Values among the Teacher Trainees at Secondary Level* organized by the Directorate of Distance Education & School of Education, Alagappa University, Karaikudi during 22nd & 23rd October 2009.
42. **Rameshthangam, P.** Srinivasan, P. Expression of serum protein profile in type 2 diabetes mellitus from South Tamilnadu – influence of diabetic environment and family history of diabetes. *9th Tamil Science Congress*, Alagappa University, Karaikudi - 3 during 11th – 13th September 2009.
43. Sudha, A., Rajaguru. K., Srinivasan, P., Manikandan, R., **Rameshthangam, P.** Phytochemical and Bioinformatics analysis of anti-inflammatory and anti-pyretic compounds of *Anisomeles malabarica* R.Br. "*9th Tamil Science Congress*", Alagappa University, Karaikudi - 3 during 11th – 13th September 2009.
44. Ganesh Kumar, Sultana Nazer, **Rameshthangam, P.** Physicochemical and microbiological water quality of Chrompet Lake in Chennai. International Colloquium on *Emerging Biotechnologies in Agriculture*, Animal Health and Productivity organized by the School of Bio-Sciences, Alagappa University, Karaikudi during February 23-27, 2009.
45. **Rameshthangam, P** and Ramasamy, P. Protein expression in white spot syndrome virus infected *P. monodon* Fabricius. Conference on *Microbiology of the Tropical Seas (COMITS)*, organized by National Institute of Oceanography (NIO), Dona Paula, Goa during December 13th to 15th, 2004.
46. **Rameshthangam, P** and Ramasamy, P. Protein profiles in White spot syndrome virus in shrimp. *Proceedings of the sixth Indian Fisheries Forum*, Central Institute of Fisheries Education (CIFE), Versova, Mumbai during 17th – 20th December 2002.
47. **Rameshthangam, P.** Modern approaches in Life Science. *Inter collegiate students seminar organized by FLORA (People of Biology)*, Erode on 6th January 2001.

ORIENTATION /REFRESHER COURSE /TRAINING PROGRAMME PARTICIPATED

Refresher Course	UGC Sponsored Refresher Course in Environmental sciences, conducted by UGC Human Resource Development Centre, University of Madras, Chennai from 07/07/2015 to 27/07/2015 and obtained grade 'A'.
	UGC Sponsored Refresher Course in Research Methods, Methodology and Statistics for College and University teachers conducted by UGC Academic Staff College, Pondicherry University, Pondicherry from 01/06/2011 to 21/06/2011 and obtained grade 'A'.

Orientation Programme	UGC Sponsored Orientation Course for College and University teachers conducted by UGC Academic Staff College, Bharathidasan University, Tiruchirappalli from 02/03/2010 to 29/3/2010 and obtained grade 'A'.
Training Programme	One week "Faculty Development (Enrichment) Program – Accreditation Quality Enhancement" held on 6 th – 12 th January, 2017 organized by IQAC, Alagappa University, Karaikudi.
	One week training on Shaksham - Information Technology Champion organized by Shaksham and Microsoft, held on 19 th Jan – 25 th Jan. 2015 at Department of Computer Science, Alagappa University, Karaikudi, Tamil Nadu, India.
	One month CAS training programme on Advances in Fish Disease Diagnostics held on 25 th February to 17 th March 2003 at Central Institute of Fisheries Education, Versova, Mumbai, India.
	One month training programme on Diagnostic technique - Animal cell culture, ELISA and PCR held on 21 st Nov. – 21 st Dec. 2001 at Tamil Nadu Veterinary and Animal Sciences University, Chennai, India.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 5

S.No:	Name of the Programme	Organizer of the Programme	Level: International/ National	Topic	Date
1.	Remedial classes	Department of Bioinformatics, Alagappa University, Karaikudi	National	Synthesis and characterization of nanoparticles	24 th March 2017
2.	Remedial classes	Department of Bioinformatics, Alagappa University, Karaikudi	National	Nanobiotechnological applications in bioinformatics	24 th March 2017
3.	National Seminar on Nanotechnological Approaches in Pollution Control	Department of Physics, Biotechnology, Electronics and Communication, Dr. Umayal Ramanathan College for	National	Chitin nanostructures and its applications	18 th January 2017

		Women, Karaikudi.			
4.	10th International Conference on Nanomedicine and Nanotechnology in Health Care (Nanomedicine 2016)	Omics Conference Series LLC, Bangkok, Thailand	International	<i>In-vitro</i> and <i>in-silico</i> studies on curcumin loaded chitin and chitosan nanoparticles from shrimp shells	25 th to 28 th July 2016
5.	Biorhythm 2016	Department of Biochemistry, Idhaya College for Women, Sarugani, Sivagangai	National	Studies on WSSV in Shrimp	30 th March 2016

Events Participated

Conferences / Seminars / Workshops: 38

1. National seminar on "Quality Education for the students belonging to the marginalized sectors in India" held on 15th & 16th March 2018 Organized by Department of Education, Directorate of Distance Education, Alagappa University, Karaikudi
2. Four days workshop on "Commercialization prospects of microbial formulates" held on 22-25 January, 2018. Organized by Department of Microbiology and University business collaboration centre, Alagappa University, Karaikudi
3. World Animal Day Celebration held on 4th October 2017. Organized by Department of Animal Health and Management, Alagappa University, Karaikudi – 630003.
4. National Conference on Trends in Microbiology (NCTM – 2017) held on 27th September 2017. Organized by Department of Microbiology, Alagappa University, Karaikudi – 630003.
5. Faculty development programme for Physical, Chemical and Life Science faculties held on 12th and 13th July, 2017. Organized by CSIR-Central Electrochemical Research Institute and Dr. Umayal Ramanathan College for Women, Karaikudi – 630003.
6. Two days training programme on "Business Resources of Solid Waste Management through Vermicomposting", held on 14th to 15th March, 2017. Organized by Department of Animal Health and Management & University Business Collaboration Centre, Alagappa University, Karaikudi – 630003, Tamilnadu, India
7. DBT Sponsored National Seminar cum Workshop on Genomics and Proteomics-2017, held on 08th to 10th February, 2017. Organized by Bioinformatics Infrastructure Facility & Department of Biotechnology, Alagappa University, Karaikudi- 630 004, Tamilnadu, India.
8. 9th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" [SBCADD'2017], held on 14th –17th February, 2017.

Organized by Department of Bioinformatics, Alagappa University, Karaikudi- 630 004, Tamilnadu, India.

9. International workshop on 'Molecular Physiology, Therapeutics and Experimental Medicine' (MPTEM'2016), held on 06th and 07th September 2016. Organized by Department of Animal Health and Management, Alagappa University, Karaikudi, Tamilnadu, India.
10. Internationals Conference on "Recent Advances in Modern Medicine: Molecular signaling scenarios in tissues and diseases", held on 03rd and 04th September 2016. Organized by Research and Development Wing, Sree Balaji Medical College and Hospital, Chrompet, Chennai, Tamilnadu India.
11. 10th International Conference on Nanomedicine and Nanotechnology in Health Care (Nanomedicine 2016), held on 25th to 28th July 2016, Organized by Omics Conference Series LLC, Bangkok, Thailand.(ISSN: 2157-7439).
12. International conference on Recent Trends in Biosciences (ICRTB 2016), held on 07th to 09th April, 2016. Organized by Biosciences Department, Alagappa University, Karaikudi 630003, Tamil Nadu, India (ISBN 978-81-928690-9-4).
13. Workshop on Metrohm Auto lab Electrochemical Instruments for Biosensors, Energy and Corrosion applications, Organized by Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi held on 16th February 2015.
14. International Seminar on "Recent trends in Aquatic animal biotechnology" (RTAAB' 2013), Organized by Department of Animal Health & Management, Alagappa University, Karaikudi, 21st - 22nd October 2013.
15. National Workshop on Fluorescent Microscopy, Organized by Department of Zoology, Periyar University, Salem, 10th October 2013.
16. National Symposium on Nanosciences and Nanotechnology, Organized by Karunya University, Coimbatore, September 30th - 1st October 2013.
17. National workshop on "Expansion and Enrichment of Distance Learning" (EEDL -2012) held on 27th & 28th March 2012 organized by the Directorate of Distance Education, Alagappa University, Karaikudi.
18. International Symposium on Tagore - The Literary Genius and world Literature (ISTLG & WL) held on 1st March, 2012 organized by the Department of English and Foreign Languages, Alagappa University, Karaikudi.
19. Expansion of Distance Education - Experiences and Expectations" Workshop held on 7th and 8th July 2010 organized by the Directorate of Distance Education of Alagappa University, Karaikudi.
20. Shift System in Government Colleges on the total development of the students. A one day National level workshop held on 31st March, 2010 organised by Department of Education, Alagappa University, Karaikudi.
21. International conference on emerging trends in teaching language & literature, held on 4th & 5th December 2009 organized by Department of English and Foreign languages, Alagappa University, Karaikudi.
22. Workshop for lesson writers of Distance Education Programme, held on 11th and 12th June 2009 organized by the Directorate of Distance Education of Alagappa University, Karaikudi.

23. National Seminar on Application of Genomics and Bioinformatics in Animal Health and Management held on 25 and 26th March 2009 organized by Centre for Animal Health and Management, Alagappa University, Karaikudi.
24. National Seminar on Current Trends and Future Prospects of Nano Marine Sciences, held on 23rd and 24th March 2009 organized by Department of Oceanography, Alagappa University, Karaikudi.
25. National Seminar on Recent Trends in Molecular Modelling and Drug Design held on 18th and 19th March 2009.organized by Department of Bioinformatics, Alagappa University, Karaikudi.
26. Workshop on techniques in Genomics in relation to diabetes & related disorders, held on 3rd to 9th January 2009 Organized by Madras diabetes research foundation, Chennai & Indian Council of Medical Research.
27. Science Seminar on Basic Sciences: Scope and Hope held on 23rd August 2007 organized by University of Madras. India.
28. International seminar on Computational Drug Discovery in Pharma R & D held on 25th July 2007 organized by Bioinformatics Infrastructure Facility (BTBI – DBT funded), Department of Biotechnology & CAS in Crystallography and Biophysics, University of Madras, Chennai. India.
29. International seminar and workshop on Techniques in Biotechnology – Immunocytochemistry. Held on 8th – 11th May 2007 organized by Department of Biotechnology, University of Madras, Chennai. India.
30. International conference on Nanoscience and Nanotechnology (ICNSNT), held on 26th to 28th August 2006 organized by centre for Nanoscience and Nanotechnology, University of Madras, Chennai. India.
31. INTERNATIONAL seminar on Bio-ethics, held on 26th -27th January 2006 organized by The Tamilnadu Dr. M.G.R Medical University & University of Madras, Chennai, India.
32. International seminar on Immunotechnology and workshop on Immunoenzyme labelling in tissue sections, ELISA, 2D & Pulse field gel electrophoresis and Fermentor held on 20th to 22nd October 2005 organized by Department of Biotechnology, University of Madras, Chennai, India.
33. National Seminar on Structural Biology held on 4th March 2005 organized by Department of Crystallography and Biophysics, University of Madras. India.
34. Awareness programme on Application of Radioisotopes and Radiation Technology for Societal Development held on 13th and 14th July 2004 organized by Anna University. Chennai India.
35. International seminar on “Biosensors I and Biosensors II” held on 23rd and 24th March 2004 organized by Department of Biotechnology, University of Madras. India
36. Ethics in Medical Research, Indo-UK Workshop, held on 11th October 2004.
37. National seminar on Genomics and Proteomics, held on February 19th and 20th, 2003 organized by Department of Biotechnology, University of Madras. India.
38. The Sixth Indian fisheries Forum held on 17th – 20th December 2002 Organized by Asian fisheries Society (Indian Branch), Indian fisheries Association & Central Institute of Fisheries Education, Mumbai.

Overseas Exposure / Visits

1. Italy (Verona), 2009.
2. Thailand (Bangkok), 2016.

Distinctive Achievements / Awards

1. **INSA visiting scientist award 2018-19** by Indian National Science Academy, Bahadur Shah Zafar Marg, New Delhi.
2. Appreciation award given by Alagappa University for the significant service for acquiring A+ grade in the third Cycle of NAAC accreditation.
3. Awarded Bose Science Society Fellowship, Bose Science Society, C/o TNSRO, 39, Mura Bhavan, Rajagopalapuram Post Pudukkottai -622003, TamilNadu. India.
4. Research paper entitled “Adsorptive removal of anionic, cationic and azo dyes using green synthesized nickel nanoparticles” presented in International Conference on Membrane Technology and its Applications (MEMSEP 2017), held on 21 – 23rd February 2017. Organized by Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli - 620 024, Tamilnadu, India was selected as “Best Oral Presentation of the session”.
5. Research article “Cerium doped nickel-oxide nanostructures for riboflavin biosensing and antibacterial applications. New J. Chem. (2016)” was cited in “Nature India” (doi:10.1038/nindia.2016.27).
6. Research paper entitled “Synergistic effect of *Ocimum Sanctum* leaf extract synthesized quercetin and nickel nanoparticles on breast cancer cell lines” presented in International Conference on Frontiers in Life Sciences (ICFLS-‘16), held on 7th & 8th January, 2016, organized by Department of Botany, St. Joseph’s College (Autonomous), Tiruchirappalli, Tamil Nadu, India was selected as “Best Paper Presentation”.
7. Post-Doctoral Research Fellowship for Young Indian researchers sponsored by Italian Ministry of University and Research (MUR), published by ministry note n 179, 29 January 2007 , the University of Verona, Italy and the University of Madras.
8. Project Assistant (PA): “Project Assistant (PA)” was awarded in the Major Research Project entitled “Identification of novel herbal drug targeting protein(s) and gene(s) of White spot syndrome virus of shrimp” funded by UNIVERSITY GRANTS COMMISSION (UGC) with Potential for Excellence, Government of India, during the academic year 2003 November – 2005 December and 2006 July – April 2007.
9. Teaching- Cum – Research Fellow (TRF): Teaching- Cum – Research Fellow was awarded from the University of Madras during the academic year January –April, 2006.

10. Research Article Published in Virus Research 110(2005) 133 -141 was selected as 14th among the Science Direct TOP 25 articles in the subject area Immunology and Microbiology in the Journal Virus Research.

Additional Responsibilities

1. Member of the Inspection Squad to inspect the conduct of Examinations in the colleges affiliated to Alagappa University.
2. Inspection member of PG Science programs in DDE, Alagappa University – Conduct of theory and practical classes.
3. Member of Competitive Examinations Coaching cell, Alagappa University.
4. Member, Environmental Awareness Club, Alagappa University.
5. Member of expert regarding the equivalence of B.Sc Biochemistry and B.Sc., Chemistry to the Govt. of Tamilnadu.
6. Event Co-ordinator for ALUTES, organized by Cultural Club, Alagappa University.
7. Event Co-ordinator for Alagappa University Inter-University Cultural Festival-2017, Organized by Centre for Youth Welfare & Empowerment, Alagappa University.
8. Chairman of Question paper setters Board in B.Sc. Biotechnology, Alagappa University.
9. Chairman of Question paper Scrutiny Board in B.Sc. Advanced Zoology & Animal Biotechnology, Alagappa University.
10. Co-ordinator for Department of Biotechnology, ALUTES for the year 2016, 2017
11. Camp Co-ordinator for Village Placement Programme 2017 at Gandhi Nagar, Amaravathipudur organized by Alagappa University, Karaikudi, Tamilnadu, India.

Membership in Professional Bodies

1. Life Member, Indian Science Congress Association, Kolkata.
2. Life Member, Society for Biotechnologists (INDIA), Cochin.
3. Life Member, Bose Science Society, INDIA.

Editorial Board

1. Journal of Advanced Materials

Advisory Board

1. Journal of Nanostructure in Chemistry
2. British Biotechnology Journal
3. Journal of the Chemical Society of Pakistan
4. European Journal of Medicinal Plants
5. African Journal of Agricultural Research
6. Journal of Applied Life Sciences International
7. African Journal of Biotechnology
8. Applied Biochemistry and Biotechnology
9. BMC Complementary and Alternative Medicine
10. International Journal of Medical Nano Research
11. British Microbiology Research Journal

Extension activities

1. Acted as a Rapporteur in the UGC Sponsored National Conference on “Human Rights Education”, Organized by Alagappa University, Karaikudi held on 14 & 15, March 2017.
2. Volunteer in Blood Donation camps organized by TAMIL NADU STATE AIDS CONTROL SOCIETY & TAMIL NADU BLOOD TRANSFUSION COUNCIL.
3. Active volunteer in the donor recruitment drive in DATRI BLOOD STEM CELL DONOR REGISTRY, Chennai 600113, India.