



Dr.S.Thambidurai
Professor

Contact

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Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D.	Anna University, Chennai	1992	Textile Chemistry	Awarded
M.Sc.	Anna University, Chennai	1988	Applied Chemistry	First
B.Sc.	Anna University, Chennai	1985	Applied Sciences	First

Teaching Experience

Total Teaching Experience : 28 Years

Position	Institution	Duration
Professor	Alagappa University	2016-till date
Associate Professor	Alagappa University	2013-2016
Assistant Professor	Alagappa University	2009-2013
Senior Lecturer	Alagappa University	2005-2009
Lecturer	Alagappa University	2001-2005
Assistant Professor	Pavendar Bharathidasan College of Engg. & Tech. Trichy	1999-2001
Lecturer	Erode Inst. Tech. Kavindapadi.	1995-1999

Research Experience

Total Research Experience: 26 Years

Position	Institution	Duration
Professor	Alagappa University	2016-till date
Associate Professor	Alagappa University	2013-2016
Assistant Professor	Alagappa University	2009-2013
Senior Lecturer	Alagappa University	2005-2009
Lecturer	Alagappa University	2001-2005
Research Associate	PSG College of Tech.	1993- 1994
Senior Research Fellow (CSIR)	Anna University, Chennai	1991-1993

Academic and Additional Responsibilities

S.No	Position	UniversityBodies	Period	
			From	To
1	Coordinator	Centre for Swachh Bharat and Swasth Bharat	25.07.2017	Till date
2	Coordinator	M.Phil.Chemistry (WEP)	12.08.2016	31.3.2019
3	Programme Officer	NSS	01.09.2016	31.3.2018

Areas of Research

- Textile Chemistry
- Bio nanomaterials

Research Supervision/Guidance

Program of Study		Completed	Ongoing
Research	Ph.D	13	2
	M.Phil	45	-
Project	PG	80	5
	UG/ Others	10	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	BooksChapters
56	38	4	120	3

Cumulative Impact Factor(asperJCR) : 194

h-index : 29

i10 index : 51

Total Citations : 2136

Thesis Evaluated : 35

Viva voce Examiner : 30

Funded Research Projects

Completed Projects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	To		
1	UGC	2010-	2013	Optimization study of salt-free reactive dyeing and fixing of seaweed nano particles on cotton fabric for permanent antibacterial finishing	7.71

Other Fund Received as Research Mentor:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	To		
1	AURF	2010-	2011	Synthesis of Zinc Oxide Blended Chitosan Nanoparticles for Antibacterial and UV-Protection on Cotton Fabric	0.64

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized:

Position	Programme	Duration	Institution
Coordinator	Two days training programme on Business Training Programme on Textiles and Batteries.	7-8 th February, 2017	Alagappa University
Organizing Secretary	Workshop: Materials Chemistry for Future Industrial Development, (MATCH FIND-2017)	6-7 th January, 2017	Alagappa University
Coordinator	Workshop: Green Process Techniques for Industrial Applications (Greptia-2009)	March 20-21, 2009	Alagappa University
Organizing Secretary	Conference: Recent Advances in Textile and Electrochemical Sciences (RATES-2007)	June 1-2, 2007	Alagappa University

Events Participated

Number of Conferences/Seminars/Workshops: 90

Membership

Professional Bodies

Life Member: The Indian Science Congress Association

Advisory Board

Year/Period	Name of the BoS/Administrative Committee / Academic Committee	Role
2022-Till date	M.Sc., Chemistry Alagappa University (Department)	Member
2017 to 2020	B.Sc & M.Sc., Chemistry , Alagappa University (Affiliated colleges)	Member
2017 to 2020	M.Phil., Chemistry , Alagappa University (Affiliated colleges)	Member
2018 to 2019	M.Sc., Chemistry Alagappa University (Department)	Member
2009 to 2012	M.Sc., Chemistry , Alagappa University (Affiliated colleges)	Member

Academic Bodies in Other Institutes/Universities

Year/Period	Name of the BoS/Administrative Committee / Academic Committee	Role
2022-2024	M.Sc. & B.Sc.Chemistry, Bishop Heber College, Trichy	Member
2020-2021	M.Sc. & B.Sc.Chemistry, Bharathidasan University, Affiliated Colleges	Member
2019-2020	M.Sc.&B.Sc.Chemistry, Meenakshi College, Madurai	Member
2019-2020	M.Sc. &B.Sc.Chemistry, TheivanaiAmmal College for Women, Villupuram	Member
1999-2000	B.Tech. Textile Technology, Bharathidasan University	Member
1999-2000	B.E. Textile Technology, Bharathidasan University	Member
1999-2000	B.Sc. Apparel and Fashion Technology, Bharathidasan University	Member

Ph.D. Thesis Guided

- No. of PhD Thesis evaluated : 13
- No. of PhD Public Viva Voce Examination : 13
conducted

S. No	Name of the Scholar	Title of the Thesis	Year of Completion
1	T.Revathi	Chitosan/ Neem Seed Metal Oxide (Zn, Cu and Mg) Hybrid Composites	2021
2	R.Karthik	Cobalt and Bismuth doped RGO-ZnO/polyaniline hybrid composites	2019
3	S.Rajaboopathi	Polyaniline/Seaweed Metal Oxide (Cd, Ag and Zn) Hybrid Composites	2019
4	M.Karpuraranjith	Chitosan/graphene based SnO ₂ -Polyaniline Hybrid Composites	2017
5	R.Pandimurugan	Synthesis and Characterization of Seaweed-ZnO-Polyaniline Hybrid Composites	2016
5	K.Pandiselvi	Chitosan-ZnO/ Polyaniline Hybrid Composites Synthesis and Applications	2014

7	S.Anandhavelu	Preparation of Chitosan-ZnO nanostructures and its Graphene oxide hybrid Composites during Chitin Deacetylation	2013
8	R.Krishnaveni	Preparation and Characterization of Chitosan-ZnO Composite for Application on Bioscoured Cotton Fabric	2011
9	S.Ananda Priya	Effect of Lipase Enzyme Synthesized from Bacillus sp. Strain on Polyester Hydrolysis and its Fabric Properties	2010
10	A.Kannan	Studies on Removal of Selected Heavy Metals by Palmyra Palm Fruit Seed Carbon	2009
11	A.Selva Subha	A Study on Solvent Induced partial Cyanoethylation of Cotton Cellulose and Hydroxylation of cyano ethyl group	2007
12	G.Anita Hebsiba	A comparative study on stretching of Alkali slack swollen cotton yarns in presence and in Absence of solution	2007
13	A.VijayAnand	Study on Acetone Induced Hydroxylation of Acrylonitrile Grafted Cotton Cellulose and its properties	2007

Book Chapter Published

S.No	Authors/Title of the Chapter	Title of the Book/Publisher
1	S. Thambidurai, R. Pandimurugan, 2020, Antibacterial Activity of Seaweed-ZnO Composites	Encyclopedia of Marine Biotechnology, Chapter 110, John Wiley & Sons Ltd, pp: 2443-2452. ISBN: 9781119143772
2	S.Thambidurai and K.Pandiselvi, 2017, Polyaniline/Natural Polymer Composites and Nanocomposites	Polyaniline Blends, Composites, and Nanocomposites. Elsevier, pp-235-256, ISBN: 9780128095515
3	S.Thambidurai, 2011, Extraction and Characterization of Seaweed Nanoparticles for Application on Cotton Fabric	Marine Macroalgae: Biotechnology and Applied Phycology, John Wiley & Sons, Ltd. pp 205-220. ISBN: 978-0-470-97918-1

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1	Roshni A, Thambidurai S, (2022), Enhanced photocatalytic and antibacterial activity of ZnO with rice field crab chitosan and plectranthusamboinicus extract, Materials Chemistry and Physics, Elsevier, 291, 126739–755	4.778

2	Revathi T, Thambidurai S , (2019), Cytotoxic, antioxidant and antibacterial activities of copper oxide incorporated chitosan-neem seed biocomposites, <i>International Journal of Biological Macromolecules</i> , Elsevier, 139, 867–878,	6.953
3	Rajaboopathi S, Thambidurai S , (2019), Synthesis of bio-surfactant based Ag/ZnO nanoparticles for better thermal, photocatalytic and antibacterial activity, <i>Materials Chemistry and Physics</i> , Elsevier, 223, 512-522.	4.094
4	Rajaboopathi S, Thambidurai S , (2018), Enhanced photocatalytic activity of Ag-ZnO nanoparticles synthesized by using Padinagymnospora seaweed extract, <i>Journal of Molecular Liquids</i> , Elsevier, 262, 148–160.	6.165
5	Revathi T, Thambidurai S , (2018), Immobilization of ZnO on Chitosan-Neem seed composite for enhanced thermal and antibacterial activity, <i>Advanced Powder Technology</i> , Elsevier, 29, 1445–1454.	4.833
6	Rajaboopathi S, Thambidurai S , (2018), Evaluation of UPF and antibacterial activity of cotton fabric coated with colloidal seaweed extract functionalized silver nanoparticles, <i>Journal of Photochemistry & Photobiology, B: Biology</i> , Elsevier, 183, 75–87.	6.252
7	Pandimurugan R, Thambidurai S , (2017), UV protection and antibacterial properties of seaweed capped ZnO nanoparticles coated cotton fabrics, <i>International Journal of Biological Macromolecules</i> , Elsevier,; 105, 788-795.	6.953
8	Rajaboopathi S, Thambidurai S , (2017), Green synthesis of seaweed surfactant based CdO-ZnO nanoparticles for better thermal and photocatalytic activity, <i>Current Applied Physics</i> , Elsevier, 17, 1622-1638.	2.48
9	.Karpuraranjith M, Thambidurai S , (2017), Synergistic effect of chitosan-zinc-tin oxide colloidal nanoparticle and their binding performance on bovine albumin serum, <i>Materials Chemistry and Physics</i> , Elsevier, 199, 370-378.	4.094
10	Karpuraranjith M, Thambidurai S , (2017), Design and synthesis of graphene-SnO ₂ particles architecture with polyaniline and their better photodegradation performance, <i>Synthetic Metals</i> , Elsevier, 229, 100-111.	3.266
11	Karthik R, Thambidurai S , (2017), Synthesis of cobalt doped ZnO/reduced graphene oxide nanorods as active material for heavy metal ions sensor and antibacterial activity, <i>Journal of Alloys and Compounds</i> , Elsevier, 715, 254-265.	5.316
12	Revathi T, Thambidurai S , (2017), Synthesis of chitosan incorporated neemseed extract (<i>Azadirachta indica</i>) for medical textiles, <i>International Journal of Biological Macromolecules</i> , Elsevier, 104, 1890–1896.	6.953
13	Karpuraranjith M, Thambidurai S , (2017), Chitosan/zinc oxide-polyvinylpyrrolidone (CS/ZnO-PVP) nanocomposite for better thermal and antibacterial activity, <i>International Journal of Biological Macromolecules</i> , Elsevier, 104, 1753–176.	6.953
14	Karthik R, Thambidurai S , (2017), Synthesis of RGO–Co doped ZnO/PANI hybrid composite for supercapacitor application, <i>Journal of Materials Science: Materials in Electronics</i> , Springer, 28, 9836–9851.	2.478
15	Karpuraranjith M, Thambidurai S , (2017), Design and synthesis of graphene-	3.266

	SnO ₂ particles architecture with polyaniline and their better photodegradation performance, <i>Synthetic Metals</i> , Elsevier, 229, 100-111.	
16	Karpuraranjith M, Thambidurai S , (2017), Hybrid structure of biotemplate-zinc-tin oxide for better optical, morphological and photocatalytic properties, <i>Semiconductor Science and Technology</i> , IOP Publishing, 32, 035014-035029.	2.352
17	Rajaboopathi S, Thambidurai S , (2017), Heterostructure of CdO-ZnO nanoparticles intercalated on PANI matrix for better thermal and electrochemical performance, <i>Materials Science in Semiconductor Processing</i> , Elsevier, 59, 56–67.	3.927
18	Karpuraranjith M, Thambidurai S , (2016), Biotemplate-SnO ₂ particles intercalated PANI matrix: Enhanced photocatalytic activity for degradation of MB and RY-15 dye, <i>Polymer Degradation and Stability</i> , Elsevier, 133, 108-118.	5.03
19	Pandimurugan R, Thambidurai S , (2016), Novel seaweed capped ZnO nanoparticles for effective dye photodegradation and antibacterial activity, <i>Advanced Powder Technology</i> , Elsevier, 27, 1062–1072.	4.833
20	Karpuraranjith M, Thambidurai S , (2016), Twist fibrous structure of CS–SnO ₂ –PANI ternary hybrid composite for electrochemical capacitance performance, <i>RSC Advances</i> , RSC Publishing, 6, 40567–40576.	3.361
21	Pandimurugan R, Thambidurai S , (2016), S Synthesis of seaweed-ZnO-PANI hybrid composite for adsorption of methylene blue dye, <i>Journal of Environmental Chemical Engineering</i> , Elsevier, 4, 1332–1347.	5.909
22	Pandiselvi K, Thambidurai S , (2016), Synthesis of adsorption cum photocatalytic nature of polyaniline-ZnO/chitosan composite for removal of textile dyes, <i>Desalination and Water Treatment</i> , Taylor & Francis, 57, 8343-8357.	1.631
23	Pandimurugan R, Thambidurai S , (2015), Seaweed-polyaniline nanofibre modified electrode for sensing of uric acid, <i>Analytical Methods</i> , RSC Publishing, 7, 10422–10432.	2.073
24	Pandiselvi K, Thambidurai S , (2015), Synthesis, characterization, and antimicrobial activity of Chitosan-zinc oxide/polyaniline composites, <i>Material Science in Semiconductor Processing</i> , Elsevier, 31, 573-581.	3.927
25	Pandiselvi K, Thambidurai S , (2014), Chitosan-ZnO/Polyaniline nanocomposite modified glassy carbon electrode for selective detection of dopamine, <i>International Journal of Biological Macromolecules</i> , Elsevier, 67, 270-278.	6.953
26	Pandimurugan R, Thambidurai S , (2014), Seaweed-ZnO composite for better antibacterial properties, <i>Journal of Applied Polymer Science</i> , John Wiley & Sons Inc, 131, DOI: 10.1002/app.40948.	3.125
27	Pandimurugan R, Thambidurai S , (2014), Seaweed-ZnO composite for better antibacterial properties, <i>Journal of Applied Polymer Science</i> , John Wiley & Sons Inc, 131, DOI: 10.1002/app.40948.	3.125
28	Baburaj T, Thambidurai S , (2014), Corrigendum to ‘N-amination of amino acids and its derivatives using N-Boc-O-tosyl hydroxylamine as an efficient NH-	2.415

	Boc transfer reagent: electrophilic amination' [Tetrahedron Lett. 53 (2012) 2292–2294], Tetrahedron Letters, Elsevier, 55, 561-563.	
29	Pandiselvi K, Manikumar A, Thambidurai S , (2014), Synthesis of novel polyaniline/MgO composite for enhanced adsorption of reactive dye, Journal of Applied Polymer Science, John Wiley & Sons Inc, 131, DOI: 10.1002/app.40210.	3.125
30	Pandiselvi K, Thambidurai S , (2013), Synthesis of porous chitosan– polyaniline/ZnO hybrid composite and application for removal of reactive orange 16 dye, Colloids and Surfaces B: Biointerfaces, Elsevier, 108, 229-238.	5.268
31	Krishnaveni R, Thambidurai S , (2013), Industrial method of cotton fabric finishing with chitosan–ZnO composite for anti-bacterial and thermal stability, Industrial Crops and Products, Elsevier, 47, 160-167.	5.645
32	Pandiselvi K, Thambidurai S , (2013), Chitosan-ZnO/polyaniline hybrid composites: Polymerization of aniline with chitosan-ZnO for better thermal and electrical property, Polymer Degradation and Stability, Elsevier, 98, 988-996.	5.03
33	Anadhavelu S, Thambidurai S , (2013), Single step synthesis of chitin/chitosan-based graphene oxide–ZnO hybrid composites for better electrical conductivity and optical properties, ElectrochimicaActa, Elsevier, 90, 194– 202.	6.901
34	Anadhavelu S, Thambidurai S , (2013), Preparation of eco-friendly chitosan-ZnO composite for chromium complex dye adsorption, Coloration Technology, Wiley Blackwell, 129, 187-192.	1.614
35	Anadhavelu S, Thambidurai S , (2013), Effect of annealing temperature on optical and electrochemical properties of chitosan-ZnO nanostructure, Ionics, Springer-Verlag, 19, 903-909.	2.354
36	Baburaj T, Thambidurai S , (2012), <i>N</i> -Amination of amino acids and its derivatives using <i>N</i> -Boc- <i>O</i> -tosyl hydroxylamine as an efficient NH-Boc transfer reagent: Electrophilic amination, Tetrahedron Letters, Elsevier, 53, 2292-2294.	2.415
37	. Krishnaveni R, Thambidurai S , (2012), Modification of Enzyme Pretreated Cotton Fabric using Acrylonitrile, Acrylonitrile/ Solvent Mixture and its Characterization, Fibre and Polymers, Springer, 13, 1132-1338.	1.797
38	Anadhavelu S, Thambidurai S , (2011), Effect of zinc chloride and sodium hydroxide concentration on the optical property of chitosan-ZnO nanostructure prepared in chitin deacetylation, Materials Chemistry and Physics, Elsevier, 131, 449-454.	4.094
39	Baburaj T, Thambidurai S , (2011), <i>N</i> -Boc- <i>O</i> -Tosyl Hydroxylamine as a Safe and Efficient Nitrogen Source for the <i>N</i> -Amination of Aryl and Alkyl Amines: ElectrophilicAmination, Synlett, Georg ThiemeVerlag Stuttgart, 14, 1993-1996.	2.006
40	Krishnaveni R, Thambidurai S , (2011), Effect of Solvents on Cyanoethylation of Cotton Cellulose and its Properties, Journal of Applied Polymer Science, John Wiley &Sons Inc, 122, 1622–1627.	3.125
41	Anadhavelu S, Thambidurai S , (2011), Preparation of Chitosan-Zinc oxide Complex during chitin deacetylation, Carbohydrate Polymers, Elsevier, 83,	9.381

	1565–1569.	
42	Mercy Sheeba J, Thambidurai S (2009) Extraction, Characterization and Application of Seaweed Nano Particles on Cotton Fabrics, Journal of Applied Polymer Science, John Wiley & Sons Inc, 113, 2287-2292.	3.125
43	SelvaSubha A, Thambidurai S (2008) Effect of Solvent Induced Hydroxylation of Cyanoethyl group on dye uptake of cotton fabrics, Journal of Applied Polymer Science, John Wiley & Sons Inc, 108, 1373-1377.	3.125
44	Anita Hebsiba G, Thambidurai S (2007) Properties of Cotton yarns after slack swollen and stretched in Presence or Absence of Alkali II, Journal of Applied Polymer Science, John Wiley & Sons Inc, 106, 3111-3118.	3.125
45	SelvaSubha A, Thambidurai S (2006) Solvent Induced Partial Cyanoethylation and Hydroxylation of Cyanoethyl group, Journal of Applied Polymer Science, John Wiley & Sons Inc, 102,183-191.	3.125

Resource persons in various capacities

National Conferences : 15

International Conferences : 20

Invited Lectures : 5

Date : 02.04.2024

(Signature)

Place : Karaikudi

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