

Name:	Photo			
				
Designation:	Assistant Professor			
Qualification:	M.Sc.,B.Ed.,Ph.D			
Area of specialization:	Polymer-Rubber- Composites, Bio materials			
Experience:	Industrial Experience		Teaching Experience	
	Nil		6.8	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	7		5	
Publications:	Conference		Journal	
	National	International	National	International
	6	1	2	11
Books / Book Chapters	Nil			
Patents:	National		International	
	2			
Professional Body Membership	I-EEE			
Staff Achievements	<ol style="list-style-type: none"> 1. Got an Premium Award for Research Publications in the year of 2022 in Dr. MGR Educational and Research Institute, Chennai. 2. Reviewing international journals 3. Anna University Recognised Supervisor 			

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.,	Chemistry	2008	Sri Vasavi College, Erode	Bharathiar University	70	I
PG B.Ed	M.Sc.,	Chemistry	2012	Vivekanandha college of arts and science	Periyar University	71	I
	B.Ed	Chemistry	2009	KRP College of Education	Tamilnadu Teachers Education University	78	I
Ph.D	Ph.D	Chemistry	2017	MIT Campus	Anna University	Thesis highly Commended	

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Excel Engineering College	Asst. Professor	1.08.2022	31.08.2024	2	1	0
Dr.MGR Educational and Research Institute	Asst. Professor	16.08.2017	31.01.2022	4	5	115
Total				6	6	15

Workshops/Seminars attended: 14

FDP/STTP Attended: 5

Symposium Attended: 0

Conference Attended: 07

Completed / Ongoing Projects: Nil

Patent: 02

Journal Publications: 13

Books / Book Chapters: Nil

Awards: Got a Premium Award for Research Publications in the year of 2022 in Dr. MGR Educational and Research Institute, Chennai.

Startup: Nil

Webinar: Conducted

Resource Person: Symposium at Paavai arts and science college, Rasipuram as Resource person in the title of Bio-degradable polymers.

Online Courses: Nil

Journals

1. Sivakumar, P., S. Priyatharshni, S. Mohankumar, K. B. Nagashanmugam, R. Rajan, R. Lavanya, N. Prabhu, S. Ponnusamy, and G. Pradeesh. "Crown ether functionalized silver nanoparticles for colorimetric detection of alkali earth metals in real boiler feed water samples." *Chemical Papers (2023)*: 1-9.
2. Nagashanmugam, K. B., P. Sivakumar, S. Priyatharshni, R. Rajan, S. Maragathamani, R. Lavanya, N. Prabhu, and S. Ponnusamy. "Iron making in induction furnace for casting steel billets." *Materials Today: Proceedings (2023)*.
3. Sivakumar, P., K. B. Nagashanmugam, S. Priyatharshni, R. Rajan, R. Lavanya, S. Maragathamani, N. Prabhu, S. Ponnusamy, and G. Pradeesh. "LC-MS detection of amino acids and neurotransmitters by using α -active 2, 4, 5-triphenylpyrylium salt as an efficient derivatizing material." *Materials Today: Proceedings (2023)*.
4. Sivakumar, P., K. B. Nagashanmugam, S. Priyatharshni, R. Lavanya, N. Prabhu, and S. Ponnusamy. "Review on the interactions between dopamine metabolites and α -Synuclein in causing Parkinson's disease." *Neurochemistry International (2022)*: 105461.
5. Lavanya R & Natchimuthu N, 'Effect of N, N'-dimethylacetamide/lithium chloride modified microcrystalline cellulose on the processing behaviour and properties of cellulose-rubber composites' *Journal of Polymer Materials 2021, 38,1, 99-110*.
6. S.Bharani kumar, S.D.Sekar, T.Mothilal, G.Sivakumar, R.Lavanya, C.M.Meenakshi, S.Manivannan, *Experimental investigation on physical properties of banana/E-Glass fiber reinforced hybrid interpenetrating polymer network composites, Materials Today: Proceedings, 2021, 45, 5029-5033*.
7. CM Meenakshi, Rajesh Ravi, J Stephen Leon, M Selvaraj, K Manikandan, G Suresh, R Lavanya, *Evaluation of improvement in performance of FRP composite by using Al (OH₃) as secondary reinforcement, Journal of Physics: Conference Series, 2021, 1921 (1), 012092*.

8. *K Senthilnathan, Rajesh Ravi, J Stephen Leon, G Suresh, K Manikandan, R Lavanya, Analyzing the effect of mechanical properties of various proportions of filler material on jute fiber/epoxy reinforced composites. Journal of Physics: Conference Series, 2021, 1921 (1), 012089.*
9. *BV Dharmendra, S Vivek, P Ramu, T Srinivasan, G Suresh, CM Meenakshi, R Lavanya, Static investigation of roselle waste powder reinforced bio polymer composite, Journal of Physics: Conference Series, 2021, 2054, 012058.*
10. *S.Bharani Kumar, S D Sekar, G Sivakumar, Srinivas, R Lavanya, G Suresh, Modern concepts and application of soft robotics in 4D printing, Journal of Physics: Conference Series, 2021, 2054, 012056.*
11. *Lavanya R & Natchimuthu N, 'Effect of elastomer assisted shear induced deformation on the morphological and swelling characteristics of N, N'-dimethyl acetamide/lithium chloride treated microcrystalline cellulose'. Bulletin of materials science, 2019, 42 (4), 168.*
12. *Lavanya R, Clara I & Natchimuthu N 2017, 'Shear-induced morphology changes in N,N'-dimethylacetamide/lithium chloride pretreated cellulose', Journal of Applied Polymer Science, 2017, 134, 19, 44809.*
13. *Clara I, Lavanya R & Natchimuthu N, pH and temperature responsive hydrogels of poly (2-acrylamido-2-methyl-1-propanesulfonic acid-co- methacrylic acid): synthesis and swelling characteristics. Journal of Macromolecular Science, Part A, 2016, 53 (8), 492499.*

List of patents

1. *Targeted Delivery of Lipid Nanoparticles and Liposomes for Treatment of Bone Diseases.*
2. *Bio-Based Polyurethane Composites.*

Conferences

1. *Janani DKD, Lavanya, R & Natchimuthu, N 2014, 'Mixing behaviour of elastomer composites containing reinforcing silica in presence of cellulose', National Conference on Emerging trends in elastomeric materials, process and tyre technology for sustainable growth on 21-22 Nov 2014, organized by Indian Rubber Manufacturers Research Association (IRMRA), New Delhi, India*
2. *Lavanya, R & Natchimuthu, N, 2016, "Polyurethane bio-composites based on cellulose and castor oil" National Conference on "Recent Advances in Chemical Engineering" (RACE - 2016) on 07.10.2016, organized by Department of Chemical Engineering, Annamalai University, Chennai, India*
3. *Lavanya, R & Natchimuthu, N 2017, Effect of Mechanical and Mechanochemical Shear Treatments on Cellulose in Solid State' International Conference on Frontier Areas in Chemical Technologies-2017 (FACTS-2017) on 06-08 July 2017, organized by Department of Industrial Chemistry Alagappa University, Karaikudi, India*

4. *Lavanya, R & Natchimuthu, N 2017 'Cellulose dissolution in DMAc/LiCl solvent system' Two days National conference on "Ionic Liquids in Green Chemical Processes & Sustainable Technologies' on 3rd &4th August-2017 organized by Department of Chemical Engineering, SSN College of Engineering, Chennai, India*
5. *Lavanya R, Vinodh madan & Santhosh Kumar, 'Cellulose based composites', National conference on EMERGE-2018 on 13th april-2018 organized by Humanities and Sciences, Dr. MGR educational and research institute, Chennai, India*
6. *Lavanya R and Natchimuthu N, 'Cellulose under the influence of elastomer assisted shear in solid state' National conference on recent innovations in advanced material sciencs-RIAMS'19 on March 13 &1 14 March 2019 organized by the Department of Mechanical engineering, Rajalakshmi Institute of Technology, Chennai*
7. *Lavanya R and Natchimuthu N, 'Properties and processing behavior of cellulose-rubber composites' National conference on recent trends in chemistry of materials (NCRTCM'2019) on 11-12 October 2019, Organized by Department of Chemistry Bannari Amman Institute of Technology, Sathyamangalam 638 401 Erode Tamilnadu India.*