

Faculty Profile



Name Sr. S. Sahaya Leenus

Designation : Assistant Professor

Department : Chemistry

Date of Birth : 30.04.1982

Date of Appointment : 15.06.2016

Academic

S. No	Degree	University / Institution	Year of Completion
1	B.Sc.	Jayaraj Annapackiam College for Women (Autonomous), Periyakulam.	2006
2	M.A(Christian Studies)	Madras University, Chennai.	2008
3.	Formators Course	Beschi College Dindugal	2009
4.	B.Ed.	Mahatma College, Pudukkottai.	2010
5.	M.Sc.	Jayaraj Annapackiam College for Women (Autonomous), Periyakulam.	2014
6.	M.Phil.	M.K.U, Madurai	2017
7.	S.E.T	Mother Therasa Women's University, Kodaikannal.	2017

8.	(Ph.D)	Karunya University,Coimbatore.	2019 onwards
----	--------	-----------------------------------	--------------

Total Experience : UG: 10 year PG: 10 year M.Phil: 04 Year

Area of Specialization/Interest : Electrocoagulation analysis and Electrochemical Techniques & Nanotechnology

Professional Affiliation

S.NO	YEAR	PROFESSIONAL AFFILIATION
1.	2016-17	Member in Xavier board of higher Education and Campus ministry
2.	2017 - 18	Member in Xavier board of higher Education and Campus Ministry
3.	2018 - 19	Member in Xavier board of higher Education and Campus Ministry& Press committee
4.	2019 - 20	Member in Fine arts and Press Committee
5.	2020 - 21	Coordinator in Entrepreneurship Cell & member in Fine arts
6.	2021-22	Coordinator in Entrepreneurship Cell & member in Fine arts
7.	2022-23	Coordinator in Entrepreneurship Cell & member in Fine arts
8.	2023 –24	Member in Fine arts
9.	2024-25	Coordinator in Institution Innovation Council & Member in current Events club
10	2025-2026	Coordinator in Institution Innovation Council, Member in current Events club, Member in consultancy and OSA treasurer

Research Publications:

International Publications : 14

1. T. Johny Dathees, **S.Sahaya Leenus**, R.Anitha, C.Sagaya Rani, **“Plant mediated synthesis of silver nanoparticles and their biological activites”**
5(3) May-June 2016, ISSN 2319-8141, 249-258.

2. T. Johny Dathees, **S.Sahaya Leenus**, J.Jenifer, K.Kharaniya, **“Green synthesis of silver nanoparticles”** *International Journal of Universal Pharmacy and Biosciences*:5(6), November-December 2016, ISSN 2319-814, 146-157.
3. **S.SahayaLeenus**, T.Johny Dathees, P.Nivetha, S.Ilakkiya, **“Green Synthesis of Silver Nanoparticles and their Antimicrobial Activity”** *Journal of Emerging Technologies and Innovative Research* (An International Open Access Journal & UGC and ISSN Approved), ISSN: 2349-5162, Vol. 6, Issue.3 March 2019.
4. T.JohnyDathees, **S.SahayaLeenus**, S.MariaEsther, P.Revathi, **,”Photodegradation of Methylene Blue in the presence of Solar Light using CdO Nanocatalyst”** *Journal of Emerging Technologies and Innovative Research* (An International Open Access Journal & UGC and ISSN Approved), ISSN: 2349-5162, Vol. 6, March 2019.
5. **Sr.S.SahayaLeenus***, Devasahaya Maryl, T. Madhumitha², P.Mageshwari³, Sr.T. Johny Dathees, **“Green Synthesis Of Silvernanoparticles Using MuntingiaCalabura L, (Fruits)Citrus Reticulata leaves and Their Antimicrobialactivity”** (An International Open Access Journal & UGC and ISSN Approved) 2020 JETIR January 2020, Volume 7, Issue 1 www.jetir.org (ISSN-2349-5162)
6. Sr.T.Johnydathees, S.vinitha, J.Vijayalakshmi, **Sr.S.SahayaLeenus** **“Green synthesis of copper oxide nanoparticles and their antimicrobial activity”** in *the journal of Emerging Technologies and innovative Research*, 7(1)2020, pp 831-840, ISSN No 2349-5162.
7. **Sahaya Leenus Sebastian^a**, Parameswari Kalivel ^{a*}, Kavitha Subbiah^b, Jovitha Jane David^a, Asath Murphy Maria Stephen^a, Jegathambal Palanichamy^c, **“Electrocoagulation using Ti/Ti for the remediation and reuse of aqueous Dispersive Blue-79”** *Journal of Environment Monitoring Assessment* (2024) 196:177. <https://doi.org/10.1007/s10661-024-12320-y>
8. **Sahaya Leenus Sebastian^a**, Parameswari Kalivel ^{a*}, Kavitha Subbiah^b, Asath Murphy Maria Stephen^a, Jovitha Jane David^a, Jegathambal Palanichamy^c, **“Assessing titanium vs. aluminium electrodes for wastewater remediation in the small-scale industries (SSI) textile sector”** *Environmental*

Nanotechnology, Monitoring & Management 21 (2024) 100950,
<https://doi.org/10.1016/j.enmm.2024.100950>

9. Jovitha Jane David^a, Asath Murphy Maria Stephen^a, Riju Suguna Robin^a, **Sahaya Leenus Sebastian^a**, Jegathambal Palanichamy^b, Parameswari Kalivel^{a*}
“Comparative study on the electrocatalytic activity of dissimilar electrode combinations for the treatment of textile effluent by electrocoagulation process and their subsequent reuse” *Iranian Journal of Catalysis* 13 (3), August 2023. (DOI: 10.30495/IJC.2023.1991117.2022)
10. Jovitha Jane David^a, Asath Murphy Maria Stephen^a, Riju Suguna Robin^a, **Sahaya Leenus Sebastian^a**, Jegathambal Palanichamy^b, Parameswari Kalivel^{a*}
“An Attempt to Reduce the Electrocoagulation Costs and to Ensure the Reuse of Treated Aqueous Dye Solution” *Nature Environment and Pollution Technology” An International Quarterly Scientific Journal*, e-ISSN: 2395-3454, Vol. 22,(3), pp. 1277-1288, 2023. <https://doi.org/10.46488/NEPT.2023.v22i03.015> .
11. M.S. Asath Murphy^a, D.Jovitha Jane^a, **S.Sahaya Leenus^a**, Riju S. Robin^a, Jegathambal palanichamy ^b& Parameswari Kalivel ^{a*}, **“Electrochemical treatment of textile wastewater using copper electrodes”** *Journal of Environmental Science and Health Part A*, October 8, 2023, <https://doi.org/10.1080/10934529.2023.2274257>
12. Asath Murphy M.S, Jovitha Jane D, **Sahaya Leenus Sebastian**, Riju S Robin, Jegathambal Palanichamy, Parameswari Kalivel (2024). **“An investigation on the treatment of wastewater disperse dye by electrocoagulation and to examine the use of the treated dye for flora and fauna”** *Iranian Journal of Chemistry and Chemical Engineering*.
13. Asath Murphy M.S, Jovitha Jane D, **Sahaya Leenus Sebastian**, Riju S Robin, Jegathambal Palanichamy, Parameswari Kalivel (2024). **“Evaluation of electrocatalytic activity Ti and Al as anodes for the remediation of textile dyeing effluent”** *Iranian Journal of Catalysis*.
14. Jovitha Jane David, Asath Murphy Maria Stephen, Subbiah Kavitha, Suresh Kumar Krishnan, Santhiya Mariappan, **Sahaya Leenus Sebastian**, Jegathambal Palanichamy, Parameswari Kalivel, Palanivel Sathishkumar.

“Investigating the efficiency of electrocoagulation using similar/dissimilar electrodes for the detoxification of Coralene Rubine dye: a cost effective approach” Evaluation of toxicity in real-time textile effluents post-treatment using *Sorghum bicolor* and *Danio rerio*-Potential for reuse

15. Jovitha Jane David, Asath Murphy Maria Stephen, **Sahaya Leenus Sebastian**, Suresh Kumar Krishnan, Subbiah Kavitha, Parameswari Kalivel, Jegathambal Palanichamy. **“Evaluation of toxicity in real-time textile effluents post-treatment using *Sorghum bicolor* and *Danio rerio*-Potential for reuse”** *Desalination and Water Treatment*, 320 (2024) 100752, <https://doi.org/10.1016/j.dwt.2024.100752>

16. **Sahaya Leenus Sebastian**, Parameswari Kalivel. **“A Review on the Metal Electrodes Used in Electrocoagulation and Need for the Alternative Electrode”** *Journal of Science Humanities and Management*, vol 11, No. 2, (19) June 2024, ISSN:2347-9868.

Patent:

S.No	Published / Granted	Title	Patent No & Application No
1	Granted Date of Grant : 08/11/2023	“A cost effective and low power consuming textile effluent treatment method for effluent reclamation”	467218 202241061578

Project:

S.No	Funded by	Project No	Title	Year	Outlay
1	Jayaraj Annapackiam College for Women Autonomous, Periyakulam , Theni	JAC/2022-2023/JACFRP-Scholar/7	“Treatment of textile waste water by electrocoagulation process”	30.09.2022	10,000/-
2	Tamil Nadu State Council	TNSCST, ES-326	“Reuse of Textile Waste Water by	March 2023.	7500/-

	for Science and Technology		Electrocoagulation Using Alternative Electrodes”		
--	-----------------------------------	--	---	--	--

Seminars/Conferences/Workshops Participated:

Year	Title of the Paper	Seminar	Place &Date	Level
2016-2017	Green synthesis of silver nanoparticles	UGC Sponsored National Seminar on Recent Trends in Chemistry (RTC-7)	PG and Research Centre of Chemistry, J A College, Periyakulam on 11 th and 12 th January 2017	National
2017-2018	-	Workshop on Statistics using Excel and SPSS in Collaboration with AIMST University	17.01.2018 to 19.01.2018 Jayaraj Annapackiam College for Women, Periyakulam	International
2017-2018	-	National Seminar on Recent Trends in Chemistry (RTC-8)	23.01.2018 Jayaraj Annapackiam College for Women, Periyakulam.	National
2017-2018	-	Workshop on women in science and Research	19.02.2018 & 20.02 .2018 IQAC in collaboration with United states India Educational foundation, Chennai.	National
2018-2019	-	Educating Educators on Psycho Spiritual Mentoring	19.07.2018 to 20.07.2018 & 10.10.2018 to 12.10.2018 Christian Studies and Counseling Psychology, university of Madras, Chennai	National
2019-2020	-	National Seminar on Recent Trends in Chemistry (RTC-10)	10.12.2019 Jayaraj Annapackiam College For Women, Periyakulam	National

	-	NAAC Sponsored National Seminar on Quality in Teaching and Research.	03-02-2020, Mother Theresa Women's University, Kodaikannal.	National
	-	Effective usage of ICT Tools for E-Content preparation (Online course)	27-04-2020 to 02-05-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam.	National
	-	Digital Tools For Smart Classroom In Higher Education (Online course)	06-05-2020 to 07-05-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam.	National
	-	National webinar on outcome-based education (Online course)	22-05-2020 to 29-05-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam	National
	-	"Free statistical tool for research data analysis and research publication with special reference to citation, impact factor and h index" (Online course)	01 & 02-06-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam	National
	-	"Let us lockdown the stress" (Online course)	05 & 06 -06 -2020 Jayaraj Anna Packiam College For Women	National

			Autonomous, Periyakulam	
	-	“Functional properties of bandgap engineering of ZnO and GaN Alloy” (Online course)	08-06-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam	International
	-	“Organic foods and healthy life style” (Online course)	10-06-2020 Jayaraj Anna Packiam College for Women Autonomous, Periyakulam	National
	-	“Porous carbon based nano composite for energy storage and sensing” “Chemical biology of covid 19” (Online course)	11& 12 -06 -2020 Jayaraj Anna Packiam College for Women Autonomous ,Periyakulam	International
	-	“Women in Entrepreneurship” (Online course)	15-06-2020 Jayaraj Anna Packiam College for Women Autonomous ,Periyakulam	National
2020 - 2021	-	National Seminar on Recent Trends in Chemistry –I- 2	11.03.2021& 12.03.2021 Jayaraj Annapackiam College For Women, Periyakulam	International
	Romoval of pollutants	Challenges and Opportunities in Water and	29.03.2021&30.03.2021 Karunya Institute of technology and	International

	from a real textile dyeing waste water using stainless steel electrode in electrocoagulation.	Wastewater Management & World Water Day Celebration. (Online) International Webinar on Advancements in Chemical Sciences : Research Prospects and Career Options	Sciences. Karunya University. Coimbatore. 17.06.2021. Karunya Institute of technology and Sciences. Karunya University. Coimbatore 14.	International
2021-2022	Efficacy of Electrocoagulation in removal of dye pollutants from synthetic dye solution using Ti Electrodes	In Association with Alternative Energies and Atomic Energy Commission (CEA), Universite Gustave Eiffel, France. (Online)	17-19th February 2022. Department Of Chemistry SRM Institute Of Science And Technology Kattankulathur – 603 203	International
	Treatment of Dispersive Dyeing Effluent by a Hybrid Electrocoagulation	Two days National Virtual Conference On Emerging Trends in Chemical Sciences. (NCETC-22)	25 & 26 th march 2022 Karpapagam Academy of Higher Education. (Deemed to be university) Coimbatore. Department of Chemistry, Emerging Trends in Chemical Sciences.	National
2022-2023	Faculty induction programme	UGC-HRDC Pondicherry university 9 th FIP programme	03 rd Nov to 02 Dec 2022, UGC-HRDC Pondicherry university 9 th FIP programme.	FIP Programme
2023-2024	Poster Presentation,	Second International Conference on Frontiers in	26 th & 27 th October 2023. Organized by Department of Applied Chemistry.	International

	” Comparative Study on Efficiency and Sustainability of Titanium with Aluminium Electrodes in Electrocoagul ation for Textile Dye Wastewater Remediation for Small Scale Industries (SSI)”	Chemical Sciences (ICFCS- 2023)	Karunya Institute of technology and Sciences.Karunya University. Coimbatore 14. 978-93-88993-85-2	
	Green Synthesis of Silver Nano Particles Using <i>Sesbania</i> <i>Grandiflora</i> (STEM), <i>Jasmine</i> <i>Grandiflora</i> (Leaves) and their Antimicrobial Activity	International Conference on Advanced Functional Materials for Sustainable Development	04.03.2024 & 05.03.2024 PG and Research Center of Chemistry, Jayaraj Annapackiam College For Women, Periyakulam 978-93-93333-80-3, 2024	Internation al

	Refresher course	28 th April to 11 May 2024, Ramanujan College, University of Delhi, Teaching Learning center, Ministry of education.	Discipline specific Refresher course	National
--	------------------	---	--------------------------------------	----------

Conference Presentations:

Year	Title of the Paper	Seminar	Place & Date
2016-2017	Green synthesis of silver nanoparticles	UGC Sponsored National Seminar on Recent Trends in Chemistry (RTC-7)	PG and Research Centre of Chemistry, J A College, Periyakulam on 11 th and 12 th January 2017
2017-2018	Production and characterization of milk clotting enzyme from Moringa Oleifera Seeds Extract	UGC Sponsored National Seminar on Recent Trends in Chemistry (RTC-8)	23.01.2018 Jayaraj Annapackiam College For Women, Periyakulam (National)
2018-2019	Green Synthesis of Silver Nano Particles and Their Antimicrobial Activities	Nano national summit - current trends and future perspective's	Holy Cross College ,Trichy 10-01-2019(National)
2019-2020	Green Synthesis of Silver Nanoparticles using <i>Celosia Spicata</i> <i>Flamingo</i> and their Antimicrobial Activity.	National Seminar on Recent Trends in Chemistry (RTC-10)	10.12.2019 Jayaraj Annapackiam College For Women, Periyakulam (National)
2020-2021	Removal of pollutants from a real textile dyeing waste water using stainless steel electrode in electrocoagulation.	International Conference on Challenges and Opportunities in Water and Wastewater Management	29.03.2021 - 30.03.2021 Karunya Institute of technology and Sciences.Karunya University. Coimbatore.(International)

		&World Water Day Celebration.(Online)	
2021-2022	Efficacy of Electrocoagulation in removal of dye pollutants from synthetic dye solution using Ti Electrodes.	In Association with Alternative Energies and Atomic Energy Commission (CEA), Universite Gustave Eiffel, France.(Online)	17-19th February 2022 Department Of Chemistry SRM Institute Of Science And Technology Kattankulathur – 603 203. (International)
2021-2022	Treatment of Dispersive Dyeing Effluent by a Hybrid Electrocoagulation	Two days National Virtual Conference On Emerging Trends in Chemical Sciences.(NCETC-22)	25 & 26th march 2022 Karpapagam Academy of Higher Education.(Deemed to be university)Coimbatore. (International)
2023-2024	Poster Presentation, “Comparative Study on Efficiency and Sustainability of Titanium with Aluminium Electrodes in Electrocoagulation for Textile Dye Wastewater Remediation for Small Scale Industries (SSI)”	Second International Conference on Frontiers in Chemical Sciences (ICFCS-2023)	26 th & 27 th October 2023. Organized by Department of Applied Chemistry. Karunya Institute of technology and Sciences.Karunya University. Coimbatore 14. (International)
	Green Synthesis of Silver Nano Particles Using	International Conference on	PG and Research Center of Chemistry, JAC, Periyakulam on

	<i>Sesbania Grandiflora</i> (STEM), <i>Jasmine Grandiflora</i> (Leaves) and their Antimicrobial Activity	Advanced Functional Materials for Sustainable Development	04.03.2024 and 05.03.2024
--	--	---	---------------------------

Research Experience: 09 Year

Research Guidance:

No. of PG projects guided: 12

Books Published :

S.No	Title	ISBN No	Year
1	Value Education	978-81923121-4-9,	2017-2018.
2	Allied chemistry Volume -1	978-81-2344-024-9,	2020-2021.
3	Allied chemistry Volume -11	978-81-2344-109-2,	2021-2022.
4	Entrepreneurship Skills in Chemistry	978-81-19042-76-0,	2023-2024

Resource Person:

2018-2019	Resource Person for SET/NET Coaching	Jayaraj Annapackiam College For Women, Periyakulam.
2024-2025	Resource Person for PTA Meet. “Role of Parents and Teachers in Emotional and Social Development”	Child Jesus Nursery and Primary School, Kulithali, Karur Dist – 639104. on July 27 th 2024.

Organised:

S. No.	Title of the Programme	Institution/Venue	Date
1	Served as a Co - Coordinator for the In-service training programme for science teachers, Theni Dist, Catalysed and supported by Tamil	Jayaraj Annapackiam College for Women, Periyakulam.	18.02.2019 to 22.02.2019

2	<p>NADU state Council for Science and Technology, Chennai.</p> <p>Served as an Organizing Secretary, Two Day International Webinar organized by PG and Research Center of Chemistry, “Porous carbon-based nano composite for energy storage and sensing” “Chemical biology of covid 19” (Online course)</p>	Jayaraj Anna Packiam College for Women Autonomous, Periyakulam	11 -06 2020 & 12-06-2020
3	<p>Served as a convener, One day International webinar, Recent Trends in Chemistry, organized by PG and Research Centre of Chemistry, and Jyoti Nivas College, Autonomous, Bangalore.</p> <p>“Recent Advances of Green synthesis” Protective fabrics/ composites for efficient multifunctional applications.</p>	PG and Research Centre of Chemistry, and Jyoti Nivas College, Autonomous, Bangalore.	19.12.2022

Contact Details:

**Present Address : St.Anne’s Convent,
J.A.College for women autonomous,
Periyakulam,
Theni (Dt)- 625601.**

Mobile : 7094920276

**Email : srleenuschem@annejac.ac.in
sahayaleenus@gmail.com**