

<b>Name</b>	A.Lakshmi
<b>Qualification</b>	M.Sc., Ph.D.,
<b>Designation</b>	Assistant Professor
<b>Year of Joining</b>	2014
<b>Specialization</b>	Electrochemistry, Nanomaterials, Polymers
<b>Email id</b>	<a href="mailto:lakshmismctuty@gmail.com">lakshmismctuty@gmail.com</a> <a href="mailto:magathalenalakshmi@yahoo.co.in">magathalenalakshmi@yahoo.co.in</a>



### Seminars/Workshops/FDP/ Conferences

<b>Title of Workshop/ Seminar/ FDP/ Conferences</b>	<b>Type</b>	<b>Paper Presented/ Participate d</b>	<b>Title of the Paper</b>	<b>Organized By</b>	<b>Date</b>
Chemical Sciences: Reflections, Challenges, Knowledge- Industry Partnernship and Sustainable Future	Regional Conference	Participated	-	St.Xavier's College (Autonomous), Palayamkottai & Indian Chemical Society, Tamil Nadu Branch	10.10. 2025
Innovation in Chemical Sciences for Sustainable Development (ICSSD)-2025” on	International Conference	Participated		PG Department of Chemistry	3.10.2025
Navigating Consultancy, Filing Patent and Designing Research Article: Insights and Strategies	National seminar	Participated	-	Marian Research Forum and IQAC, St. Mary's College (Autonomous),	20.01.2024

				Thoothukudi	
11 <sup>th</sup> International Tamil Research Conference Kuala Lumpur, Malaysia.	International Conference	Presented	Electrochemical determination of diazepam on nanosize conducting poly(3-octylthiophene) modified glassy carbon electrode	International Association of Tamil Research	21.7.2023-23.7.2023
In-service Teacher Training Programme in Physical Sciences	Training Programme	Participated	-	Tamilnadu State Council for Higher Education at Rani Anna Government College for Women Tirunelveli	05.05.2022 & 06.05.2022
Writing Research Proposals for funded projects	National Workshop	Participated	-	Marian Research Forum” St.Mary’s College (Autonomous), Thoothukudi	14.09.2019
Recent Trends in Multidisciplinary Research (ICRTMDR-18)	International Conference	Participated	-	V.O.Chidambaram College, Thoothukudi and Institute For Engineering Research And Publication	19.4.2018
Advanced Materials Chemistry at the interfaces of Energy, Environment and Medicine (AMCI-2018)	National conference	Paper Presented	Synthesis and Characterisation of nanorods of poly-3-methylthiophene in aqueous medium	Manonmaniam Sundaranar University, Tirunelveli	21.2.2018
Academic and Research Integrity in the Digital World	National Seminar	Participated	-	Research Forum and Department of Library, St.Mary’s College (Autonomous) Thoothukudi	09.12.2017

Green Chemistry for Clean Environment	National Conference	Presented	(i) Green Synthesis of copper nanoparticles using Zingiber officinale extract and its corrosion inhibition on mild steel  (ii) Synthesis of Graphite oxide-TiO <sub>2</sub> composite	Department of Chemistry St.Mary's College (Autonomous) Thoothukudi	07.12.2017 & 08.12.2017
A One day Research Orientation Programme for Research Supervisors of Manonmaniam Sundaranar University	Orientation	Participated	-	IQAC & Centre for Research, Manonmaniam Sundaranar University, Tirunelveli.	01.11.2017
ndaranar University					
Cosmic concerns: An interdisciplinary Dialogue in Applied ethics	National conference	Participated	-	St.Mary's College (Autonomous) Thoothukudi	27.01.2017 & 28.01.2017
International conference on Materials Science and Technology	International conference	Participated	-	APC Mahalakshmi College, Thoothukudi	28.12.2016
Quality Enhancement in Higher Education: Teaching, Learning & Evaluation	National conference	Participated	-	St.Mary's College (Autonomous) Thoothukudi	7.01.2016 & 8.01.2016
International conference on Nanomaterials for Energy, Environment, Catalysis and Sensors (ICNEES-15)	International conference	Participated	-	Madurai Kamaraj University	11.12.2015 & 12.12.2015
Electrochemical Methods for Evaluation of Nano materials	Workshop	Participated	-	National Institute of Technology, Tiruchirappalli	20.11.2014 & 21.11.2014

National level workshop on Molecular Biotechnology and Bionanotechnology	National level workshop	Participated	-	St.Mary's College, Autonomous Thoothukudi	12.09.2014 & 13.09.2014
Advances in Mechanical manufacturing and building sciences (ICAMB)	International Conference	Participated	-	VIT university, Vellore	9.01.2012, 10.01.2011 & 11.01.2012
International Conference on nanoscience and nanotechnology (ICNN 2011)	International Conference	Paper Presented	Synthesis and characterization, capacitive behaviour of poly (3,4-ethylenedioxythiophene)-copper oxide nanocomposites	Coimbatore institute of technology, Coimbatore	06.07.2011 To 08.07.2011
Advanced materials and its applications (ICAMA 2011)		Paper Presented	"Electrochemical Synthesis, characterization of Nano Size poly(3,4-ethylenedioxythiophene) on Glassy Carbon Electrode in phosphate Buffer solution and its characteristics	Multifunctional materials research center, Kalasalingam University, Krishnakoil	04.03.2011 & 05.03.2011

**Webinar/ Online Workshop/ Online FDP attended**

Name	Department	Webinar/ Online Workshop/ Online FDP attended	Paper Presented/ Participated	Title	Organised By	Date

Dr. A. Lakshmi	Chemistry	Webinar	-	Glimpse on Open Education Resources	Department of Library, St. Mary's College (Autonomous) Thoothukudi	20.03.24
Dr. A. Lakshmi	Chemistry	FDP	Participated	Preparing teachers for artificial intelligence driven education	Annammal College of Education, Thoothukudi	6.11.23 to 10.11.23
Dr.A.Lakshmi	Chemistry	National	Participated	Increasing Visibility in	Department of Library and	31-Oct-
		Webinar		the Research World Using Academic and Social Media	Marian Research Forum, St. Mary's College(Autonomous), Thoothukudi	2020
Dr.A.Lakshmi	Chemistry	A One Day Virtual Workshop	Participated	Instrumental Analysis of Biochemical Constituents in Food	Marian Star Centre Department of Chemistry St. Mary's College (Autonomous), Thoothukudi	29-Oct-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	An overview of Development of Drugs and Vaccines for the Current Pandemic"	Department of Chemistry St. Mary's College (Autonomous), Thoothukudi	20-Jul-2020
Dr.A.Lakshmi	Chemistry	National Level Workshop	participated	ICT Tools For Smart Teaching	Servite College of Education For Women	18-Jun-2020 to 20-Jun-2020
Dr.A.Lakshmi	-	FDP	participated	Digital Tools For Smart Teaching	Servite Arts And Science College For Women Thogamalai	16-Jun-2020 and 17-Jun-2020

Dr.A.Lakshmi	Chemistry	National Webinar	participated	Intermolecular Bonding	Women's Christian College Chennai	16-Jun-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Google's UI Toolkit	Department of Computer Science and Computer Applications Servite Arts And Science College	13-Jun-2020
					For Women Thogamalai	
Dr.A.Lakshmi	Chemistry	National Level Online Certificate Course	participated	Medicinal Chemistry	Sri Parasakthi College For Women(Autonomous) Courtallam	12-Jun-2020
Dr.A.Lakshmi	Chemistry	International Webinar	participated	Lecture 1:Porous Carbon Based Nanocomposite For Energy Storage And Sensing  Lecture 2:Chemical Biology of Covid 19	JeyarajAnnapackiam College For Women Periyakulam	11-Jun-2020 and 12-Jun-2020
Dr.A.Lakshmi	Chemistry	National Level Webinar	participated	Designing New Chiral Molecules For Asymmetric Organocatalysis	PG & Research Department of Chemistry V.O.Chidambaram College Thoothukudi	11-Jun-2020

Dr.A.Lakshmi	Chemistry	International Webinar	participated	Evolution and Transformation of Chemistry: A Futuristic Approach	S.T.Hindu College Nagercoil	08-Jun-2020
Dr.A.Lakshmi	Chemistry	National Webinar	participated	Nanomaterials	Sadakathullah Appa College(Autonomous) Tirunelveli	06-Jun-2020
Dr.A.Lakshmi	Chemistry	National Webinar	participated	Biodiesel From Marine	V.O.Chidambaram College	05-Jun-2020
				Algae	Thoothukudi	
Dr.A.Lakshmi	Chemistry	International Webinar	participated	Effective Usage of ICT Tools For Higher Education	Servite Arts And Science College For Women Thogamalai	03-Jun-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Introduction to Geographic Information System(GIS)	Department of Physics, St. Mary's College (Autonomous), Thoothukudi	02-Jun-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Graphene Based Nanocomposites For Energy Storage	V.O.Chidambaram College Thoothukudi	01-Jun-2020
Dr.A.Lakshmi	Chemistry	Quiz	participated	Fundamentals of Rechargeable Batteries	Rajapalayam Rajus ' College Rajapalayam	01-Jun-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Laboratory Safety Practices	SIES College of Arts , Science & Commerce(Autonomous) Mumbai	31-May-2020

Dr.A.Lakshmi	Chemistry	Webinar	participated	An Overview of E- content Development	Department of Visual Communication(SC)  St. Mary's College (Autonomous), Thoothukudi	29-May-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Three Questions That Lead You To Success	Aditanar College of Arts and Science  Tiruchendur	28-May-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Energy, Energy Everywhere, How to harness it?	Department of Chemistry, V.O.Chidambaram College	21-May-2020.
Dr.A.Lakshmi	Chemistry	webinar	participated	"Taking Research Forward During the Pandemic"	Loyola Institute of Frontier Energy (LIFE), Loyola College  Chennai	20-May-2020.
Dr.A.Lakshmi	Chemistry	International Webinar	participated	Bioinformatic s in Microbiome Research & Climate, Biomes and India	PG Department of Chemistry (SSC)  St. Mary's College (Autonomous), Thoothukudi	17-May-2020.
Dr.A.Lakshmi	Chemistry	International E- Conference	participated	Strategies & Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to theWorld"	Government Vidarbha Institute of Science & Humanities,  Amravati,  India	15th - 17th May-2020.



Dr.A.Lakshmi	Chemistry	Webinar	participated	National Level “American College Chemistry” Webinar Series-I	Department of Chemistry  The American College, Madurai	15th & 16th May- 2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Application of ICT in Chemistry for Undergraduate s	Dept.of Chemistry, Stella Maris College (Autonomous)  Chennai	14-May- 2020
Dr.A.Lakshmi	Chemistry	Workshop	participated	Mental Health And Psychosocial Consideration During Lockdown	ST.Mary’s College (Autonomous)  Thoothukudi  In Association with Aadhi Foundation	13 <sup>th</sup> & 14 <sup>th</sup> May-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Selection of Appropriate Statistical Tools:A Critical Way For Successful Research	Research Advisory Committee  ST.Mary’s College (Autonomous)  Thoothukudi	12-May- 2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Psychological First Aid	Department of Psychology  St. Mary’s College (Autonomous), Thoothukudi	11-May- 2020

Dr.A.Lakshmi	Chemistry	Quiz	participated	Novel Covid-19 Pandemic General Awareness quiz	PG and Research Department of Chemistry The New College Chennai	06-May-2020
Dr.A.Lakshmi	Chemistry	Webinar	participated	Redefining Learning Spaces-Change Agent in Educational Ecosystem	Colombo Plan Staff college	06-May-2020
Dr.A.Lakshmi	Chemistry	Certificate Course	participated	Elemental Arts: Evolution of Modern Periodic Table	Department of Science and Humanities (Chemistry) Sri Krishna	1 <sup>st</sup> & 2 <sup>nd</sup> May, 2020
					College of Engineering and Technology Coimbatore	

### Papers Published

Paper Title	Author(s)	Journal	Year	Volume	Issue	Page No.
Synthesis of Metal Oxide Nanoparticles doped poly-3-Anisidine nanocomposites with enhanced Electrocatalytic Activity for methanol Oxidation	S.Shyamala, S.Kalaifarasi, M.Kanagavalli, P.Karpagavinayagam, C.Vedhi, R.R.Muthuchudarkodi, <b>A. Lakshmi</b>	Materials Today: Proceedings Accepted Manuscript	2021			
Enhanced Electrocoagulation of Basic Green 4 and Acid Yellow 23 using Graphene Oxide as Adsorbent	<b>A. Lakshmi</b>	Journal of Advanced Chemical Sciences,	2019	5	3	656-659

Electrocoagulation of Methylene Blue using Graphene Oxide as Adsorbent	<b>A. Lakshmi</b>	Journal of Environmental Science and Pollution Research,	2019	5	4	404-407
Electrochemical determination of the antidepressive drug, Nitrazepam using Poly(3,4-ethylenedioxythiophene) modified glassy carbon electrode	<b>A.Lakshmi</b> , IrudayaAntonat Sophia, C.Vedhi	International Journal of Recent Research Aspects ISSN: 2349-7688	April 2018		Special Issue: Conscious Computing Technologies	905-908
Microwave Synthesis and Characterization of Multiwalled Carbon Nanotubes (MWCNT) and Metal Oxide Doped MWCNT	<b>A. Lakshmi</b> , D. Lydia Gracelin, M. Vigneshwari, P. Karpagavinayagam, V. Veeraputhiran, C. Vedhi	Journal of Nanoscience and Technology	2015	1	1	19–22
Electroanalysis of Diazepam on nanosize conducting poly(3-methylthiophene) modified glassy carbon electrode,	<b>A.Lakshmi</b> , G.Gopu, S.Thanikaikarasan, T.Mahalingam , Peggy Alvarez, P.J.Sebastian , C.Vedhi	Journal of new materials for electrochemical systems (impact factor : 0.66)	2014	17	3	185-190
Electrochemical. Electrochromic behavior and effects of supporting electrolyte on nano thin film of poly (3,4-ethylenedioxy thiophene),	<b>A. Lakshmi</b> , Anandha Raj J.G. Gopu, P. Arumugam, C.Vedhi,	Electrochimica Acta, (impact factor 4.088)	2013	92		452-459

Synthesis and Characterization of Poly (3-hexylthiophene) and Used as Modified Electrode for Determination of Antidepressants in Pharmaceutical Formulations and Urine Samples	<b>A.Lakshmi</b> and C.Vedhi, J.	Electrochem, Soc, (impact factor 2.59)	2013	160	4	H252-H257
Synthesis characterization and capacitive behaviour of poly (3,4-ethylenedioxy thiophene)-Copper oxide nanocomposite,	<b>Augustine Lakshmi</b> , Athisayaraj Emi princess prasanna, chinnapiyanvedhi,	Advanced Materials Research	2013	678		273-277
Development of nano cobalt oxide thin film modified electrode for electrochemical studies of ascorbic acid	I. V. Surya, <b>A. Lakshmi</b> and C.Vedhi,	Outreach	(2010-2011)	4		45-48

### Papers in proceedings

Paper Title	Author(s)	Proceedings	Year	Page No.
A Study on Color Removal Efficiency of Acid Orange 52 Solution by Electrocoagulation	T. AntoTheresinal, V. Krishnaveni, T. Munieswari, M. Rizwana Fathima, C. Subbulakshmi, S. Supriya and <b>A. Lakshmi</b>	SMC SCIENCE UPDATES  ISBN CODE: 9789380430775	2021	101
Phytogenic Generation of cobalt oxide Nanoparticle using phyllanthusniruri Extract and Evaluation of their Antibacterial and Antioxidant Properties	J. Angel Selciya, M. Arumugalingammal, A. Maria Hannah, U. Sherly, M. Subhasree, V. Vimalcy and <b>A. Lakshmi</b>	SMC SCIENCE UPDATES  ISBN CODE: 9789380430775	2021	93
An analysis of Biological Oxygen Demand (BOD) of water samples collected from Thoothukudi District	M. Agnes Mary, J. Jebima, M. Josephin Preethi, N. Kethseeyal, A. Mary Iswarya, T. Munieshwari, G. Stella Angelin, S. Utchinimahali, V. Vimalcy, * <b>A.Lakshmi</b>	SMC SCIENCE UPDATES  ISBN CODE: 9789380430591	2021	110

### As Resource Person

Date	Name of the Institution	Invited As	Topic/Event
31.01.2024	TNSCST and St. Mary's College (Autonomous), Thoothukudi	Resource person	In-service Training Programme for Science Teachers on the topic "Applied Chemistry"
15.9.2017	District Institute of Education and Training (DIET), Thoothukudi	Resource person	One day training program for PG teachers on "Higher order thinking"
28.08.2017 - 01.09.2017	PG & Research Department of Zoology, St. Mary's College, Thoothukudi	Resource Person	'Inservice Training Programme for Secondary Grade Science Teachers' catalyzed and supported by TamilNadu State Council for Science and Technology, Chennai

### **Papers Presented Abroad**

Presented a paper entitled “Electrochemical determination of diazepam on nanosize conducting poly(3-octylthiophene) modified glassy carbon electrode” at 11<sup>th</sup> International Tamil Research Conference held at Kuala Lumpur, Malaysia from 21.7.2023 to 23.7.2023

### **Chair Person**

Served as chair person for a session at 11<sup>th</sup> International Tamil Research Conference held at Kuala Lumpur, Malaysia

### **Online Course:**

- Completed Online refresher course in Chemistry for Higher Education (ARPIT) organised by Ministry of Human Resource Development during November 2018 to March 2019.
- Completed online course “Organic Solar Cells”- Theory and Practice” authourised by Technical University of Denmark through massive open online course (MOOC).

### **Others:**

- Completed **NEP 2020 Orientation & Sensitization Programme** under Malaviya Mission Teacher Training Programme (MM-TTP) of UGC, Organized by UGC-Malaviya Mission Teacher Training Centre (UGC-MMTTC), Bharathidasan University, Tiruchirappalli from 1.7.2024 to 10.7.2024
- Completed a Refresher Course in Chemistry organized by Ramanujam College, Delhi. from 29<sup>th</sup> November to 13<sup>th</sup> December 2022
- Attended UGC sponsored UGC sponsored Refresher Course in Chemistry organized by UGC Human Resource Development Centre, Gujarat University, Ahmedabad from 21.6.2022 to 4.7.2022.
- Attended UGC sponsored 107<sup>th</sup> Orientation Programme (Batch -I) organized by UGC Human Resource Development Centre, Bharathidasan University, Tiruchirapalli from 12.11. 2019 to 2.12.2019.
- Successfully completed a UGC Minor research project [MRP-6421/16 (SERO/UGC)] entitled “Treatment of dye effluents by electrocoagulation using nanoparticle as adsorbent” of Rs 2,75,000for the year 2017-2019
- Editor-in-chief of Journal of Advanced Electrochemistry.

### **Positions held:**

- Member in sports Club
- Member in Women Rights forum
- Member in PTA
- Member in discipline committee
- Member in IQAC
- Member in Scribes forum
- Coordinator for I year Certificate course

- Member in Research Advisory Committee
- Member in College Website Committee
- Assistant Controller of Examination (2023-2024)
- NSS Programme officer (2024-2025)
- ERP Incharge (2025-2026)