



Name: Dr.P. Gayathri

Qualification: M.Sc., M.Phil., Ph.D

Designation: Assistant Professor

Years of Experience: UG: 1 year 5 months PG: 1 year 5 months

Previous Experience: UG: 06 months PG: 0, PDF: 4.8

Area of Specialization: Physical chemistry, Electrochemistry

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PROJECTS

S.no.	Title	Duration	Funding agency	Amount sanctioned (in lakhs)
1	Designing biomimetic based disposable biosensor for clinical applications	Three years (December 2018-September 2021)	UGC-DSKPDF Scheme (Anna University)	24,60,000/-
2	Electroorganic Modifications of Graphene into Redox-mediator-cum-Substrate to Immobilize Glucose Oxidase / Cholesterol Oxidase for Biosensor Applications	Two years (June 2016-June 2018)	DST-SERB NPDF Scheme (IIT Madras)	19,20,000/-

CONFERENCES ATTENDED / PRESENTED PAPER

S.no.	Organized by	State/National/International	Participated/ Presented	Title	Date(s)
1*	Pachaiyappas college, Chennai	International	Presented	Copper(II).benzotriazole framework built on carbon nanotube by π - π interaction for electrochemical sensing Applications	February 02-03, 2018
2	IIT-Madras, Chennai	National	Presented	Redox Active Cobalt-Bipyridine Metal work-Nafion Coated Carbon Nanotubes for Sensing Ascorbic Acid	August 17 th , 2017
3	ISAEST-11, Chennai	International	Presented	Electrochemical preparation of copper benzotriazole complex on MWCNT chemically modified electrode and its application to H ₂ O ₂ sensing	December 08-10, 2016
4	ISAEST-10, Chennai	International	Presented	Simultaneous electrochemical detection of ascorbic acid and uric acid in the physiological pH on preanodized glassy carbon electrode	January 28-30, 2013
5	VIT University, Vellore	International	Presented	MWCNT-Chitosan composite chemically modified electrode as an electrochemical detector for highly	December 5-7, 2013

				selective flow injection analysis of H ₂ O ₂	
6	VIT University, Vellore	International	Presented	A Preanodized Glassy Carbon Electrode for the Simultaneous Electrochemical Detection of Ascorbic acid and Uric acid in the Physiological pH	February 20-22, 2012
7	VIT University, Vellore	International	Presented	Addordable and quick sensor for blood-hemoglobin	November 26 th , 2012

JOURNAL PUBLICATIONS

S.NO.	JOURNAL NAME	UGC /SCI/SCIE/ WOS	ISBN / ISSN NUMBER	REFERENCE	DATE OF PUBLICATION/D OI
1	Polycyclic Aromatic Compounds	Scopus/SCI	1040-6638(Web)	Investigation on the Role of Molecular Planarity and Conjugation Effects on Physicochemical Properties of Anthracene and Pyrene Appended <i>meso</i> -5,15-Bis(Thien-2-yl)-10,20-Diphenylporphyrin Triads	30November https://doi.org/10.1080/10406638.2022.2149566
1	New Journal of Chemistry	Scopus/SCI	1369-9261 (web)	Oxygen sensitive 1-amino-2-naphthol immobilized functionalized-carbon nanotube electrode	30 April 2020/doi.org/10.1039/D0NJ00438C
2	The Journal of Physical Chemistry C	Scopus/SCI	1932-7455 (web)	Regioselective Electrochemical Oxidation of One of the Identical Benzene Rings of Carbazole to 1,4-Quinone on the MWCNT Surface and Its Electrocatalytic Activity	24 November 2019/doi.org/10.1021/acs.jpcc.9b07486
3	The Journal of the Electrochemical Society	Scopus/SCI	1945-7111 (web)	Redox Active Cobalt-Bipyridine Metal work-Nafion Coated Carbon Nanotubes for Sensing Ascorbic Acid	29 September 2018 /doi.org/10.1149/2.0661813jes
4	The Journal of the Electrochemical Society	Scopus/SCI	1945-7111 (web)	Aquotriss(benzotriazole)sulfatocopper(II) benzotriazole framework assembled on multiwalled carbon nanotubes through π - π interaction for H ₂ O ₂ sensing in ph 7 buffer Solution	20 September 2017/doi.org/10.1149/2.0011713jes
5	ChemElectroChem	Scopus/SCI	2196-0216	Redox-active copper-benzotriazole stacked multiwalled carbon nanotubes for the oxygen reduction reaction	14 June 2018/doi.org/10.1002/celc.201800754
6	The Journal of Physical Chemistry C	Scopus/SCI	1932-7455 (web)	An unusual electrochemical reductive cleavage of azodye into highly redox active	17 March 2015/doi.org/10.1021/acs.jpcc.5b00612

				copolymeric aniline derivatives on a MWCNT modified electrode surface in neutral pH and its electro-analytical features	
7	Langmuir	Scopus/SCI	1520-5827 (web)	Electrochemical behaviour of 1,10 Phenanthroline ligand on MWCNT surface and its relevant electrochemistry for selective recognition of copper ion and hydrogen peroxide sensing	13 August 2014/doi.org/10.1021/la502651w
8	Chemistry—A European Journal	Scopus/SCI	1521-3765	An iron impurity in multiwalled carbon nanotube complexes with chitosan that biomimics the heme-peroxidase function	06 November 2013/doi.org/10.1002/chem.201303075
9	The Journal of Physical Chemistry C	Scopus/SCI	1932-7455 (web)	Improved electric wiring of hemoglobin with impure-multiwalled carbon nanotube/nafion modified glassy carbon electrode and its highly selective hydrogen peroxide biosensing	October 17, 2012/doi.org/10.1021/jp3064933
10	The Journal of Electroanalytical Chemistry	Scopus/SCI	1572-6657	Selective covalent immobilization of catechol on activated carbon electrodes	22 December 2009/doi.org/10.1016/j.jelechem.2009.12.016

WEBINARS [National/International]

S.no.	Organized by	State/National/International	Topic	Date(s)
1	Easwari Engineering College	National	Chemistry in Everyday Life	May 23 rd , 2020

FDP/STTP

S.no.	Organized by	State/National/International	Topic	Date(s)
1.	Teaching Learning Centre, Ramanujan College, University of Delhi	National	Teaching Learning Methods	08/02/2023 to 14/02/2023

OTHERS:

Book Chapter:

In Handbook of Functional Nanomaterials. Volume 3 - Application and Development, (Ed. M. Aliofkhaezai), Chapter 15. Organic Redox Mediators Functionalized CNT Chemically-Modified Electrodes for Electrochemical Applications, Nova Science Publishers Inc., USA (2013) (pp 377-392). ISBN: 978-1-62948-566-9