

## CURRICULUM VITAE

**Dr. G. KALAIYAN, M.Sc., B.Ed., M.Phil., Ph.D.**

**Assistant Professor**

**PG & Research Department of Physics**

**Sri Vidya Mandir Arts & Science College (Autonomous)**

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### **Educational Qualification (From degree onwards)**

<b>S.No</b>	<b>Institutions Studied</b>	<b>Years of Study</b>	<b>Degree or Diploma</b>	<b>Month &amp; year of passing</b>	<b>Class with percentage of marks</b>
1	Arignar Anna Govt Arts College, Namakkal	2004 - 2007	B.Sc	April 2007	First Class, 67.54%
2	Sengunthar College of Education, Tharamangalam	2007-2008	B.Ed	November 2008	Second Class, 59 %
3	Govt Arts College, Dharmapuri	2008-2010	M.Sc	August 2010	First Class, 72.66%
4	Nehru Memorial College (Autonomous), Puthanampatti	20011- 2013	M.Phil	August 2013	First Class with Distinction, 81.7%
5	Sri Vidya Mandir Arts&Science College, Ktteri	2017-2022	Ph.D	January 2022	Highly Commended

**Details of Collegiate teaching experience gained:**

Name of the College / Institution	Designation	Period		Y	M	D
		From	To			
P.M.P Arts and Science College, Thokkampatti, Dharmapuri.	Assistant Professor	14. 06. 2010	31. 03. 2016	05	09	17
Sri Vidya Mandir Arts and Science College (Autonomous), Katteri, Uthangarai.	Assistant Professor	15. 06. 2016	Till Date	08	09	14
Total				14	09	00

**Research Interests**

- Nanomaterials and Thin Films

**Student Projects guided in PG level & Ph.D:**

- M.Sc (Physics) : Completed- 12 & Ongoing -2
- Ph.D (Physics) : Completed- Nil

**Research Publications**

International Journal Publications	:	<b>06</b>
Conference Proceedings	:	<b>01</b> (AIP Proceedings)
National Seminars/Symposium organized	:	<b>08</b>
Citations for the Journal Publications	:	<b>191</b>
h-Index	:	<b>05</b>
i10-Index	:	<b>05</b>

### **Publications in International Peer Reviewed Journals**

S.No	Name of the Authors	Title of Paper	Name of the Journal	Month and Year of Publication	ISSN.No	Link to the notification in UGC enlistment of the journal
1	<b>G Kalaiyan,</b> Niraj S Topare, Surajudeen Sikiru, S Thambidurai, M Kandasamy, N Pugazhenthiran, C Santhi, P Rameshkumar, S Suresh	Green synthesis of copper oxide nanoparticles using <i>Euphorbia heterophylla</i> leaf extract for deactivation of pathogenic bacteria and photocatalytic degradation of industrial dyes	Results in Engineering	April - 2025	2590-1230	<a href="https://doi.org/10.1016/j.rineng.2025.104797">https://doi.org/10.1016/j.rineng.2025.104797</a>
2	<b>G Kalaiyan,</b> KM Prabu, N Suresh, S Suresh	Green synthesis of copper oxide spindle like nanostructure using Hibiscus cannabinus flower extract for antibacterial and anticancer activity applications	Results in Chemistry	January - 2023	2211-7156	<a href="https://doi.org/10.1016/j.recchem.2023.100840">https://doi.org/10.1016/j.recchem.2023.100840</a>
3	<b>G. Kalaiyan,</b> S. Suresh, K.M. Prabu, S.Thambidurai, M. Kandasamy, N.Pugazhenthiran, S. Karthick Kumar, T. Muneeswaran	Bactericidal activity of Moringa oleifera leaf extract assisted green synthesis of hierarchical copper oxide microspheres against pathogenic bacterial strains	Journal of Environmental Chemical Engineering	February - 2021	2213-3437	<a href="https://doi.org/10.1016/j.jece.2020.104847">https://doi.org/10.1016/j.jece.2020.104847</a>

4	<b>G. Kalaiyan,</b> K.M. Prabu, S. Suresh, N. Suresh	Green synthesis of CuO nanostructures with bactericidal activities using Simarouba glauca leaf extract	Chemical Physics Letters	December - 2020	0009- 2614	<a href="https://doi.org/10.1016/j.cpl.2020.138062">https://doi.org/10.1016/j.cpl.2020.138062</a>
5	<b>G Kalaiyan,</b> S Suresh, S Thambidurai, KM Prabu, S Karthick Kumar, N Pugazhenthiran, M Kandasamy	Green synthesis of hierarchical copper oxide microleaf bundles using Hibiscus cannabinus leaf extract for antibacterial application	Journal of Molecular Structure	February - 2020	0022- 2860	<a href="https://doi.org/10.1016/j.molstruc.2020.128379">https://doi.org/10.1016/j.molstruc.2020.128379</a>
6	S Suresh, R Ilakiya, <b>G Kalaiyan,</b> S Thambidurai, P Kannan, KM Prabu, N Suresh, R Jothilakshmi, S KarthickKumar, M Kandasamy	Green Synthesis of Copper Oxide Nanostructures using Cynodon dactylon and Cyperus rotundus Grass Extracts for Antibacterial Applications	Ceramics International	June- 2020	0272- 8842	<a href="https://doi.org/10.1016/j.ceramint.2020.02.015">https://doi.org/10.1016/j.ceramint.2020.02.015</a>
7	KM Prabu, P Arachimani, M Anand Sagaya Chinnarani, <b>G Kalaiyan,</b> S Suresh	Molecular structure, vibrational, non- linear optical and natural bond orbital analysis of 7- amino-4- methylcoumarin: A quantum chemical study	AIP Conference Proceedings	December - 2019	-	<a href="https://doi.org/10.1063/1.5135246">https://doi.org/10.1063/1.5135246</a>

**Details of Orientation Course / Refresher Course / FDP Attended**

<b>S.No</b>	<b>Title of the Orientation Course/Refresher Course/FDP</b>	<b>Organized by</b>	<b>Dates</b>
<b>1</b>	3rd International Faculty Development Programme (FDP) on Advanced Functional Materials: Energy, Environment and Sustainable Development - 2025	Department of Physics, in association with the Department of Mechanical Engineering, SRM TRP Engineering College Tiruchirappalli – 621105	28 <sup>th</sup> February – 06 <sup>th</sup> March 2025
<b>2</b>	Refresher Course on Academic Leadership, Governance and Management (IDC)	Centre for Professional Development in Higher Education (CPDHE) UGC - Malaviya Mission Teacher Training Centre (MMTTC) University of Delhi Delhi - 110 007	15 <sup>th</sup> October 2024 – 28 <sup>th</sup> October 2024
<b>3</b>	Six Days Faculty Development Programme on Recent Advances, Trends, and Challenges in Nanomaterials Characterization and Techniques (RCINMCT-2024)	Department of Physics, Koneru Lakshmaiah Education Foundation, Guntur - 522302	9 <sup>th</sup> September 2024 – 14 <sup>th</sup> September 2024
<b>4</b>	Five Days Faculty Development Programme on “Recent Trends of Advanced Functional Materials”	Department of Physics, Velammal College of Engineering, Madurai – 625009.	25 <sup>th</sup> – 28 <sup>th</sup> March 2024 & 01 <sup>st</sup> April 2024
<b>5</b>	Five Days Faculty Development Programme on Advanced Materials for Energy Applications	Sathyabama Institute of Science and Technology, Chennai	9 <sup>th</sup> October 2023 – 13 <sup>th</sup> October 2023
<b>6</b>	“NAAC Accreditation Framework”	Guru Shree Shantivijai Jain College for Women, Chennai- 600007.	9 <sup>th</sup> September 2023 – 16 <sup>th</sup> September 2023
<b>7</b>	“An Online Faculty Development Programme On Astronomical Studies”	DBT Star College Scheme jointly organized by Post Graduate and Research Department of Physics and Chiguru CoLab, Bangalore & Jamal Mohamed College (Autonomous), Tiruchirappalli-	07 <sup>th</sup> February 2022 - 08 <sup>th</sup> February 2022

		620020	
8	“Two Day Online Faculty Development Programme On Condensed Matter Physics”	Jamal Mohamed College (Autonomous), Tiruchirappalli– 620020 in collaboration with Indian SpectroPhysics Association (ISPA-Chennai)	24 <sup>th</sup> January 2022 - 25 <sup>th</sup> January 2022

### Papers Presented in Conferences / Symposia / Seminars / Workshops

S.No	Title of the Presentation	Name of the event	Organized by	Date
1	Green synthesis of Copper Oxide nanostructures using Cuminum Cyminum extract	National Conference on “Recent Innovations in Nanomaterials for Environmental and Biomedical Applications (RINEBA – 2025)”	PG & Research Department of Physics, Sri Pushpam College (Autonomous), Poondi.	17-18 Feb 2025
2	Green synthesis of Mn-doped ZnO nanostructures using Hibiscus cannabinus leaf extract	One Day National Conference on Advancement in Nano Energy Storage Devices and Astronuclear Reactions (ANESDAR-2024)	Department of Physics, Adhiyaman Arts & Science College for Women, Uthangarai.	30 Aug 2024
3	Bio synthesis of Copper Oxide nanoparticles using Citrus Sinensis extract	”International Conference On Research In Emerging Advanced Materials And Spectroscopy (ICREAMS - 2024)”	PG and Research Department of Physics, Sri Vidya Mandir Arts & Science College (Autonomous), Katteri - 636902, Uthangarai.	21-22 Feb 2024
4	Green synthesis of Zinc Oxide nanostructures using Hibiscus cannabinus leaf extract	“National Conference on Material Synthesis and Environmental Sustainability (NCMSES-2023)”	PG and Research Department of Physics, Sacred Heart College (Autonomous) Tirupattur-635601	26 Sep 2023

5	Green synthesis of Zinc Oxide nanoparticles using Cynodon dactylon grass extract	“One day International Virtual Conference on Material Science and Nanotechnology (ICMSN-2023)”	Department of Physics, St. Joseph College of Arts and Science for Women, Pagalpatty, Salem.	28 Feb 2023
6	Bio Synthesis of Zinc Oxide Nanoparticles Using Euphorbia heterophylla leaf extract	“National conference on Advances in Material Research” (NCAMR) - 2022	PG and Research Department of Physics, Sacred Heart College (Autonomous) Tirupattur-635601	30 Sep 2022
7	Green synthesis of CuO nanoparticles with bactericidal activities using Filamentous algae extract	International Virtual Conference entitled “Physics of Emerging Materials and Molecules (IVCPMM – 2021)”	PG & Research Department of Physics, Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai.	04-05 Mar 2021
8	Green synthesis of Copper Oxide nanoparticles using Simarouba Glauca leaf extract and their antibacterial activity	Two Day International Conference on Innovations in Physical Sciences, Information Technology and Social Sciences (IC – IPIS2020)	PG & Research Department of Physics, Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai.	14-15 Feb 2020
9	Green Synthesis of Silver nanoparticles using Euphorbia heterophylla leaf extract	Two Day International Conference on ‘Recent Applications in Advanced Materials (IC-RAAM 2019)’	Department of Physics & Chemistry, E.R.K Arts & Science College, Erumiyampatti.	11-12 Jul 2019
10	Green Synthesis of Silver nanoparticles using Euphorbia Hirta leaf extract	National Conference on ‘Recent Advance Materials & Mathematical Analysis 2019’	Sri Balamurugan Arts & Science College, Sathappadi.	06-08 Feb 2019
11	Study of Geometric, Electronic Spectral and NLO properties of grandis sensitizer for solar cell applications	CSIR One Day National Conference on ‘ Bioenergy, Environment and Sustainable Technologies-A Future Approach’	Velalar college engineering and technology (Autonomous), Erode.	16 Mar 2017
12	Study of geometrical, electronic spectral and NLO properties of massileo quadlifolia linn sensitizer for solar cell application	National symposium on Recent advances in Nanoscience And Nanotechnology (NSRANN 2017)	Periyar University, Salem.	15 Mar 2017

**Participated in Conferences / Symposia / Seminars / Workshops / Webinars**

S.No	Name of the Event	Organized by	Date	Year
1	"Two-Day National Symposium on Materials Innovation and Leading Exploration (NSMILE-2024)"	Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai.	27 & 28, December	2024
2	“International Seminar on Advanced Materials for Sustainable Development for Energy Applications”	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	09 <sup>th</sup> November	2024
3	“Workshop on Quantum Mechanical Calculations through Computational Techniques”	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	27 <sup>th</sup> July	2024
4	“National Symposium on Futuristic green Technology”	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	23 <sup>rd</sup> July	2024
5	International Webinar on “Metal Organic Framework Derived Nanomaterials for High Performance Supercapacitors”	Department of Physics, GASCW, Barugur.	19 <sup>th</sup> September	2023
6	National Webinar on “Experimental Techniques for the Fabrication & Characterization of Metal Oxide Thinfilms for the various Applications”	PG & Research Department of Physics, Muthurangam Govt. Arts College (A), Vellore.	28 <sup>th</sup> February	2022
7	Webinar on “Indian Science Technology And Engineering Facilities Map (ISTEM): A Multidimensional Gateway To Researchers/ Faculties/	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	24 <sup>th</sup> February	2022



	Scientists			
8	“Role Of IQAC In Self Financing Colleges”	GSS Jain College For Women, Vepery, Chennai	13 <sup>th</sup> November	2021
9	2nd International Webinar 4f-3d Magnetic Interactions in Rare-Earth Ferrite Oxide (RFeO <sub>3</sub> ) Single Crystals	PG & Research Department of Physics, Muthurangam Govt. Arts College (A), Vellore.	07 <sup>th</sup> October	2021
10	“Symposium on Recent Advances in Smart Sensors”	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	26 <sup>th</sup> August	2021
11	A One Day Webinar On “Revised NAAC Criteria: A Glance”	Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai.	10 <sup>th</sup> April	2021
12	One Day National Level Seminar on "Challenges in Revised NAAC Assessment and Accreditation Framework"	Marudhar Kesari Jain College For Women, Vaniyambadi.	13 <sup>th</sup> February	2021
13	International Webinar on Role of Nanoscience in Healthcare Materials	Government Arts College (Autonomous), Salem	22 <sup>nd</sup> June	2020
14	International Webinar on “Development of Ultra High Temperature Materials for Hypersonic Applications”	SRM Institute of Science and Technology, Ramapuram Campus, Chennai.	23 <sup>rd</sup> July	2020
15	National Webinar on Sensor Materials and Applications	B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai.	26 <sup>th</sup> July	2020
16	National Seminar on Emerging Technologies in Material Science	NKR Government Arts college for Women, Namakkal.	22 <sup>nd</sup> February	2020
17	Workshop for Research Scholars	Periyar University, Salem.	28 <sup>th</sup> November	2019
18	National workshop on Recent Advances In Material Science and Biological Sciences	Adhiyaman Arts & Science College for Women, Uthangarai.	10-12 <sup>th</sup> July	2019

19	International Conference on Material Science and technology”(ICMAST-2017)	Pachamuthu College of arts & science for women, Dharmapuri.	28-29 <sup>th</sup> August	2017
20	One Day International Seminar on Materials Science and technology”(ISMST-2017)	Mother Teresa Women’s University,Kodaikanal.	4 <sup>th</sup> August	2017
21	Science Academies Lecture Workshop on Recent Trends in Applied Physics for Technology ”(SALWRTAPT)	Sri vidya Mandir Arts and Science College, Uthangarai.	21-22 July	2017
22	National Level Workshop on Advanced Materials-2017(NLWAM-2017)	Periyar University PG Extension Centre, Dharmapuri.	23 <sup>rd</sup> February	2017
23	International Conference on Modern Materials Research 2016(ICMMR 2016)	Sri vidya Mandir Arts and Science College, Uthangarai.	19-20 December	2016
24	National Conference on Systematic Investigations of Structural, Morphological and Optical properties of Materials	Sacred Heart College(Autonomous), Tirupattur, Vellore.	01 <sup>st</sup> December	2016
25	One Day National Level Seminar on Green Chemistry In Organic Synthesis (GCOS 2016)	N.K.R College for Women, Namakkal	28 <sup>th</sup> September	2016

#### List of Conferences / Workshops Organized with Internal Funding Agencies

S.No	Title of the Program	Sponsored/collaboration	Date, Month and Year	Nature of the Work
1	National Symposium on Materials Innovation and Leading Exploration	Collaboration with Indian Spectro Physics Association, Chennai.	27 & 28 December 2024	Member
2	International Conference on Research in Emerging Advanced Materials and	Collaboration with Indian Spectro Physics Association, Chennai.	21 & 22 February 2024	Member

	Spectroscopy (ICREAMS 2024)			
3	International Virtual Conference on Physics of Emerging Materials and Molecules (IVCPPEMM 2021)	Collaboration with Indian Spectro Physics Association, Chennai.	04 & 05 March 2021	Member
4	International workshop on Recent Advances in Material Science	Sri Vidya Mandir Arts & Science College, Katteri, Uthangarai, Krishnagiri(D.T), Tamilnadu.	14 February 2019	Member
5	International Conference on Modern Materials & Research 2016 (ICMMR 2016)	Collaboration with Indian SpectroPhysics Association, Chennai.	19 & 20 December 2016	Member

### Awards

Sl. No.	Title of the Award	Organization Confer the Award	Purpose	Year
1	Best Teacher Award	Sri Vidya Mandir Arts & Science College, Katteri, Uthangarai, Krishnagiri(D.T), Tamilnadu.	Academic	2023

## **PERSONAL DETAILS**

Name : **Dr. G. KALAIYAN**

Date of Birth : 10.05.1987

Gender : Male

Nationality : Indian

Marital Status : Married

Languages Known : English and Tamil

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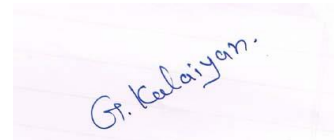
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## **DECLARATION**

I hereby declared that all the above information provided by me is true to the best of my knowledge.

**Date:** 29.03.2025

**Place:** Katteri



**(G. KALAIYAN)**