Teachers Profile

Name	:	Dr. RAJESH K. M.
Position (Permanent/Guest-Fulltime/Parttime):		Professor – Permanent full time
Department and College	:	Post Graduate and Research department of Chemistry, Sree Narayana College, Nattika 680566
Address (Temporary & permanent including-contact no. both land phone and mobile)	:	

Permanent	Temporary
Kattiparambil - House, Mamangalam, PMRA-59 Palarivattom P. O. Cochin - 682025, Kerala. 9400735529, 9388642404,	Ambady, Kottayil Road, Kunnamkulam P. O. Thrissur - 680503.

Email id	:	rajeshkmamangalam@gmail.com
Religion	:	Hindu
Caste	:	Ezhava
Category	:	OBC
Date of joining to the present institution	:	01/07/2022(AN)
Date of joining to the service and order no	:	01/07/2010:
Qualifications	:	Ph D, M.Sc, UGC-NET

Course	Board/University	Month &Year of passed	% of mark and grade	Remarks
PhD	Cochin University of Science and Technology	January/2012		
NET	UGC	June /2004		
M.Sc-Chemistry	M.G. University	June/2002	67.5: I class	
B.Sc – Chemistry	M.G. University	May/2000	80.2: I class	
PDC	M.G.University	May/1997	73.4: I class	
SSLC	Board of Public Examination, Kerala state	May/1995	64.8: I class	

Additional Qualification (if any) : 1. Diploma in software application

2. Diploma in Yoga

Details of teaching experience

Name of institution	Date of Joining	Date of Relieving	Experience		Remarks
			UG	PG	
SN College, Nattika	01/07/2022(AN)		4	4	Order No. 2/SNT/3779 dated 17/06/2022. A1/447/2022 dated 01/07/2022
SN College, Alathur	25/06/19	01/07/2022(FN)	3		Order No. 2/SNT/3779 dated 17/06/2022: A1/447/2022 dated01/07/2022.
MPMM SNT College, Shoranur	10/06/14	17/06/19	5	0	General transfer: 2/SNT/2296 dated 04/06/19: 2(a)/27/2019 dated 17/06/19
SN College, Kannur	01/07/14	09/06/14	4	4	2/SNT/387 dated 03/06/14; G1/2(a)/626/2014 dated 09/06/14
TKMM College, Nangiarkulangara	02/08/05	30/03/07	1 Y & 8 M		Complete of FIP substitute period
Total (as on 30/06/2026)			16Y & 8 M	8 Y	

Promotion Details

From	To	Date	University Order
Assistant Professor Level 10	**Assistant Professor Level 11**	**01/07/2010 to 30/06/2014**	**U.O. No. 1151/2020/Admn dated Calicut University P O, 28.01.2020**
Assistant Professor Level 11	**Assistant Professor Level 12**	**01/07/2014 to 30/06/2019**	**U.O. No. 19002/2022/Admn dated Calicut University P O, 07.10.2022**
Assistant Professor Level 12	**Associate Professor Level 13 A**	**01/07/2019 to 30/06/2022**	**U.O. No. 10274/2024/Admn dated Calicut University P.O. 28/06/2024.**
Associate Professor Level 13 A	**Professor Level 14**	**01/07/2022 to 30/06/2025**	**U.O. No. 4821/2026/Admn dated Calicut University P.O. 18/03/2026**

Research Guideship: U.O.No. 20961/2022/Admn dated Calicut UniversityP.O., 04.11.2022

Papers published in journals

2026-27	
Synthesis of undoped and A-site lutetium donor–doped barium strontium titanate by the sol-gel method for wastewater remediation and tunable energy storage capacitor applications ., K. Sreelakshmi · S. Laxmi Priya · K. M. Rajesh · N. Manoj · Pearl Augustine · Manoj Parameswaran, Journal of Nanoparticle Reserach , J Nanopart Res (2026) 28:254 https://doi.org/10.1007/s11051-026-06766-z. Page no 1-21	
2025-26	
1	**Enhancement of Visible Light Activity of Titanium Dioxide via Banana Peel Bio-Waste Modification for Photocatalytic and Antibacterial Applications. *Rajesh K M*, Arsha C A, Anju C G, Ansalna P A, Laxmi Priya S, Sreelakshmi K. Open Nano Research Journal(2352-9520) || Volume 28 (March-April) 2026 || www.opennano.life**
	Photocatalytic and Antibacterial Study of Zinc Oxide/Biochar Nanocomposite in Visible Region: Synthesis and Characterisation Rajesh K M1*, Devanandha M B, Hena C H, Laxmi Priya S, Manoj N, Sreelakshmi K. Journal on Communications(1000-436X) || Volume 21 Issue 3 2026 || www.jocs.review
	Oxidation of Cyclohexene with H2O2 Catalyzed by an Oxovanadium (IV) Quinoxaline Schiff Base Complex. Vasudevan Arun and Kattiparambil Manoharan Rajesh. Current Catalysis, 2025, 14, e22115447353192. P No: 91-100
2024-25	
1	**“Plant Extract as Green Synthesis Agent for Silver Nanoparticle Synthesis and Evaluation of Their Antibacterial Activity”. Rajesh K. M., Bhagyalakshmy M. , Lakshmi K. P. , Malavika K. M. , Nandhana M. P. , Laxmi Priya S. International Journal of Advanced Multidisciplinary Application | IJAMA Volume 2 Issue 3 March 2025 ISSN No: 3048-9350 . Page 1-8**
2	**“Exploring the Association Between Heavy Metal Exposure and**

	Neurodevelopmental Disorders in Children" . Dr. Ankita Bhushan1*, Dr. Sanket Patel, Dr. Apurva Patel, Dr. Jyoti Judah, Rajesh K M, Dr. Salam Himika Devi. African Journal of Biomedical research(Afr. J. Biomed. Res.) Vol. 28(2s) (February 2025); ISSN 1119-5096. 1009-1016 .
3	**Combination of Sonochemical Synthesis and Calcination of Graphene-TiO2 Nanocomposite for Efficient Photocatalytic Degradation of Methyl Orange Dye", S. LAXMI PRIYA, N. MANOJ, K. LEON PRASANTH, E. NISSAM, S. SUGUNAN and K.M. RAJESH.Asian Journal of Chemistry; Vol. 36, No. 8 (2024), 1927-1932. https://doi.org/10.14233/ajchem.2024.31449**
	2023-24
1	**"Synthesis and Characterization of Crystalline Graphene-Titania Nanocomposites as Efficient Photocatalysts for Pollution Control", K.M. RAJESH1, S. LAXMI PRIYA, S. RIJITH2, K. JITHESH3, V. ARUN and S. SUGUNAN, Asian Journal of Chemistry; Vol. 35, No. 11 (2023), 2651-2658, https://doi.org/10.14233/ajchem.2023.28407**
2018-19	
1	**"Photocatalytic degradation of organic pollutant aldicarb by non-metal-doped nano titania:Synthesis and Characterization". Rajesh Kattiparambil Manoharan, Sugunan Sankaran. Environ Sci Pollut Res (2018) 25:20510–20517. DOI 10.1007/s11356-017-0350-2**
2.	**"Synthesis, Characterisation of N doped and N-S co-doped nano-titania and its Photocatalytic activity on Degradation of 2,4-Dichlorophenoxyacetic acid (2,4 D)". Laxmi Priya S ., Sugunan S ., Rajesh K. M.* International Journal of Research in Engineering and Applied Sciences(IJREAS). Available online at http://euroasiapub.org Vol. 8 Issue 12, December-2018, ISSN (O): 2249-3905, ISSN(P): 2349-6525 | Impact Factor: 7.196 |**
2015-16	
1	**Photocatalytic Degradation of 2,4-Dichlorophenoxyacetic acid and 2,4,5-Trichlorophenoxyacetic acid by Visible Light Responsive N,S Co-doped titania. Rajesh K. M., Laxmi Priya S., Sugunan S., Sasidharan T. A. International**

	Journal for Advanced Research in Science and Technology (IJARST). (https://ijarst.in/). Volume 06, Issue 02, Feb 2016. ISSN 2457-0362. 87-90. IF-6.42
2	**Photocatalytic Water splitting by Modified titania for Hydrogen Production using Visible light Irradation" K. M. Rajesh, M.R. Pai, S. Laxmi Priya, S. Sugunan, Indian Journal of Research, vol 4, issue 11, 2015. ISSN: 2250-1991**
3	**"Photochemical Investigation of the antibacterial activity of essential oils of Prem na latifolia and Lantana camara" S. Laxmi Priya, E.A. Jose, K. M. Rajesh, International Journal of Chromatorgaphy, Photon 113(2015) 130-139. ISJN:5319-4847**
2014-15	
	"Synthesis and Characterisation of N and NS co-doped nanot titania photocatalyst and its anti-bacterial study of Escherichia coli", Rajesh K. M., Hari Sankar H.S., Anitha P. K.,Laxmi priya S., Sugunan S., Indian Journal of Applied Research, Vol 4, Issue 12, 2014. ISSN: 2249-555X.
2012-13	
	Effect of mechanical stirring on the preparation of high visible light active N S co-doped nano tiania" Rajesh K. M & Sugunan S, IOSR journal of applied Chemistry vol 2, issue 2, October 2012.

Papers presented in seminars (oral/Poster):

2025-26	
"PHOTOCATALYTIC DEGRADATION OF CATIONAIC DYE -CRYSTAL VIOLET FROM AQUEOUS SOLUTION USING ZnO"(oral-online), in the two day national seminar on "Recent Trends in Material Science and Allied Arrears (RTMS 2025)held on 12-13 February 2025 at MPMM SNT College Shoranur, organised by the Department of Chemistry MPMM SNT College shoranur in association with Kerala State Higher Education Council.	
2023-24	
"Synthesis of nano crystalline non-metal doped titania with high photocatalytic activity on dye degradation" (poster) in the three day International conference on Advanced Research, INSIGHT 2024-Beyond the sunset: Rising Knowledge Landscape held on 07-09 February, 2024 at MES Keveeyam College,Valanchery, Malappuram, Kerala organised by IQAC of MES College Valanchery in association with Kerala State Higher Education Council Thrivandrum.	
2019-20	
1	**Chaired the session of Dr. Binitha N N (Assistant Professor SNGS College, Pattambi) presented a paper titled as "Titania-Graphene Nano Composite for pollutant Abatement" in one day national seminar on "Emerging trends in materials science", organised by department of Chemistry MPMM SN Trusts College, Shoranur on 20 February 2020.**
2	**"High Sunlight active titania-graphene nano composite photocatalyst" in Directorate of Collegiate Education (DCE), Govt. of Kerala sponsored two day national seminar on "Recent Trends in Materials Science (NSRTMS-2019)" organised by Department of Chemistry Government College, Chittur, Palakkad on on 5-6 December 2019**
3	**"Photocatalysis by Titania" in Directorate of Collegiate Education (DCE), Govt. of Kerala sponsored two day national seminar on "Emerging Frontiers in Materials Chemistry (EFMC-2019) organised by Department of Chemistry B. J. M. Government College, Chavara, Kerala on 28-29 November 2019**

2016-17	
1	**“Photocatalytic degradation of Malachite green by modified titania” (Poster) in Society for Material Chemistry BARC and KSCSTE sponsored National Symposium on “The innovative trends in chemical education and research: Hurdles and successive progress –(ITCER-2017) organized by Post graduate and research department of chemistry Sree Narayana Colege Kollam at Sree Narayana College Kollam on 22-24 March 2017**
2	**Photocatalytic activity of titania doped with nitrogen: synthesis and characterization (poster) – UGC, DST, KSCSTE sponsored National seminar on Current Trends in Chemistry CTric 2017 organised by department of Applied Chemistry, CUSAT on 3-4 February 2017**
3	**Photocatalytic degradation of pollutants by modified titania” (Oral) in Directorate of Collegiate Education (DCE) sponsored national seminar on “ Modern Trends in Chemistry and Polymer Chemistry” organized by Post Graduate Department of Polymer Chemistry, Govt. College, Attingal on 24-26 November 2016**
2015-16	
1	**“Photocatalytic degradation of Acid Red 1 by modified titania using visible light irradiation” (Poster), in KSCSTE, DST, DRDO,BRNS, UGC sponsored International conference on “Materials for Millennium Matcon-2016” held at CUSAT organised by Department of Applied Chemistry, CUSAT on 14-15 January 2016.**
2013-14	
1	**Resource person/ Invited talk on “Introduction to Mass Spectrometry” in the UGC sponsored National seminar “Conducting Materials Probing Methods Novel Properties and Emerging Application” organised by Department of Chemistry MES College Nedumkandam on 18-19 December 2013**
2	**“High visible light photo catalytic active N,S co-doped nano titania: Synthesis and Characterisation” Rajesh K. M. & Satheesh Babu T. P., Proceeding of UGC sponsored national seminar on “Conducting materials probing method: Novel properties and merging application” p-10, December/2013, department of Chemistry MES college Nedumkandam, Kerala**

3	**Chaired the session of Prof(Dr) Syed Akheel Ahmed, Department of Chemistry, University of Mysore title " The Rise and Rise of Conducting Polymers" in the UGC sponsored national seminar on " Conducting Mateials Probing Methods – Novel Properties and Emerging Applications" organised by Department of Chemistry, MES College Nedumkandam held on 18-19 December 2013.**
4	**"Synthesis and Characterisation of high visible light non-metal doped nano titania" Proceeding of national seminar on "Nanoscience and technology in association with KSCSTE and ISTE, p- 17, Feb/2013 at department of science and humanities Sree Narayana Gurukulam college of enegineering, Kadayiruppu, Kerala.**
2010-11	
1	**" High visible light responsive modified nano titania for the degradation of organic pollutant" By Rajesh K. M. (poster)- National seminar on Current Trends in Chemistry CTric 2011 at CUSAT on 4 and 5 March /2011. Organised Department of Applied Chemistry, CUSAT. Sponsored by UGC, DST, KSCSTE**

Project undertaking (Minor/ Major) : One (minor)

Title of the project	Funding agency and reference number	Year of approval	Duration of the project	Amount	Present status	Remarks if any
Enhancement of Visible Light Activity of Titanium Dioxide via Banana Peel Bio-Waste Modification for Photocatalytic and Antibacterial	DBT-STAR SN College, Nattika. File No. 24-25/DBT STARISNCNUG/ P1-12	2025-26	V Semester	10000	Completed	
Photocatalytic and Antibacterial Study of Zinc Oxide/Biochar Nanocomposite in Visible Region: Synthesis and characterisation	DBT-STAR SN College, Nattika. File No. 24-25/DBT STARISNCNUG/ P1-12	2025-26	V Semester	10000	Completed	

Plant Extract as Green Synthesis Agent for Silver Nanoparticle synthesis and evaluation of their antibacterial activity	**DBT-STAR SN College, Nattika. File No. 24-25/DBT STARISNCNUG/ P1-12**	**2024-25**	**V Semester**	**8000**	**Completed**	
Studies of effect of Flood on water quality of well water samples in shoranur and ottappalam regions of Palakkad District	**KSCSTE (SPYTiS-II)** **64/SPYTiS-II/2018/KSCSTE dated 07/01/2019**	**2018 (2018-19)**	**One year**	**10000**	**Completed**	**Amount not released**
Photocatalytic Degradation of Aqueous Dyes using Modified Titania	**KSCSTE (SPYTiS-II)** **145/SPYTiS-II/2017/KSCSTE dated 30/10/2017**	**2017 (2017-18)**	**One Year**	**10000**	**Completed**	

Synthesis and Characterisation of nano titania modified with carbon composites and its photocatalytic application on pollution control	**UGC (MRP-Minor)** **1674-MRP/14-15/KLCA057/UGC-SWRO dated 04/02/2015**	**Feb.2015 (2015-17)**	**2 year** **2015-17**	**440000**	**Completed**	

Research Experience

Research Stage	Title of Work	Institution where work was carried out	Name of funding agency	Duration	Remarks
Ph.D	**Studies on Photocatalysis by nano titania modified with non-metals**	**Cochin University of Science and Technology**		**2008-2012**	
Project	**Studies on Photocatalysis by Nano titania in Pollution Control**	**Cochin University of Science and Technology**	**Board of Research in Nuclear Science, Department of Atomic Energy,**	**2007-2010**	**Worked as Junior Research Fellow**

			Govt. of India		
Training	**Orientation Programme in Catalysis Research**	**National center for catalysis research, Dept. of Chemistry, IIT Chennai.**	**DST**	**2007**	