

DETAILED FACULTY BIODATA FOR COLLEGE WEBSITE JUNE 2024 TO MAY 2025		
Sl. No.	Name	Dr. SMITHA S
1	Designation	Assistant Professor
2	Department	Physics
3	Contact Number	9446852753
4	Whatsapp Number	9446852753
5	Email	Smitha6feros@gmail.com
6	Institutional Email ID	
7	PEN Number	669862
8	Personal Web Page	
9	Date of Entry into Service	18/10/2012
10	Date of Retirement	31/03/2035
11	Edu. Qualifications	M.Sc. Physics, BEd, NET, Ph.D.
12	Areas of Interest/Specialisation	Nanotechnology
13	Courses/Subject Taught	B.Sc. &M.Sc. Physics
14	Field of Research	Mixed metal oxide nanomaterials
15	Guideship Details (Guideship order number and date, Research Centre, Number of PhD students & title of their research topic)	

	1. Affiliated University: 2. Subject: 3. Guideship Order Number & Date: 4. Research Centre: 5. Number of Full time PhD Research Scholars: 6. Number of Part time PhD Research Scholars: 7. Details of PhD Research Scholars (Full Name, Title of Topic, Year of Joining): 1. 2. 3. 4.
16	Google Scholar Profile Link/ORCID ID/Research Gate Profile Link (Give the links)
17	Patent Obtained/Applied (Give the details)
18	Teaching Experience (Permanent) (Give the details)
	1.High school assistant(govt.) 2.Assistant Professor
19	Teaching Experience (Contract) (Give the details)
	1.
20	Research Experience

	<p>1.Completed UGC Minor Project entitled “Synthesis of Metal Nano structures using Bio-Inspired materials and its Characterization” vide UGC No: MRP(S) 0698/13-14/KLKE0 16/UGC-SWRO.</p> <p>2.Developed a visible-light active nano material in renewable energy device applications.</p> <p>3.Developed mixed nanostructures for medical and Environmental protection applications.</p> <p>4.Sustainable production of nanostructured materials by biogenic routes</p>
21	Memberships in Learned Bodies/Societies, If Any
	1.APT
22	Scholarships/Fellowships Obtained
	1.
23	Research Papers Published (Mention UGC Care Listed/Peer-reviewed). Include Name of Authors, Year, Name of Journal, Volume, Page numbers, ISSN Number, DOC if any
	<p>1. Cytotoxic and anticancer activity of mixed metal oxide FeO: MnO nanostructures S Smitha, PGA Krishna, NJ Tharayil - Materials Today: Proceedings, 2022</p> <p>2. Temperature dependent micro strain analysis of Lanthanum oxide nanoparticle using Williamson-Hall and size-strain plot methods,PGA Krishna, S Smitha, NJ Tharayil - Materials Today: Proceedings, 2022</p> <p>3. Synthesis and characterization of FeO-MnO magnetic nanoparticles in vitro antioxidant and antibacterial studies,S Smitha, NJ Tharayil, AIP Conference Proceedings 2162 (1)</p> <p>4. Synthesis and characterization of iron-manganese oxide nanocomposites-chemical and biological methods ,S Smitha, J Prabha, NJ Tharayil - Proceedings of the international conference on ..., 2018</p> <p>5. S. Smitha, B V Vibitha and Tharayil John Nisha, ”Band gap shrinkage in hematite with Mn addition: A visible-light active nano material in renewable energy device applications” AIP Conference Proceedings 2244, 070032 (2020).</p>
24	Popular Article Published

	<ol style="list-style-type: none"> 1. 2.
25	Books Published (Include ISBN/ISSN Number)
	<ol style="list-style-type: none"> 1. Evaluation of the Biological Activity of Zinc Ferrite Nanoparticles Synthesized with DNA biotemplate for Enhanced Environmental Protection. Dr. Smitha S^{1a}, Aswathy B R¹, Nayana Kumari L¹ 2. Green Synthesis of Iron Oxide Nanoparticles Using <i>Cnidioscolus aconitifolius</i> Leaf Extract: A Sustainable Approach for Environmental conservation, Aswathy B R^{1*}, Smitha S¹, Bismi Saji¹, Anju S Ranjan¹
26	Papers Presented
	<ul style="list-style-type: none"> ▪ Smitha S, Prabha Jyothi PS, Anu Krishna and Nisha J Tharayil, “Synthesis and characterization of Iron-Manganese oxide Nanocomposites - Chemical and Biological methods”, ICAN2018: Technology Letters Conference Proceedings of the International Conference on Advanced Nanostructures, Department of Physics, Catholicate College, Pathanamthitta, 12-14 March 2018 ▪ Smitha S , Anu Krishna, Vibitha B.V, Prabha Jyothi P.S and Dr.Nisha J Tharayil, “Biosynthesized, magnetically retainable binary transition metal oxide FeO / MnO nanocomposites for environmental remediation”, 31st Kerala Science Congress, Fatima Mata National College, Kollam, 2 & 3 February 2019. ▪ Smitha S and Dr. Nisha J Tharayil, “Structural, Optical and Magnetic characterization of Binary Metal Oxide FeO-MnO Nanocomposites for Biological Application “National Seminar on

	<p>Interdisciplinary Approaches in Materials and Biological Research (IAMBR-2018), Mahatma Gandhi College, Thiruvananthapuram, 16th and 17th February 2018.</p> <ul style="list-style-type: none"> ▪ Smitha S and Dr. Nisha J Tharayil, “Synthesis and Characterization of FeO-MnO Magnetic Nanoparticles in Vitro Antioxidant and Antibacterial Studies”, International Conference on Advanced Materials (ICAM), Department of Physics, Nirmalagiri College, Kannur, 12-14 June 2019. ▪ Smitha S, Prabha Jyothi P.S, Anu Krishna and Dr. Nisha J Tharayil, “Optical And Antimicrobial Studies of Mn Doped α-Fe₂O₃ Nanoparticles”, UGC sponsored National Seminar on ‘Frontline Approaches in Material Science and computational Chemistry’ [MATCOM-2018], Dept. of Chemistry, SNCW, Kollam, 14-16 March 2018. ▪ S. Smitha and Nisha J Tharayil, ”Investigation on Structural, Dielectric and Magnetic properties of α-Fe₂O₃/Mn₂O₃ nanostructures prepared by DNA assisted precipitation method” International symposium on advanced functional materials [ISAFM 2018], Dept. of Chemistry, Mar Ivanios College, Thiruvananthapuram, 12 October 2018. ▪ Anu Krishna P G, Smitha S and Nisha J Tharayil, “Effect of temperature on structural and optical properties of green synthesized Lanthanum Oxide nanoparticles”, International Conference on Physics of Materials & Nanotechnology (ICPN-2019), Department of Studies in Physics, Mangalagangothri, Mangalore University, 19-21 September 2019.
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	<ul style="list-style-type: none"> ▪ Smitha S, B V Vibitha, and Nisha J Tharayil, “Band Gap Shrinkage in Hematite with Mn Addition: A Visible-Light Active Nanomaterial in Renewable Energy Device Applications”, International Conference on Physics of Materials & Nanotechnology (ICPN-2019), Department of Studies in Physics, Mangalagangothri, Mangalore University, 19-21 September 2019. ▪ Smitha S and Nisha J Tharayil, “Structural, Optical and Biological Characteristics Of FeO: MnO Nanoparticles Prepared By Organic Surfactant Assisted Co-Precipitation Method”, International Seminar on Supra and Nano Chemistry of Bio Active Molecules-2019 [SANCBAM-2019], Department of Chemistry, Christian College, Kattakada, 19 & 20 August 2019. ▪ Smitha S, Anu Krishna P G and Dr.Nisha J Tharayil, “Magnetic and optical characteristics of FeO: MnO nanocomposites and its catalytic dye removal application in environmental protection”, International Conference on Energy and Environment (ICEE 2K19), TKM College of Arts and Science, Kollam, 12-14 December 2019. • Dr. Smitha S. presented a paper entitled “Cytotoxic and Anticanceractivity of Mixedmetal oxide FeO: MnO Nanostructures” in the 2022 International Conference on Recent Advances in Engineering Materials (ICRAEM 2022) held at Alva’s Institute of Engineering & Technology, Moodbidri, Karnataka, India during 03 - 05, March 2022. <p>Dr. Smitha S. presented a paper entitled “Temperature dependent micro strain analysis of Lanthanum Oxide nanoparticle using Williamson-Hall and Size-Strain Plot methods” in the 2022 International Conference on Recent Advances in Engineering Materials (ICRAEM 2022) held at,</p>
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	<p>Moodbidri, Karnataka, India Alva's Institute of Engineering & Technology during 03 - 05, March 2022.</p> <ul style="list-style-type: none"> • Dr. Smitha S^{1a}, Aswathy B R¹, Nayana Kumari L¹ "Evaluation of the Biological Activity of Zinc Ferrite Nanoparticles Synthesized with DNA biotemplate for Enhanced Environmental Protection" in the International Multidisciplinary Symposium on Climate Crisis& Consciousness Bodhi-IMSC on 28-31 January 2025. • Aswathy B R^{1*}, Smitha S¹, Bismi Saji¹, Anju S Ranjan¹ Green Synthesis of Iron Oxide Nanoparticles Using <i>Cnidioscolus aconitifolius</i> Leaf Extract: A Sustainable Approach for Environmental conservation" in the International Multidisciplinary Symposium on Climate Crisis& Consciousness Bodhi-IMSC on 28-31 January 2025. •
27	Invited Talks/Public Talks delivered
	<ol style="list-style-type: none"> 1. 2.
28	Collaboration/Consultancy/Linkages
	<ol style="list-style-type: none"> 1. 2.
29	Orientation Courses Attended
	1. UGC-HRDC Orientation Course, Academic Staff College, University of Kerala, Kariavattom, 28 days (08/06/2017-05/07/2017)
30	Refresher Courses Attended

	<p>1. UGC-HRDC Orientation Course, Academic Staff College, University of Kerala, Karyavattom, 21 days (26/06/2018-16/07/2018).</p> <p>2. Refresher Course in Advanced Concepts for Developing MOOCS, Teaching Learning Centre, Ramanujan College, University of Delhi (02/07/2020-17/07/2020).</p> <p>FDP & Short term courses Attended</p> <p>1. One week FDP in Research Ethics and Characterization Techniques in Material Science. Govt. of India, MHRD.</p> <p>2. One week FDP in Open-Source Tools for Research, Teaching Learning Centre, Ramanujan College, University of Delhi.</p> <p>3. Short term Course in Student Counselling and Mentoring, UGC-HRDC, University of Kerala, Thiruvananthapuram</p>
31	Seminars/Workshops/Training Organised
	<p>1.</p> <p>2.</p>
32	Workshops Organised
	<p>1.</p> <p>2.</p>
33	Training Organised
	<p>1.</p> <p>2.</p>
34	Orientation Programmes/Induction Programmes Organised
	<p>1.</p> <p>2.</p>

35	FDP/Any Other Programmes Organised
	1.
	2.
36	Startups/Innovation/Incubation Centre (Give the details)
	1.
37	Seminars/Conferences Attended
	<ul style="list-style-type: none"> ▪ National seminar on “Recent trends in Bio-Nano Photonics” organized by Department of Physics ,SNCW ,Kollam on 19-20 December2013. ▪ Attended the ‘Walkathon 2014’ organized by Students for Palliative care Initiative of Alpha Palliative care on 15th October 2014 at Kollam. ▪ Participated in UGC sponsored National Seminar on Fitness and Life style disease management organized by S N College for Women, Kollam on 26-27 March 2015 ▪ Participated in One day Seminar held in connection with the 100th birthday celebration of Bohr Atom Model organized by S N College for Women, Kollam on 21st January 2015. ▪ Participated in UGC sponsored National Seminar on Spectroscopic Techniques-Present Scenario (NSST-2015) organized by T K M M College, Nangiarkulangara on 17-19 September 2015. ▪ International conference on advanced nanostructures [ICAN-2018], Department of Physics, Catholicate College, Pathanamthitta, 12-14 March2018 . ▪ National seminar on “Interdisciplinary Approaches in Materials and Biological Research”,IAMBR-2018,Research Committee,Mahatma Gandhi College,Thiruvananthapuram and co-sponsored by KSCSTE,Govt.of Kerala on 16-17 February 2018.

- UGC sponsored National Seminar on ‘Frontline Approaches in Material Science and computational Chemistry’ [MATCOM-2018], Dept. of Chemistry, SNCW, Kollam, 14-16 March 2018.
- Participated in a Workshop on “Crystal Growth of Functional and Exotic materials” organized by Centre for High Pressure Research, Department of Physics, Bharathidasan University, Thiruchirappalli, during 6-10 August 2018.
- International symposium on advanced functional materials [ISAFM 2018], Dept. of Chemistry, Mar Ivanios College, Thiruvananthapuram, 12 October 2018 .
- National seminar on “Challenges and Changes in AQAR and SSR preparation “ organized by the internal Quality Assurance Cell (IQAC), Sree Narayana College for Women, Kollam on 19-20 December 2019.
- National conference on Advances in Nanomaterials & nanotechnology, Department of Physics, Marthoma College, Thiruvalla, 6-7 August 2019 .
- State level Lecture workshop on electron microscopy and its applications by Department of Physics and SICC, University of Kerala, 20-21 February, 2018
- FDP on ‘Advanced concepts for developing MOOCS’ by Teaching Learning Centre, Ramanujan College, University of Delhi sponsored by MHRD, PMMN on Teacher & Teaching from July 02, 2020 to July 17, 2020.
- Attended the Lecture on “Effective Teaching” in the IQAC Webinar Series on “Emerging Trends in Higher Education” organized by the Internal Quality Assurance Cell, Bishop Moore College, Mavelikara, Kerala on 10 July 2020, in association with the Kerala State Higher Education Council, Thiruvananthapuram.

	<ul style="list-style-type: none"> ▪ Participated in the International Webinar series “CROSSROADS 2020” on 22nd July 2020 organized by the Post Graduate and Research Department of Physics, Sree Narayana College for Women, Kollam, Kerala. ▪ Participated in the webinar on “Astronomy and Astrophysics” organized by the Department of Physics, Mar Ivanios College (Autonomous), Thiruvananthapuram, India on 25.07.2020 ▪ Online One Week National Workshop on “Best Practices of ICT Tools in Teaching and Learning”, from August 3, 2020 to August 8, 2020, organized by Department of Computer and Information Sciences, Jagadguru Rambhadracharya Divyang University, Chitrakoot. ▪ Participated in the International Webinar on ‘Earthquake studies and their prediction possibilities’ organised by the Department of Physics, Sree Narayana College for Women, Kollam on 25 May, 2021. ▪ One Week National Faculty Development Program “Research Ethics and Characterization Techniques in Materials Science” jointly organized by Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MHRD and Bishop Moore College, Mavelikara, on 09-15 September 2020. ▪ Participated in the International Multidisciplinary Symposium on Climate Crisis& Consciousness Bodhi-IMSC on 28-31 January 2025
38	Workshops Attended

	<p>1.Participated in a Workshop on “Crystal Growth of Functional and Exotic materials” organized by Centre for High Pressure Research, Department of Physics, Bharathidasan University, Thiruchirappalli, during 6-10 August 2018.</p> <p>2.State level workshop on electron microscopy and its applications by Department of Physics and SICC, University of Kerala, 20-21 February, 2018.</p> <p>3. Online One Week National Workshop on “Best Practices of ICT Tools in Teaching and Learning”, from August 3, 2020 to August 8, 2020, organized by Department of Computer and Information Sciences, Jagadguru Rambhadracharya Divyang University, Chitrakoot.2.</p>
39	Trainings Attended
	1.Hands on training on Learning Management System, Institutional level training programme organized by Kerala state higher educational council.
40	Extension Activities Organised/Participated inside the Campus
	<p>1.</p> <p>2.</p>
41	Extension Activities Organised/Participated outside the Campus
	<p>1.</p> <p>2.</p>
42	Representation in Syndicate/Senate/Academic Council/Board of Studies
	<p>1.</p> <p>2.</p>

43	Tutorship in UG/PG (Mention the Class and Year/Batch)
	1.UG tutor (2015 adm) 2. UG tutor (2022 adm)
44	Academic Responsibilities Undertaken
	1. NSS program Officer (2014-2016) 2. PTA Executive Committee member (2013-2016) 3.College union election committee member 4. Internal Mentor of SSP (2014-2016) 5.Science club member 6.Media club member 7.NSQF Programme coordinator 8.DLMC Member 9. Mentor of WalkWith Scholar Programme 10.Member of Entrepreneurship Development Club 11.Member of Women's Study Unit 12.Admission committee member 13.Staff association executive member 14. Assistant chief supt. of university examinations (2022-24) 15.Timetable committee coordinator 16.Remedial coaching Committee coordinator
45	Any other Duties Performed at College
	1.University youth festival stage manager 2. PG Board Committee

Kindly attach a photograph as email attachment if you need to update in the website