FACULTY PROFILE

Personal Details

Name	:	Rani George
Department	:	Physics
Designation	:	Assistant Professor
Educational Qualification	:	M.Sc, JRF
Area of Specialisation	:	Material Science
Email	:	ranigeorge77@gmail.com
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Academic Identity

Employee ID	:	743207
VIDWAN ID	:	665339
Orcid ID	:	0009-0005-4344-3914

Research Parameters

Google scholar citations	:	219
H index	:	5
i10 index	:	5

Education

Sl. No.	Degree	Institution/University	Year
1	B.Sc	Assumption College, Changanacherry	2009
2	M.Sc	St. Berchmanns College, Changanacherrry	2011

Career Profile

Sl. No.	Institution/Organization	Designation	Period

1	IIST, Thiruvananthapuram	Research Fellow	Feb. 2012 to June 2012
2	MG University, Kottayam	Research Fellow	April 2013 – Oct 2013
3	St. Aloysius College, Edathua	Assistant Professor	29 Oct 2013 – till date

Positions Held or Holding, if any

Sl. No.	Position	Period
1.	Coordinator, Aloysian Media Club	2021-2022
2.	WWS mentor	2017-2020
3.	SSB mentor	2017-2019
4.	Co-ordinator, Aloysian Incubation Cell	2022-2026
5.	Board of Studies member – Assumption College, Changanacherry	2016
6.	Board Member- Co-operative Society	2024-2026

Research Publications

Sl. No.	Publication Details
1.	Sunil Thomas, **Rani George**, Naser Qamhieh, K.G. Gopchandran, Saleh T. Mahmoud, Alessia Quatela, "Sm^{3+} -doped strontium barium borate phosphor for white light emission: spectroscopic properties and Judd–Ofelt analysis" Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 248 (2021) 119187-12. https://doi.org/10.1016/j.saa.2020.119187
2.	**Rani George**, Sunil Thomas, Sanu Mathew Simon, Cyriac Joseph, P.R. Biju, N.V. Unnikrishnan, C. Sudarsanakumar, "Sm^{3+}-doped PVDF-SiO2 hybrid for greenish-blue light emission", Materials Today: Proceedings (2020). https://doi.org/10.1016/j.matpr.2020.05.141
3.	**Rani George**, Sunil Thomas, Cyriac Joseph, P.R. Biju, N.V. Unnikrishnan, C. Sudarsanakumar, "Spectroscopic properties of Sm^{3+} -doped PVDF-ZrO2 hybrid membrane", Materials Today: Proceedings 25 (2020) 151-154. https://doi.org/10.1016/j.matpr.2019.12.248
4.	Structural and Dielectric Studies of Eu^{3+} -Doped Li–K–Zn Fluorotellurite Glasses *Xavier Joseph,**Rani George**, Siby Mathew, N. V. Unnikrishnan;* Int. J. Sci. Res. (2015)
5	Investigations on spectroscopic properties of Er^{3+}-doped Li–Zn fluoroborate glass *Sunil Thomas, M.S. Sajna, **Rani George**, Sk.NayabRasool, Cyriac Joseph, N.V.Unnikrishnan;* Spectrochemica A (2015)
6	Spectroscopic investigations on Eu^{3+} ions in Li–K–Zn fluorotellurite glasses *Xavier Joseph, **Rani George**, Sunil Thomas, ManjuGopinath, M. S. Sajna, N. V. Unnikrishnan;* Opt. Mat. (2014)
7	Optical properties of Sm^{3+} ions in zinc potassium fluorophosphates glasses *Sunil Thomas , **Rani George**, Sk. NayabRasool, M.Rathaiah , V.Venkatramu,Cyriac Joseph, N.V.Unnikrishnan;* Opt. Mat. (2013)
8	Structural,vibrational and dielectric studies of Sm^{3+}-doped K–Mg–Al zinc fluorophosphate glasses *Sunil Thomas, **Rani George**, M. Rathaiah, V. Venkatramu, Sk. NayabRasool, N. V. Unnikrishnan;* Physica B (2013)

Books Published

Sl. No.	Book Details
1	**Rani George** "Gender Struggles in Kerala: A Socio-Cultural Analysis" *Chapters on* ***Democracy, Constitution, and Social Justice: Contemporary Challenges and Future Directions*** **ISBN** 978-93-341-6777-1 vol 1 pages 417-424
2	Rani George, Sunil Thomas, P.R. Biju, N.V. Unnikrishnan, C. Sudarsanakumar, "Optical properties of Pr^{3+}-doped PVDF-TiO2 hybrid", Optical and Molecular Physics: Theoretical Principles and Experimental Methods, edited by M.A. Esteso et al. (2021) (Book Chapter - Chapter 10) Apple Academic Press Inc. USA.
3	**Rani George** "Synthesis and Characterization of Glassy Thin Films" *Chapters on Nanoscience* . Chapter 18 **ISBN 978-81-908006-2-4**

Invited Lectures/Paper Presentations in Conferences

Sl. No.	Conference & Presentation Details
1.	Rani George, Sunil Thomas, C. Sudarsanakumar, N.V. Unnikrishnan, "Spectroscopic studies of Sm^{3+}: PVDF/ZrO_2 for white light emission", *National Conference on Optics and Photonics (NCOP-2K22),* T.K.Madhava Memorial college, Nangiarkulangara
2.	Rani George, Sunil Thomas, C. Sudarsanakumar, N.V. Unnikrishnan, "Photocatalytic Activity and Blue Light Emission of Sm^{3+}-Doped PVDF-SiO2 Hybrid", *International Workshop on Advanced Materials (IWAM 2020),* Ras Al Khaimah, United Arab Emirates (February 2020).
3.	Rani George, Sunil Thomas, C. Sudarsanakumar, N.V. Unnikrishnan, "Sm^{3+} doped PVDF ZrO_2 hybrid membrane for white light emission", *International Conference on Science & Technology of Advanced Materials (STAM 20),* Mar Athanasius College, Kothamangalam, Kerala, India (January 2020)
4.	Rani George, Sunil Thomas, C. Sudarsanakumar, N.V. Unnikrishnan, "Sm^{3+} -doped PVDF-SiO2 hybrid for blue light emission", *International Conference on Photochemistry and Sustainable Energy- ICPSE 2019,* Camelot Convention Centre, Alappuzha, Kerala, India (October 2019)
5.	Poster presentation on 'Synthesis and optical characterization of Strontium Magnesium Borate phosphor' Rani George, Sunil Thomas at International Conference on Advanced Materials heldat Nirmalagiri College, Kannur during June 12-14 2019
6.	Poster presentation on '*Synthesis and Characterisation of Sm^{3+} Doped PVDF -SiO2 Hybrid Material'*, **Rani George**, Sanu M. Simon, C.Sudarsanakumar and Unnikrishnan N.V at International conference on Advanced Functional Mateials held at St. Berchmans College, Changanacherry during 9-10 October 2018
7.	Poster presentation on '*Synthesis and Characterisation of Sm^{3+} Doped PVDF -TiO2 Hybrid Material'*, **Rani George**, Unnikrishnan N.V at UGC sponsored national seminar on 'Recent Trends in Nano and Other Materials for Energy Efficient Devices' held during July 20-22 2017 at St. Aloysius College, Edathua.
8.	Sunil Thomas, Rani George, "Spectroscopic properties of Sm^{3+} -doped strontium-borate phosphors incorporatedwith Mg, Ca, or Ba: A comparative study", *Recent trends in nano and other materials for energy efficient devices,* St. Aloysius' College, Edathua, Kerala (July 2017)

9.	Poster presentation on '*Synthesis and Characterisation of Sm^{3+} Doped PVDF -SiO2 Hybrid Material'*, **Rani George**, Unnikrishnan N.V at International conference on Advances in Optics and Photonics held at Guru Jambheshwar University of Science & Technology,Hisar (Haryana) during November 23-26 2017
10.	Poster presentation on '*Energy transfer and white light emission of Tb^{3+}:Eu^{3+}-TiO2/PVP hybrids'* Prathibha Vasudevan, Sajna M.S, Sunil Thomas, **Rani George**, Unnikrishnan N.V at 23rd National Laser Symposium (NLS-23) held during December 3 – 6 2014 at Sri Venkateswara University, Tirupati

Seminar/Workshops Organized

Sl. No.	Title of the Seminar/Workshop	Funding Agency	Amount	Date
1.	Faculty coordinator – National workshop on iSensoBotz (2015) organized in association with IIT Madras & ARK Techosolutions			18 – 19 September 2015
2.	Convenor – Intercollegiate Science Quiz			
3	Co-ordinator - EUREKA CORAL- KSCSTE Sponsored Workshop to familiarize the students of class X with basic principles in physics through hands-on experience. Conducted on 10th and 11th November, 2016.			
4	Co-ordinator- UGC sponsored national seminar on 'Recent Trends in Nano and Other Materials for Energy Efficient Devices' held at St. Aloysius College, Edathua	UGC	120000	20 - 22 July,2017
5	Co-ordinator – Ozone day celebrations	Nil	-----	14th February 2018.
6	Convenor - EUREKA - Workshop to familiarize the students of class X with basic principles inphysics through hands-on experience. Conducted on 15th January, 2019.		----	7th February 2019.
7	Convenor – International seminar on 'Physical properties of $(Cr_{84}Re_{16})_{100-y}V_y$ alloy system'			3rd August 2021.
8	Convenor - Ozone day celebrations			16th Sept 2020
9	Convenor - state level seminar on 'XRD analysis'			9th Jan 2021
10	Co-ordinator – National Seminar	Institute of Parliamentary Affairs, Government of Kerala	150000	Jan 2025

Research Projects

Sl. No.	Title of the Project	Funding Agency	Amount	Period
1.	**Minor Research Project** *on Synthesis and Optical Characterization Studies of Rare-Earth Doped TiO_2/PVDF hybrid membranes* funded by UGC (1884-MRP/14-15/KLMG019/UGC-SWRO)	UGC	Rs. 500000/-	Feb 2015 - Feb 2017
2	**Student Project** on "*Synthesis and Optical Characterization of Dy^{3+} doped TiO_2/PVDF Hybrid Material* " (87/SPS 59/2016/KSCSTE)	KSCSTE, Thiruvananthapuram.	Rs.10000/-	Jan 2017 – May 2017

Awards/Achievements

Sl. No.	Details	Year