Dr. R. RAJESH
Associate Professor& Head,
Department of Physics
Velammal College of Engineering and Technology, Madurai.
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Educational Qualification:

Degree	University / College	Year	Percentage	Class
Ph.D.	Anna University	2019	Commended	
M.Phil.,	Bharathidasan University	2006	71	I
M.Sc.,	Madura College / Madurai Kamaraj University	2003	70	I
B.Sc.,	Yadava College / Madurai Kamaraj University	2001	71	I

Experience in Years:19 years 3 months

Employment History:

S.No	Name of the Institute / Industry	Duration	Experience
01.	M/S. IAP International Pvt. Ltd, Nilakottai	20.05.03-30.05.04	1 year
02.	M/S. HClInfosystems, Pvt. Ltd, Madurai	01.08.04-30.04.05	1 year
03.	Latha Mathavan Polytechnic College, Madurai	16.05.05-20.09.07	2years 4 months
03.	Latha Mathavan Engineering College, Madurai	24.09.07-30.05.11	3 years 8 months
04.	Velammal College of Engineering & Technology, Madurai	01.06.2012 – till date	11years 3 months
		Total	19 years 3 Months

Interested Research Areas: Materials Science, Multiferroics and Energy Storage Devices

Recognized Ph.D Supervisor

Sl.No	Name of the University	Recognized Number	Area of Expertise
1	Anna University	3870012	Multiferroics, Materials Science & Energy Storage Devices

Invited talk:

- Deliver a special talk on "Physicist Perspective of Physiology" in the National Conference "LaPhysique" on 07th and 08th October 2021 at Velammal Medical College Hospital and Research Institute, Madurai.
- Deliver a special talk on "Physics for Higher Education and other opportunities" at Yadava College, Madurai on 18th March 2023

Guest Lecturer:

- HandledBasic Physics subjects at Velammal College of Allied Health Science, Madurai during 2014 – 2020

Membership in Professional Bodies:

S.No	Name of the Society	Memebership type	Reference Number
1.	Indian Society for Technical Education	Life Member	LM83829
2	Magnetics Society of India	Life Member	LM 553
3.	Educational Research and Development Association	Life Member	EDRA/INDLM/263/0623

Publications Details:

1. International Journal Publication Details:

1. Effect of Sr doping on the magnetocapacitive effect in $Bi_{0.6}Sr_{0.4}FeO_{3-\delta}$ polycrystalline ceramics, **R. Rajesh***, · S. John Ethilton, K. Ramachandran, K. Ramesh Kumar, Samba Siva Vadla, I. B. Shameem Banu, Applied Physics A 124:532 (2018) 1-9. https://doi.org/10.1007/s00339-018-1941-6
2. Studies on multiferroic properties of single phasic $Bi_{0.85}Ho_{0.05}Sm_{0.1}FeO_3$ ceramics, **R. Rajesh***, S. John Ethilton, K. Ramachandran, N.V. Giridharan, K. Ramesh Kumar, International Journal of Modern Physics B, Vol. 32 (2018) 1850277. https://doi.org/10.1142/S0217979218502776
3. Effect of Mn doping on magnetodielectric properties of polycrystalline $BiFeO_3$ ceramics, **R. Rajesh***, N. V. Giridharan, K. Ramesh Kumar, C. Karthika, Journal of Alloys and Compounds, 854 (2021) 156981. https://doi.org/10.1016/j.jallcom.2020.156981

4. Electron density distribution and magnetic ordering of polycrystalline $Bi_{0.6}Sr_{0.4}FeO_3$ ceramics, **R. Rajesh***, Ferroelectrics 573, 01 (2021) 224-235. https://doi.org/10.1080/00150193.2021.1890479.

5. Enhanced energy storage performance and magnetocapacitance effect of polycrystalline $BiFeO_3$ ceramics, **R. Rajesh***, N. V. Giridharan, Journal of Australian Ceramic Society, 58 (2022) 539 – 548. https://doi.org/10.1007/s41779-022-00711-8. (Link to view Paper: https://rdcu.be/cGUht)

6. Electron density distribution influencing the electrical and magnetic properties of polycrystalline $Bi_{0.9}Sm_{0.1}FeO_3$ ceramics, **R. Rajesh***, International Journal of Materials Research (De Gruyter), 113 (2022) 278-286. https://doi.org/10.1515/ijmr-2021-8339.

7. Enhanced magnetoelectric effect in heterogeneous multiferroic $(x)CuFe_2O_4 - (1-x)KNbO_3$ nanocomposite, P. Komalavalli, I. B. Shameem Banu, M. H. Mamat, M. Shahid Anwar, ShamimaHussain, S. SathikBasha, **R. Rajesh**, Emergent Materials (Springer), 5 (2022) 529–536. https://doi.org/10.1007/s42247-022-00382-y.

8. Energy storage performance of polycrystalline $Bi_{0.85}Ho_{0.05}Sm_{0.1}FeO_3$ ceramics, **R. Rajesh***, Ferroelectrics (Taylor & Francis), Volume 589 (2022) 55 – 63. https://doi.org/10.1080/00150193.2022.2061217.

9. Strain mediated electrical and optical properties of novel lead-free $CuFe_2O_4$-$KNbO_3$ nanocomposite solid solutions: a combined experimental and DFT studies, I.B. Shameem Banu, **R. Rajesh***, M.H. Mamat, P.Komalavalli, M.Shahid Anwar, Shamima Hussain, S. SathikBasha, Microscopy Research and Technique (Willey), Volume 85, Issue 9 (2022) 3140-3152. https://doi.org/10.1002/jemt.24172

10. Rietveld Refinement, Structural Characterization, and Methylene Blue Adsorption of the New Compound $Ba_{0.54}Na_{0.46}Nb_{1.29}W_{0.37}O_5$, HichamEs-souf, HssainBih, LahcenBih, **Raman Rajesh**, Alan Rogerio Ferreira Lia, M. I. Sayyed and RabihMezher, Crystals, MDPI 12(2022)1695. https://doi.org/10.3390/cryst12121695

11. Oxygen octahedra distortion-induced multiferroic properties of Er and Zr co-doped $BiFeO_3$ nanoparticles, S. Divyalakshmi, I. B. Shameem Banu, **R. Rajesh***, Applied Ceramic Technology (Willey) Vol. 20, Issue 3 (2022) 1939-1952. https://doi.org/10.1111/ijac.14301.

12. Crystallographic, Structural, and Electrical Properties of W^{6+} Substituted with Mo^{6+} in Crystalline Phases such as TTB Structure, HichamEs-soufi, M. I. Sayyed, Aljawhara H. Almuqrin, **Raman Rajesh**, Alan Ferreira Lima, HssainBih, LahcenBih, Crystals, 13 (2023) 483. https://www.mdpi.com/2073-4352/13/3/483/pdf

13. Octahedra tilt influencing physical properties of polycrystalline $Bi_{0.9}Co_{0.1}FeO_3$ ceramics, **Rajesh Raman***, Giridharan Nambi Venkatesan, P.

Sakthivel, I. B. Shameem Banu, Phase Transitions Vol. 96 Issue 7 (2023) 496 – 513. https://doi.org/10.1080/01411594.2023.2218005

14. Molecular design of $BiFeO_3$ via novel substitution by zirconium and erbium for tuning the multifunctional properties and band structure calculations, S. Divyalakshmi, I. B. Shameem Banu, **R. Rajesh**, Mohamad Hafiz Mamat, G. Gowri, Applied Physics A (Springer Nature), 129 (2023) 552. https://doi.org/10.1007/s00339-023-06789-6
15. Tuning the Multiferroism and Magnetoelectric coupling of Bismuth Ferrite via Substitutional Defects by Er and Transition Metals (Nb/Zr/Y), S. Divyalakshmi, I. B. Shameem Banu, **R. Rajesh**, Mohamad Hafiz Mamat, G. V. Vijayaraghavan, Journal of Superconductivity and Novel Magnetism, (2023). https://doi.org/10.1007/s10948-023-06609-1

2. Conference Proceedings

1. On the enhancement of energy storage density in $Bi_{0.9}Ho_{0.1}FeO_3$ ceramics, S. John Ethilton, R. Rajesh, K. Ramachandran, and N. V. Giridharan, AIP Conference Proceedings 1942, 140024 (2018). https://doi.org/10.1063/1.5029155.
2. Crystal structure and impedance spectroscopy studies of the crystalline phase $Ba_{0.54}Na_{0.46}Nb_{1.29}W_{0.37}O_5$, Conference: VII. International New York Academic Research Congress on Life, Engineering, and Applied Science (Turkey), Feb14 – 16, 2023.

3. International Conference Presentation Details:

1. Influence of Mn doping on structural electrical and magnetic properties of $BiFeO_3$, **R. Rajesh**, S. John Ethilton, K. Kamala Bharathi, L.N. Patro, C. Karthika, International Conference of Magnetic Materials and Applications (ICMAGMA 2017) DRDO, Hyderabad, Feb 2017.
2. Photoelectrical behaviour of 12-tungstosilicic acid single crystals, S. John Ethilton,**R. Rajesh**, International Conference on Exploring Nanostructures for Enhanced Power Conversion Efficiency of Solar Cells (ICNES 2019), Gandhigram Rural Institute Deemed University, Dindigul, Jan 2019

4. National ConferencePresentation Details:

1. Electrical, Magnetic, structural, optical and thermal analysis of strontium bismuth ferrite, **R. Rajesh**, S. John Ethilton, 19th Crystal growth seminar, VIT Vellore, 2015.

5. Book Published

1. Physics for Electrical Engineering, Mrs. A. Meenakshi, Dr. P. Indhumathi and **Dr. R. Rajesh,** The Charulatha Publishers, Chennai (ISBN No.: 978-93-93479-78-5) 2022.

2. Engineering Physics – II, **R. Rajesh,** P. Muthusamy and S. Balamurugan, Sri MaruthiPublictions, Chennai (ISBN No.: 978-93-80757-43-8) 2011

3. Engineering Physics – I, **R. Rajesh,** P. Muthusamy and R. Gokulakannan, Sri Maruthi Publications, Chennai (ISBN No.: 978-93-80757-22-3) 2010.

4. Engineering Physics Laboratory - **R. Rajesh,** P. Muthusamy and R. Gokulakannan, Sri Maruthi Publications, Chennai (ISBN No.: 978-93-80757-25-4) 2010.

6. Serving as Reviewer

1. Editorial board member in the journal of Modern Nanotechnology (ISSN: 2788 – 8118) since 2021.
2. Reviewer in Advances in Science, Technology and Engineering System Journal (ISSN: 2415-6698) since 2021.
3. Reviewer in the Materials Science Research India (ISSN: 0973-3469) since 2021.
4. Reviewer in the Brazilian Journal of Physics (ISSN: 0103-9733 Springer) since 2021.
5. Reviewer in the Journal of Nano research (ISSN: 1661-9897).
6. Reviewer in Current Nano medicine (Betham Science Publications) (ISSN: 1573-4137) since 2022.

7. Academic links :

Google scholar: https://scholar.google.co.in/citations?user=H7ii1LAAAAAJ&hl=en&oi=ao.

ORCID:https://orcid.org/0000-0002-8983-4735

VIDWAN:https://vidwan.inflibnet.ac.in/profile/216885

PUBLON:https://publons.com/researcher/2257269/rajesh-r/