

Government Arts and Science College, Pappireddipatti

Department of PHYSICS

Faculty Profile

1. Name : Dr.V. Ravi
2. Designation :Assistant Professor of Physics
3. Date of Birth : 07.06.1974
4. Gender : Male
5. Address for Communication : 7/474-1, Veera illam, Mettupatti,
Harur (Po &T.k), Dharmapuri (D.t)
Pin-636903
- Mobile : 9442487138
- Email ID : raviveeran@rediffmail.com
- 6.Date of joining in College Service :24.10.2008
7. Total years of Experience :Y 15 yrs



S.No.	Name of the Institution	Duration	
		From	To
1.	Government Arts College , Ooty	24.10.2008	30.06.2009
2	Government Arts College, Salem-7	01.07.2009	21.12.2022
3	Government Arts &Science College,Pappireddipatti	22.12.2022	Till the date

8. Educational Qualification :

S.No.	Course	Name of the Board/University	Year of Passing	Rank
1.	B.Sc Physics	Madras University	1995	II ^t class
2.	M.Sc Physics	Bharathiar University	1997	I st class
3.	B.Ed	Bharathiar University	1998	I class
4.	M.Ed	Madurai KamarasarUniversity	2000	II class
5.	M.Phil	Manonmaniam Sundaranar University	2007	I class

6	Ph.D	Periyar University	2013	Awarded
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9. Additional Qualification (if any) :NIL

10. Orientation Course attended :09.07.2009 to 05.08.2009
Tamil Nadu state Council for Higher Education and University Grants Commission -Academic Staff College University of Madras, Chennai

11. Refresher Courses attended :1.27.01.2012 to 16.02.2012
UGC-Academic Staff College, Bharathidasan University, Trichy, Tamil Nadu.

2. 04.07.2018 to 24.07.2018
UGC-Human Resource Development Centre University of Madras, Chennai

3. 27.01.2022 to 09.07.2022
UGC-Human Resource Development Centre University of Madras, Chennai

12. Participation in in-service programmes/Seminars, Conferences, Symposium, Workshop etc. attended

S.N	Name of the Workshop	Name of the Sponsoring Agency	Place and Date	Period
1.	Workshop on Frontier topics in physics	Indian Academy of Science	Chikkanna Government Arts College, Tiruppur, 27 & 28 th 2009	2 days
2.	The XXXVI optical society of india symposium on Frontiers in Optics and Photonics	IIT Delhi, New Delhi	IIT Delhi, New Delhi, 3-5 th December 2011	3 days
3.	Workshop on “Technology Driven teaching learning process for information era”	UGC	Govt. Arts College (Auto), Salem-7, 04 th - 05 th Feb’2014.	2 days
4.	Higher Education For All	Tamil Nadu Government College Teachers Association	University of Madras 12-10-2015	One day
5.	State level Seminar in Chemistry	UGC	Govt. Arts College (Auto), Salem-7, 19 th Feb’2016.	1 day

6.	State level workshop on Outcome Based Education	Tamil Nadu State council for Science and Technology	Govt. Arts College (Auto), Salem-7, 24 th & 25 th June 2019.	2 days
7.	An Initiative to Understand Citation based metrics and Scientific Writing	UGC	Govt. Arts College (Auto), Salem-7, 9 th January 2020.	1 day
8.	Advanced Materials and research innovations-2020 National level Seminar	UGC	Govt. Arts College (Auto), Salem-7, Department of Physics 6 th February 2020.	1 day

13. List of articles published in International Journals

1. P Maheswari, **V Ravi**, KB Rajesh, SMH Rahman, R Jha, "High performance SPR biosensor using Cu-Pt bimetallic layers and 2D materials", Digest Journal of Nanomaterials & Biostructures Vol. 18, No. 1, January - March 2023, p. 221 – 234.
2. P. Maheswari, **V. Ravi**, K. B. Rajesh, Rajan Jha, " High Performance Bimetallic(Cu-Co) Surface Plasmon Resonance Sensor using Hybrid Configuration of 2D Materials", J. Environ. Nanotechnol., Volume 11, No 3 (2022)
pp. 01-10
3. P Maheswari, S Subanya, A Nisha, **V Ravi**, KB Rajesh, R Jha, "Sensitivity enhancement of SPR sensor using Ni/ZnO nanocomposite assisted with graphene", Optical and Quantum Electronics 53, 1-17.
4. Maheswari Pandaram , Subanya Santhanakumar, **Ravi Veeran** , Rajesh Karuppaiya Balasundaram, Rajan Jha, Zbigniew Jaroszewicz, " Platinum Layers Sandwiched Between Black Phosphorous and Graphene for Enhanced SPR Sensor Performance". Plasmonics (2022) 17:213–222.
5. Maheswari Pandaram, **Ravi Veeran**, Rajesh Karuppaiya Balasundaram , Zbigniew Jaroszewicz, Rajan Jha , Habibur Rahman S. Mohamed Ebrahim. "Hybrid Structured (Cu-BaTiO₃-BP-Graphene) SPR Biosensor for Enhanced Performance".
6. R Chandrasekaran, K Prabakaran, KB Rajesh, **V Ravi**, "Tight focusing properties of cylindrically polarized annular multi-Gaussian beam", Optik 127 (19), 7537-7542.

8. **V. Ravi**, P. Suresh, K. Gokulakrishnan, K. B. Rajesh, Z. Jaroszewicz, P. M. Anbarasan, T.V.S. Pillai, "Generation of sub wavelength longitudinal magnetic probe using high NA lens axicon and a binary phase plate," *J. Opt. (Institute of Physics, USA)*, **14**(5) 055704 (2012).
9. K. Lalithambigai, P. Suresh, **V. Ravi**, K. Prabakaran, Z. Jaroszewicz, K.B. Rajesh, P.M. Anbarasan, T.V.S. Pillai, "Generation of Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon," *Optics Letters by OSA*,**37**(6) 999 – 1001 (2012).
10. K. B. Rajesh, **V. Ravi**, K. Vasudevan and P. M. Anbarasan, "A comparative study on focal performance of fiber ended lens and fiber ended axicon for optical recording", J. Atti della Fond. Giorgio Ronchi, Italy (*Italian Journal of Optics*),**63**(4 (2008) 445 – 456.
11. Y.P. Arul Teen, T.Nathiya, K.B. Rajesh, V. Ravi, T.V.S. Pillaie, "Effect of tilt and astigmatism aberration of turbulent atmosphere on the intensity distributions of a LG11 beam "Optik-International Journal for Light and Electron Optics 125 (19), 5780-5784
12. PM Anbarasan, P Senthilkumar, S Manimegalai, M Geetha, K Vasudevan, V Ravi, D Deivasagayam, S Moorthy Babu, V Aroulmoji,"Spectral and Morphological Studies of Nanocrystalline Silicon Thin Films Synthesized by PECVD for Solar Cells".Silicon volume 2 Pages7-17Springer Netherlands.

List of Papers presented at conference / symposium

1. P. Maheswari, **V. Ravi**, K.B. Rajesh,"Sensitivity Enhancement of Surface Plasmon Resonance (SPR) Biosensor Based on Graphene and Bimetallic layers (Cu-Co)"International e-Conference on "Recent Trends in Applied Physics", Sri Sarada College for women, Tirunelveli, 28.10.2021.
2. P. Maheswari, **V. Ravi**, M. Pavithra, E. Saranya, K.B. Rajesh, "Sensitivity Enhancement of Surface Plasmon Resonance Sensor based on graphene -BaTiO₃ hybrid structure with Zinc Oxide(ZnO) layer", "3rd International Conference on Recent Trends in Applied Science and Technology",SSN College of Engineering, Chennai,19.09.2019 to 21.09.2019.
3. P. Maheswari, **V. Ravi**, A. Nisha, K.B. Rajesh ,"Sensitivity Enhancement of Surface Plasmon Resonance Optical Biosensor Based on Graphene Structure with Nanocomposite layer". International Symposium on Modeling of Crystal Growth Processes and Devices, SSN College of Engineering, Chennai, 26.02.2019 to 28.02.2019.
4. P. Maheswari, **V. Ravi**, A. Nisha, K.B. Rajesh, "Sensitivity Enhancement of Surface Plasmon Resonance Biosensor with Copper(Cu) & Transition Dichalcogenides(TMDCs) ", National Seminar on " Current Innovations and Future Perspectives in Nanoscience and Nanotechnology ,Chikkanna Government Arts College, Tirupur ,01.02.2019.
5. P. Maheswari, K.B. Rajesh, A. Nisha, P.M.Anbarasan, **V. Ravi**, "Sensitivity Enhancement of Surface Plasmon Resonance Sensor based on MoS₂-graphene hybrid structure with

- bimetal(Co-Au) layer”, 2nd International Conference on "Recent Trends in Applied Science and Technology, Periyar University Salem, 23.08.2018 to 25.08.2018.
6. K. Lalithambigai, K. Prabakaran, **V. Ravi**, Z. Jaroszewicz, K.B. Rajesh, P. M. Anbarasan, “Generation of Nanoscale focal hole with extended depth of focus for trapping array of Nano particles”, OSI symposium, IIT Delhi, 3-5th Dec 2011.
 7. K. B. Rajesh, **V. Ravi** and P. M. Anbarasan, “Generation of sub wavelength and longitudinal polarized non diffracting beam by tight focusing of double ring shaped radially polarized beam through high NA lens axicon” National Seminar on Photonic Materials (Nspm-2009), Organised by Department of Optoelectronics, University of Kerela, Thiruvananthapuram, Kerela - 695 581, February, 26-28, 2009.
 8. K. B. Rajesh, **V. Ravi** and P. M. Anbarasan, “Generation of near field optical virtual probe using Solid Immersion Axicon (SIAX)” National Seminar on Photonic Materials (Nspm-2009) Organised by Department of Optoelectronics, University of Kerela, Thiruvananthapuram, Kerela - 695 581, February, 26-28, 2009.
 9. K.B. Rajesh, **V. Ravi** and P.M. Anbarasan “ The role of evanescent Bessel beam in High Density optical recording” National Conference on Recent Advances in Physics (NCRAP – 2008), Pachaiappas College – Chennai, Feb.1-2, 2008.
 10. K.B. Rajesh, P. M. Anbarasan and **V. Ravi**, “Lens Axicons Illuminated by Gaussian Beams for Optical Microlithography” pg.84, in the National Conference on Recent Trends in Optoelectronics and Laser Technology (NCOL- 2007), University of Kerala, April, 9 – 11, 2007.
 11. P. M. Anbarasan, K.B. Rajesh, **V. Ravi** and K. Vasudevan “Modeling of PMMA microlenses fabricated by hot embossing process using contact stress analysis” in the International conference on Photonics-2006 held at Hyderabad Central University,13-16 Dec. 2006.
 12. K.B. Rajesh, P. M. Anbarasan, **V. Ravi** and K. Vasudevan “Experimental and theoretical investigation on the effect of various parameters on the surface morphology of the microlenses under hot embossing process.”, 62, in the National conference on Recent Advances in Materials science (NCMS-2006), Periyar University, Salem, Feb-16-17, 2006.
 13. **V. Ravi**, K. Vasudevan, K.B. Rajesh and P. M. Anbarasan “ Theoretical study on optical performance of fast imaging microlenses using ray- tracing method”, pg.175, in the National conference on Recent Advances in Materials science (NCMS-2006), Periyar University, Salem, Feb-16-17, 2006.
 14. K. Vasudevan, **V. Ravi**, K.B. Rajesh and P. M. Anbarasan “Light trapping scheme of microlens array focused beam on micro machined thin crystalline silicon solar cells.”, pg. 156, in the National conference on Recent Advances in Materials science (NCMS-2006), Periyar University, Salem, Feb-16-17, 2006.

14. Research Experience (Area Speculation) :Nano Optics

15. No. of scholars guided/guiding :

Degree	Guided	Guiding
Ph.D.	1	1
M.Sc.	10	

Place: Salem

Signature

Date:15.03.2023