



BIO-DATA

1. **Name and full correspondence address :** Dr. R. Ashokkumar
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Tamil Nadu
2. **Email and contact number:** drakrphysics@gmail.com +91 9894916599
3. **Institution :** Thiruvalluvar Govt. Arts College
4. **Date of Birth :** 30-07-1975
5. **Gender (M/F/T) :** Male
6. **Category Gen/SC/ST/OBC :** OBC
7. **Whether differently abled (Yes/No) :** No
8. **Academic Qualification**

S. No.	Degree	Year	Subject	University/Institution	% of marks
1.	B.Sc.	1996	Physics	University of Madras	72
2.	M.Sc.	1998	Physics	Bharathidasan University	75
3.	M.Phil	2003	Physics	Manonmaniam Sundaranar University	71
4.	Ph.D	2011	Physics	VIT University	-

9. **Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.**

Thesis Title: Investigations on the growth and Characterizations of γ -glycine, Transition element doped α -lithium Iodate and KHP single Crystals for nonlinear optical and waveguide applications

Name of the Guide: Dr. D. RajanBabu, Professor of Physics

Name of the University: VIT University

Year of Award: 2011

Work Experience

S. No	Positions held	Name of the Institute	From	To	Pay Scale
1.	Assistant Professor	Muthayammal Engineering College, Rasipuram.	22.05.2000	30.09.2011	Consolidated
2.	Professor	Muthayammal College of Engineering, Rasipuram	01.10.2011	25.07.2015	37400-67000 AGP 9000
3.	Assistant Professor	Thiruvalluvar Govt. Arts College, Rasipuram	27.07.2015	Till date	57700 - 182400 AGP 6000

10. Academic Staff College Orientation/Refresher Courses attended.

S.No.	Nature of the Course/Summer School	Place	Duration	Sponsoring Agency
1.	Orientation Course	Bharathiar University, Coimbatore	16.12.2016-12.01.2017	UGC-Human Resource Development Centre
2.	Refresher course in Physics	Bharathiar University, Coimbatore	23.11.2018-13.12.2018	UGC-Human Resource Development Centre
3.	Refresher Course on Emerging best practices in higher Education	Smt. Radhadevi Goenka College for women, Akola, Maharashtra	22.06.2021-06.07.2021	GADTLC under PMMMNMTT of Ministry of Education
4.	Refresher Course on Physics	Kumaun University, Nainital, Uttarakand	13.09.2022-27.09.2022	UGC-Human Resource Development Centre
5.	Refresher Course in Materials Science	Bharathidasan University, Tiruchirappalli	10.09.2025 - 23.09.2025	UGC-MMTTC, Bharathidasan University

11. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No.	Author (s)	Title	Name of the Journal	Volume	Page	Year
1.	Ashok Kumar R, R.Ezhil Vizhi, N.Vijayan, G. Bhagavannarayana and D. Rajan Babu	Growth, Crystalline Perfection and Z-scan Studies of Nonlinear Optical alpha- Lithium Iodate Single Crystal	Journal of Pure Applied and Industrial Physics	1	61-67	2010
2.	Ashok Kumar R, R.Ezhil Vizhi, N.Vijayan and D. Rajan Babu	Growth, Optical and Mechanical Properties of nonlinear optical alpha- Lithium Iodate Single Crystal	Der Pharma Chemica	2	247- 254	2010
3.	Ezhil Vizhi R, R. Ashok Kumar, N. Vijayan, K. Sathiyarayanan and D. Rajan Babu	Nucleation, Growth and structural studies of Non Linear Optical crystals – Potassium Thiourea Chloride (PTC).	Der Pharma Chemica	2	272- 280	2010
4.	Ashok Kumar R, R. Ezhil Vizhi, N.Vijayan and D. Rajan Babu	Structural, dielectric and piezoelectri c properties of nonlinear optical γ - glycine single crystals	Physica B	406	2594- 2600	2011
5.	Ashok Kumar R, N. Sivakumar, R.Ezhil Vizhi and D.Rajan Babu	The effect of Fe ³⁺ doping in Potassium	Physica B,	406	985– 991.	2011

		Hydrogen Phthalate single crystals on structural and optical properties				
6.	Ezhil Vizhi R, R. Ashok Kumar , D. Rajan Babu, K. Sathiyannarayanan and G. Bhagavannarayana	Synthesis, Crystal growth, Structural, Dielectric and Ferroelectric properties of N-Acetyl Glycine Phosphite (AGPI) single crystals	Ferroelectrics	413	291-300	2011
7.	Ezhil Vizhi R, R. Ashok Kumar , K. Sathiyannarayanan, N. Vijayan, G. Bhagavannarayana and D. Rajan Babu	Structural and Mechanical studies of Semi Organic NLO Material: Zinc Thiourea Chloride	Materials and Manufacturing Processes	27	53-57	2012
8.	Ashok Kumar R , R.Ezhil Vizhi, N. Sivakumar, N.Vijayan and D. Rajan Babu.	Crystal growth, optical and thermal studies of nonlinear optical γ -glycine single crystal grown from lithium nitrate	Optik	123	409-413.	2012
9.	Ashok Kumar R ,	Synthesis,	Advanced Materials	584	3-7	2012

	D. Rajan Babu, R. Ezhil Vizhi, N. Vijayan and G. Bhagavannarayana.	growth and optical studies of Mn: α -LiIO ₃ single crystal.	Research			
10.	M. Radha Ramanan, R. Radhakrishnan, T. Dhanabal, M. Sivaraju, R. Ashokkumar	Growth, spectral, optical and dielectric characterization of an organic nonlinear optical material: 4-hydroxytetraamethylpiperazine picrate.	Optik	126	5600–5604.	2015
11.	C. Devi, R. Ashokkumar	Investigation of Different Ferrous Concentration Effect on Characteristics of Ni-Fe-P Nano Alloy Thin Films	Oriental journal of chemistry	34	906-912	2018
12.	S. P. Meena, R. Ashokkumar , E. Ranjith Kumar	Effects of Cr Doping Concentration on Structural, Morphology, Mechanical and Magnetic	Journal of Inorganic and Organometallic Polymers and Materials	Springer online	Springer online	2018

		c Properties of Electrodeposited NiCoCr Thin Films				
13.	S. P. Meena, R. Ashokkumar , E. Ranjith Kumar	Variation of pH Level on Structural, Morphological, Mechanical and Magnetic Properties of Electrodeposited NiCoCr Thin Films	Journal of Advanced Physics	7	235-238	2018
14.	S. P. Meena, R. Ashok kumar	Effect of different Current density on Properties of Electrodeposited Ni-Co-Cr Thin Films	Oriental journal of chemistry	34	1884-1889	2018
15.	S.P.Meena, R. Ashokkumar	Effect of different cobalt concentration on properties of electrodeposited NiCoCr Thin films	Rasayan J. Chem.,	11	766-772	2018

16.	C. Devi, R. Ashokkumar.	Influence of different current density on characteristics of NiFeP nano alloy thin films	Rasayan J. Chem.,	11	1144-1150	2018
17.	C. Devi, R. Ashokkumar , E. Ranjith Kumar	Effects of Heat Treatment on Structural, Optical and Magnetic Properties of Electro Deposited Fe–Ni–P Thin Films	Journal of Inorganic and Organometallic Polymers and Materials	Springer online	Springer online	2018
18.	S. Rajkumar, M. Nirmal Kumar , K. Suguna , S. Muthulakshmi , R. Ashokkumar	Enhanced performance of dye-sensitized solar cells using natural cocktail dye as sensitizer	Optik	178	224-230	2018
19.	S. Thangavel, V. Kathiravan, R. Ashok Kumar , S. Eniya, G. Satheesh Kumar, P. Selvarajan & M. Kumaresavanji	Crystal Growth of L-Alanine Oxalic Acid Crystal and its Spectral, NLO, Mechanical, Thermal, and Impedance Properties	Journal of Electronic Materials	51	3068–3077	2022
20.	S. Thangavel, V.	Spectral,	Journal of	33	12249-	2022

	Kathiravan, R. Ashok Kumar , G. Satheesh Kumar & P. Selvarajan	optical, mechanical, impedance, and nonlinear optical properties of amaranth (dye)-doped L-histidine hydrochloride monohydrate crystal	Materials Science: Materials in Electronics		12258	
21.	S. Thangavel, V. Kathiravan, R. Ashok Kumar , S. Eniya, G. Satheesh Kumar, P. Selvarajan & M. Kumaresavanji	Studies on growth and characterization of a nonlinear optical crystal: Zinc sulfate-doped L-alanine	Journal of Nonlinear Optical Physics & Materials	2350024	1-16	2022
22.	V. Kathiravan, S. Thangavel, R. Ashok Kumar , T.Muthu Lakshmi, G. Satheesh Kumar, P. Selvarajan & M. Kumaresavanji	Organometallic L-alanine cadmium iodide crystals for optical device fabrication	Journal of Electronic Science and Technology	20	4	2022
23.	Anguraj Gunasekaran, Ashok Kumar Rajamani , Chandrasekar Masilamani, Inmozhi Chinnappan, Uthrakumar Ramamoorthy and Kasinathan Kaviyarasu	Synthesis and Characterization of ZnO Doped TiO ₂ Nanocomposites for Their Potential Photocatalytic and	Catalysts	13	215	2023

		Antimicrobial Applications				
24.	G. Anguraj, R. Ashok Kumar , C. Inmozhi, R. Uthrakumar, Mohamed S. Elshikh, Saeedah Musaed Almutairi and K. Kaviyarasu	MnO ₂ Doped with Ag Nanoparticles and Their Applications in Antimicrobial and Photocatalytic Reactions	Catalysts	13	397	2023
25.	H. Sonia Judith, R. Ashok Kumar, A.Paneerselvam, K. Saravankumar	Synergetic Effect of Aluminum and Fluorine Simultaneously Doped Zinc Oxide Thin Films Deposited by Simplified Spray Pyrolysis Technique	Acta Physica Polonica A	147	1-9	2024

13. Detail of Research Guidance.

S.No.	Course	Name of Student	Title of the Thesis	Thesis Submitted/Awarded	Month & Year of Award	University
1.	Ph.D.	S.P.Meena	Structural, Mechanical and Magnetic Properties of Ni-Co-Cr Alloy Thin Films	Awarded	2020	Bharathiyar University
2	Ph.D	C.devi	Synthesis and Characterization of	Awarded	2020	Bharathiyar University

			Ni- Fe-P Magnetic Thin films by Electro deposition technique.			
3	Ph.D	S. Thangavel	Studies on Growth and Characterization of some Pure and Dye Doped Amino acid based Semiorganic Crystals for Nonlinear Optical applications	Awarded	2023	Periyar University
4	Ph.D	G.Anguraj	Synthesis and Characterization of MnO ₂ @Ag, ZnO@TiO ₂ , SnO ₂ @ZnO, AND TiO ₂ @NiO Nanomaterials for Phtocatalytic and Antimicrobial applications	Awarded	2025	Periyar University

14. Books/Reports/Chapters/General articles etc.

S.No	Title	Author's Name	Publisher	Year of Publication

15. Any other Information (maximum 500 words)

Teaching Activity:

- ❖ Acted as a Life Member in Indian Association for Crystal Growth (IACG), Indian Science and Technology Association (ISTA) and Indian Society for Technical Education (ISTE)
- ❖ Acted as member of syllabus sub committee in the faculty of Science and Humanities (Engineering Physics), Anna University Chennai.
- ❖ Imparting practical oriented intense training for science students

Research Activity:

- ❖ Done research activities in the field of Crystal Growth and Thin Films more than 20 years.
- ❖ Recognized as a Supervisor for guiding Research Scholars for Ph.D., and M.Phil. Programme of Periyar University, Salem and Bharathiar University, Coimbatore.
- ❖ Completed 4 Ph.D Scholars in the area of thin film, crystal growth and nano materials
- ❖ Guided 10 students successfully for the completion of M.Phil (Physics) programme
- ❖ Guiding 3 Ph.D Scholars in the area of crystal growth and thin film, affiliated to Periyar University, Salem.