

CURRICULAM VITAE

Dr. Ramesh B
Lecturer in Physics
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Objective: To associate with multi-dynamic institute, this may provide a platform to update my knowledge & skills in accordance with latest trends in teaching along with research that follows a tradition of anticipating & leading changes.

Short Introduction: Five Year Integrated M.Sc. Physics (2012), APSET in *Physical Sciences* for Assistant Professor, 2007. Awarded M.Phil., (2015) & Ph.D. in Physics (2018) from Sri Venkateswara University, Tirupati.

Academic Qualifications:

QUALIFICATION	UNIVERSITY/BOARD	YEAR
Ph. D. (Physics)	Sri Venkateswara University, Tirupati Andhra Pradesh, India	April-2018
M. Phil. (Physics)	Sri Venkateswara University, Tirupati Andhra Pradesh, India	September-2015
B. Ed.	Sri Venkateswara University, Tirupati	July-2013
Five Year Integrated M. Sc. (Physics)	Sri Venkateswara University, Tirupati Andhra Pradesh, India	April-2012
Intermediate	Board of Intermediate Education, Hyderabad, Andhra Pradesh, India	March-2007
SSC	Board of Secondary Education, Hyderabad, Andhra Pradesh, India	March-2005

Additional Qualification:

Andhra Pradesh State Eligibility Test (APSET)-2017 (H.T. No: 062201696)

Present Position:

Lecturer in Physics, Govt. Degree College, Nagai – 517 590, A.P. (14-07-2021 to date)

Professional Experience:

Post Graduate Teacher in Physics, AP Model School, B. Kothakota, A.P. (23-12-2019 to 13-07-2021)

Extra-Curricular Activities (Teaching/Social/Cultural/Examination)

<i>S.No.</i>	<i>Activity</i>	<i>Organizer/University/College</i>	<i>Place and Date</i>
1	Co-ordinator for RUSA & NADU-NEDU Committee	GDC, Nagari	Nagari, 18-10-2021
2	Member in Examination Committee	GDC, Nagari	Nagari, 18-10-2021
3	Member in A.V. Education Committee	GDC, Nagari	Nagari, 18-10-2021
4	Member in UGC Committee	GDC, Nagari	Nagari, 18-10-2021
5	In-charge of Digital Class rooms	GDC, Nagari	Nagari, 18-10-2021

Title of Thesis:

“Investigation on the spectral behavior of Sm³⁺, Tb³⁺ ions doped borate and phosphate based phosphors for solid state lighting applications”.

Synopsis:

To date, as energy saving devices like phosphor converted LEDs are emerging as an essential solid state light source for the next generation lighting industry with superior luminescence capacity, longer duration time, and tunable optical performance. The thesis enlightens the borate and phosphate systems such as NaSrB₅O₉ and CaZn₂(PO₄)₂ have an abundant scope to study the luminescence properties in relation with their crystal structures. Meanwhile, Sm³⁺ and Tb³⁺ activated host systems have good absorptions in the n-UV region and also well matching with the emissions of UV chip. The main objective of the present research work is to investigate the spectral behavior of Sm³⁺, Tb³⁺ ions borate and phosphate based NaSrB₅O₉ and CaZn₂(PO₄)₂ phosphors for solid state lighting applications.

Research Experience:

DST-SERB Project: Junior Research Fellow, SVU College of Sciences, Tirupati, A.P., INDIA	01-07-2014 to 31-03-2015
NFHEST-JRF	01-04-2015 to 31-03-2017
NFHEST-SRF	01-04-2017 to 21-04-2018

Academic Awards/Fellowships:

NFHEST-JRF	UGC, Govt. of India	01-04-2015 to 31-03-2017
NFHEST-SRF	UGC, Govt. of India	01-04-2017 to 21-04-2018
Andhra Pradesh State Eligibility Test (APSET)-2017	Govt. of Andhra Pradesh	30-07-2017

Membership of Professional/Academic Bodies:

Life Member	Indian Science Congress Association (ISCA), L34323
Life Member	Indian Laser Association (ILA), LM-1099
Life Member	Photonic Society of India (PSI), 265

Expertise:

- ❖ Luminescence materials
- ❖ Material characterization
- ❖ Photonics

Publications:

S. No.	Title	Name of the publisher/Journal with ISBN/ISSN Number	Year	Citation Index/Impact Factor
01	Study of optical properties and up-conversion mechanism in Nd ³⁺ /Yb ³⁺ ions co-doped SiO ₂ -Al ₂ O ₃ -Na ₂ CO ₃ -SrF ₂ -CaF ₂ glasses for green light emitting display device applications	Optik 171 (2018) 918-924 ISSN: 0030 – 4026	2018	1.191
02	Structural studies of a green-emitting terbium doped calcium zinc phosphate phosphor	Journal of Molecular Structure 1155 (2018) 568-572 ISSN: 0022 - 2860	2018	2.011
03	Luminescence properties of CaZn ₂ (PO ₄) ₂ :Sm ³⁺ phosphor for lighting application	Optik 156 (2018) 906–913 ISSN: 0030 - 4026	2018	1.191
04	Facile one-pot synthesis of hexagons of NaSrB ₅ O ₉ :Tb ³⁺ phosphor for solid-state lighting	Mater. Res. Express 4 (2017) 046201 ISSN: 2053 – 1591	2017	1.151
05	Determination of strain, site occupancy, photoluminescent, and thermoluminescent-trapping parameters of Sm ³⁺ -doped NaSrB ₅ O ₉ microstructures	Ceramics International 42 (2016) 1234–1245 ISSN: 0272 – 8842	2016	3.057
06	Photoluminescence studies of Eu ³⁺ ions doped calcium zinc niobium borotellurite glasses	Advanced Materials Letters 2016 (72) 170-174	2016	1.46
07	Photoluminescence and decay properties of Sm ³⁺ and Dy ³⁺ in SrAl ₄ O ₇ phosphor	Advanced Materials Letters 6 (2015) 1111-1115	2015	1.46
08	Synthesis, photoluminescence and thermoluminescence properties of LiNa ₃ P ₂ O ₇ :Tb ³⁺ green emitting phosphor	Journal of Physics and Chemistry of Solids 86 (2015) 170–176 ISSN: 0022 – 3697	2015	2.207
09	NIR fluorescence spectroscopic investigations of Er ³⁺ -ions doped borate based tellurium calcium zinc niobium oxide glasses	Journal of Luminescence 164 (2015) 154–159 ISSN: 0022 – 2313	2015	2.732
10	Characterization Studies of Green Derivitized Silver Nanoparticles Using Ocimum tenuiflorum Leaf Extract and Their Antibacterial Activity	Nanomedicine and Nanobiology 1 (2014) 1–6	2014	
11	X-ray analysis and optical studies of Dy ³⁺ doped NaSrB ₅ O ₉ microstructures for white light generation	Journal of Alloys and Compounds 615 (2014) 719–727	2014	3.779

Orientation/Refresher Courses/Schools/FDP/FIP Undergone:

S. No.	Name of the Course	Organized by	Duration			Year
			From	To	Weeks	
1	Faculty Induction Program (OC)	UGC-HRDC, Andhra University, Visakhapatnam	14-07-2022	10-08-2022	4	2022
2	Faculty Induction Program	Commissionerate of Collegiate Education in collaboration with GC (A) Ananthapur, PVKN GC (A) Chittoor, GCM (A) Kadapa & GCW (A) Kadapa	29-06-2022	03-07-2022	5 Days	2022
3	Online National level Teacher Development Program	FDP cell, Shantiniketan International School, Amaravati (MH)	10-06-2022	16-06-2022	1	2022
4	National level Faculty Development Program on “Renewable Energy for Sustainable Development”	Bharatratna Indira Gandhi College of Engineering, Solapur	01-03-2022	05-03-2022	1	2022
5	Intellectual Property Awareness/Training Program	Intellectual Property Office, India	23 rd February 2022	-	1 Day	2022
6	Faculty Development Program on Emerging Technologies and Teaching Pedagogies in Forensic Science	360° Forensic Association, Department of Forensic Science, Faculty of Science, SGT University, Gurugram	21-02-2022	25-02-2022	5 Days	2022
7	Online Faculty Development Program on “Information Security and Challenges (ISIC-2021)”	Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj, Uttar	18-12-2022	22-12-2022	1	2021

		Pradesh, India				
8	Online Faculty Development Program on 'Advanced Materials and Applications'	Department of Physics, Presidency University	04-10-2021	08-10-2021	5 Days	2021
9	Online Faculty Development Program on "Research Tools & Methodologies"	Department of Mechanical Engineering, Lendi Institute of Engineering & Technology, Vizianagaram	27-09-2021	01-09-2021	1	2021
10	One week International Online Faculty Development Programme on "Research Tools and Methodologies"	Department of Mechanical Engineering, Lendi Institute of Engineering and Technology, Vizianagaram District, A.P., INDIA	27-09-2021	01-10-2021	1	2021
11	Two Week International Faculty Development Program on "Advanced Computational and Experimental Research in Physics-2021"	Department of Physics, SRM Institute of Science & Technology, Ramapuram Campus, Chennai, India	13-09-2021	25-09-2021	2	2021
12	One week Online International Faculty Development Programme on "Tools for Technical writing and Research data analysis (TTWRDA-2020)"	Department of Computer Science, NERIM Group of Institutions, Guwahati, Assam, INDIA	01-09-2020	05-09-2020	1	2020
13	DST – SERC School on "Lasers and Nonlinear Optics"	Department of Physics, Pondicherry University, Puducherry, India	22-03-2016	11-04-2016	3	2016
14	5 th SERC School on Nonlinear Dynamics	Department of Physics, PSG College of Technology, Coimbatore, Tamil Nadu	01-12-2016	21-12-2016	3	2016

Conferences/Seminars/Workshops/Webinars Attended:

S. No.	Name of the Conference / Seminars / Workshops	Organized by	Dates
1	International Webinar on Modern Trends in Nanotechnology	Department of Physics & Electronics, SRR & CVR Government Degree College (A), Vijayawada	11 th March, 2022
2	National level webinar on Career Opportunities in Life Sciences	Department of Microbiology & Biotechnology, School of Basic Sciences, Faculty of Arts and Sciences, BIHER, Chennai	2 nd February 2022
3	One day National Level Webinar titled - Key concepts to Decode Reading	Department of English, K.R. College of Arts and Science, K.R. Nagar, Kovilpatti	29 th November 2021
4	International Webinar on “Research Methodology”	Department of Physics and Chemistry in association with IQAC, YVNR GDC, Kaikaluru	18-19 th November 2021
5	One Day Webinar on “Soil Physics”	Department of Physics, Kongu Engineering College, Perundurai, Erode, Tamil Nadu	13 th November 2021
6	Webinar on “Transport Properties of Nano-Crystalline Thin Films and its Applications”	Departments of Physics, School of Basic and Applied Sciences, Harcourt Butler Technical University Kanpur, India	30 th October 2021
7	Webinar on “Synthesis, Characterization and Applications of Nano-Materials”	Departments of Physics, School of Basic and Applied Sciences, Harcourt Butler Technical University Kanpur, India	28 th October 2021
8	27th International Conference of International Academy of Physical Sciences on Advances in Relativity and Cosmology	Department of Mathematics, Birla Institute of Technology and	26-28 th October, 2021

		Science – Pilani, Hyderabad Campus, Hyderabad, India	
9	National Conference on “Advanced Materials, Technology, Applications & Education (AMTAE-2021) ”	Department of Physics, Savithribai Phule Pune University, Pune	16 th October 2021
10	National Webinar on “Advanced Materials for Various Technological Applications”	Department of Physics, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi, Chennai	7 th October 2021
11	National workshop on Popularisation of Remote Sensing based Maps & Geospatial Information	ISRS & ISRO	11 th August, 2017
12	National conference on Recent trends in Mathematics and its applications (RTMIA - 2016)	Department of Mathematics, Sri Venkateswara University, Tirupati, A.P., INDIA.	22 – 23 December, 2016
13	DAE-BRNS Symposium on Condensed Matter Physics under Extreme Conditions (CoMPEC - 2016)	Physics Group, Bhabha Atomic Research Centre, Trombay, Mumbai, INDIA.	13 – 16 April, 2016
14	Science Academies Lecture workshop on Theoretical and Computational Fluid Dynamics – (SALW - 2016)	Department of Mathematics, Sri Venkateswara University, Tirupati, A.P., INDIA.	21 – 22 March, 2016
15	National Seminar on Advances in Materials Science (NSAMS - 15)	Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur, A.P., INDIA.	25 – 26 November, 2015
16	UGC sponsored National Conference on Recent trends in Material Science (RTMS) – 2015	Department of Physics, S.V. Degree College, Kadapa, A.P., INDIA.	01 – 02 March, 2015
17	International Conference on Frontiers in Nano Science, Technology and Applications (FiNSTA’14)	Department of Physics, Sri Sathya Sai Institute of Higher Learning, Prashanthinilayam, A.P., INDIA.	20 – 22 December, 2014
18	DAE-BRNS National Laser Symposium (NLS - 23)	Department of Physics,	03 - 06 December, 2014

		Sri Venkateswara University, Tirupati	
19	A two day National Workshop on Nanomaterials: Synthesis, Characterization & Application	Department of GEBH, Sree Vidyanikethan Engineering College, A. Rangampet, A.P.	02 – 03 September, 2014
20	Workshop on Satellite Navigation systems-Their application to aviation and atmospheric Science	Department of Physics, Sri Venkateswara University, Tirupati	30 th March 2012
21	17 th National Space Science Symposium	Sri Venkateswara University, Tirupati	14 – 17 February, 2012

Papers presented in the Conferences/Seminars:

S. No.	Name of the Conference / Seminar	Organized by	Title of the paper	Dates
01	National Symposium on Advanced Functional Materials & their Applications (NSAFMA-2018)	Department of Physics, Rajeev Gandhi Memorial College of Engineering and Technology (Autonomous), Nandyal-518501, Kurnool, A.P., INDIA.	Synthesis, photoluminescence and Judd-Ofelt analysis of a novel type of phosphate based UV excitable $\text{CaZn}_2(\text{PO}_4)_2:\text{Eu}^{3+}$ phosphor for solid state lighting applications	27 – 28 February, 2018
02	National Conference on the Role of Science and Technology in National Development (NCSTND - 2017)	The Indian Science Congress Association Tirupati Chapter and Siddhartha Institute of Engineering & Technology, Puttur, A.P., INDIA	Analysis of J-O intensity parameters and fluorescence properties of Nd^{3+} ions	21 – 22 March, 2017
03	National Conference on Critical and strategic Materials for Advanced Technologies (CSMAT - 2017)	Rare Earth Association of India, Mumbai, INDIA.	Development of novel green emitting $\text{CaZn}_2(\text{PO}_4)_2:\text{Tb}^{3+}$ phosphor for Solid-state lighting applications	09 – 11 March, 2017
04	104 th Indian Science Congress	Sri Venkateswara University, Tirupati, A.P., INDIA.	Effect of Sm^{3+} activation on structural and luminescence properties of phosphate based	03 – 07 January, 2017

			CaZn ₂ (PO ₄) ₂ phosphor for Solid-state lighting applications	
05	International Conference on “Sustainable Energy Technologies for Smart & Clean Cities (SETS & CC - 2016)”	Amararaja Industries, Karakambadi, A.P., INDIA.	Luminescence and microstructural features of Sm ³⁺ activated CaZn ₂ (PO ₄) ₂ phosphor for commercial Solid-state lighting applications	27 – 29 July, 2016
06	1 st Andhra Pradesh Science Congress	Sri Venkateswara University, Tirupati, A.P., INDIA.	Development of Eu ³⁺ activated CaZn ₂ (PO ₄) ₂ phosphor for Solid-state lighting applications	27 – 29 January, 2016
07	24 th DAE – BRNS National Laser Symposium (NLS - 24)	Raja Ramanna Centre for Advanced Technology, Indore, INDIA.	Spectroscopic studies of Nd ³⁺ doped oxy fluorosilicate glasses for high power Solid state laser application	2 – 5 December, 2015
08	International Conference on Science, Technology and Applications of Rare Earths (ICSTAR - 2015)	Rare Earth Association of India, Thiruvananthapuram, Kerala, INDIA.	Optical study of NaSrB ₅ O ₉ :Tb ³⁺ phosphors for Solid-state lighting applications	23 – 25 April, 2015
09	International Seminar on “Glasses and other Functional Materials (ISGFM - 2014)”	Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar, A.P., INDIA.	Optical analysis of NaSrB ₅ O ₉ : Sm ³⁺ phosphors for Solid-state lighting applications	11 – 13 December, 2014

Computer Knowledge:

- MS-Office, Mat lab, C, C++, Origin Pro 8.5

Personal Information:

Father's Name : Gotu Naick B
 Date of Birth : 10th July, 1989
 Nationality : Indian (Hindu)
 Marital Status : Married
 Languages known : English, Hindi, Telugu
 Permanent Address : H. No. 5-3-36, P.M.K Thanda (V), Pallikuppam (P), Ramakuppam (M), Chittoor – 517 401, A.P., INDIA., Phone: +91-95730 65618

References:

1. Prof. B. Deva Prasad Raju

(Ph.D. Supervisor)

Department of Physics, SVU College of Sciences,

Sri Venkateswara University, Tirupati – 517 502, A.P., INDIA.

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2. Prof. K.T. Ramakrishna Reddy

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Sri Venkateswara University, Tirupati – 517 502, A.P., INDIA.

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DECLARATION

I hereby solemnly affirm that all the above details provided are true, complete to the best of my knowledge and belief.

(Dr. RAMESH B)