



NEW PRINCE SHRI BHAVANI COLLEGE OF ENGINEERING AND TECHNOLOGY

(Affiliated to Anna University)

Vengaivasal Main Road, Valli Nagar, Sembakkam, Chennai, Tamil Nadu 600073, India

Phone: +91 44 2278 0404

Department of

Personal Details

Name:	Dr. E. ANNIE RATHNA KUMARI
Designation:	ASSISTANT PROFESSOR
Educational Qualification:	M.Sc., M.Phil., Ph.D (in Physics)
Experience:	8 years 3 months
Area of Specialization:	Luminescence materials, Crystal growth

Educational Details

S.No.	Degree	Branch/Specialization	Institute/University	Year
1	Ph.D	Physics / Luminescence Materials	SSN College of Engineering / Anna University, Chennai	2022
2	M.Phil.,	Physics	The American College / Madurai Kamaraj University	2008
3	M.Sc.,	Physics	The American College / Madurai Kamaraj University	2007
4	B.Sc.,	Physics	Lady Doak College / Madurai Kamaraj University	2005

Publication Details

International Journal

1. **Annie Rathna Kumari, E,** & Kennedy, SMM, 2019, 'Color tunable and energy transfer mechanism of Dy³⁺ and Eu³⁺ rare earth ions activated NaCaBi₂(PO₄)₃ eulytite type phosphor for NUV excitable warm white light emitting diodes', Optik, vol. 186, p. 221-230, ISSN: 0030-4026, (**Impact factor:**

2.84).

2. **Annie Rathna Kumari, E, & Kennedy, SMM, 2021, 'Photoluminescence properties of certain trivalent RE ions (Dy/Sm/Eu) activated NaSrBi₂(PO₄)₃ phosphors and cool to warm white color tuning in Dy³⁺-Sm³⁺ and Dy³⁺-Eu³⁺ codoped NaSrBi₂(PO₄)₃ phosphors for indoor lighting applications', Journal of Luminescence, vol. 235, p. 118018, ISSN: 0022-2313, (Impact factor: 3.599).**
3. Albert, KJ, **Annie Rathna Kumari, E, & Kennedy, SMM., 2022, 'Synthesis, photoluminescent properties, and an insight into the Judd-Ofelt analysis of the NaPbBi_(2-x)(PO₄)₃: xEu³⁺ orthophosphate phosphors for Light applications', Journal of Alloys and Compounds, vol. 934, p.168047, ISSN: 0925-8388, Impact factor: 3.599.**
4. **Annie Rathna Kumari, E, & Kennedy, SMM, 2023, Synthesis and photoluminescence characteristics of the near white emitting Dy³⁺ ions activated NaMBi_{2-x}(PO₄)₃ [M: Ba/Ca/Ca0.5+ Sr0.5/Sr/Sr0.5+ Ba0.5] phosphors, Optik, 275, p.170601, ISSN: 0030-4026 (Impact factor: 2.84).**
5. A.Princy, **Annie Rathna Kumari, E, & Kennedy, SMM 2023, Structural characterization, energy transfer, and Judd-Ofelt analysis of pure and the Eu³⁺-doped Ca₂LiMg₂V₃O₁₂ phosphors. JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN:1551-2916, (Impact factor: 4.186)**

International Conference

1. **Annie Rathna Kumari, E, & Masilla Moses Kennedy, S, 2019, 'PL properties of Sm³⁺ activated NaCaBi₂(PO₄)₃ Phosphors for WLED applications' 6th International Conference on Luminescence and Applications (ICLA-2019) held on 7-10 January 2019, at School of Studies in Physics and Astrophysics, Pt. Ravishankar Shukla University, Raipur-492010, Chhattisgarh.**
2. **Annie Rathna Kumari, E, & Masilla Moses Kennedy, S, 2020, 'Synthesis and PL properties of an orange-red emitting NaCaBi_{2-x}(PO₄)₃:xSm³⁺ phosphors' The 28th International Conference (Virtual) of Forum For Interdisciplinary Mathematics; Synergies in Computational, Mathematical, Statistical, and Physical Science (FIM28 SCMSPS2020), held on 23 – 27 November 2020, at Stella Maris College, and SSN College of Engineering, Chennai, Tamilnadu.**

National Conference

1. **Annie Rathna Kumari, E,** & Masilla Moses Kennedy, S, 2018, ‘Synthesis and luminescence properties of Dy³⁺ activated NaCaBi₂(PO₄)₃ Phosphor for white light emitting diodes’ National Conference on Luminescence and Applications (NCLA-2018) held on 14–16 February 2018, at CSIR –National Institute For Interdisciplinary Science and Technology, Trivandrum, Kerala.
2. **Annie Rathna Kumari, E,** & Masilla Moses Kennedy, S, 2020, ‘PL properties of Dy³⁺ activated NaBaBi₂(PO₄)₃ Phosphors for WLED applications’ National Conference on Luminescence & its Applications (NCLA-2020) held on 10-12 February 2020, at the Department of Physics, National Institute of Technology, Warangal.

Program Organised

Conference

1. National conference on “**Advanced Materials Science (NCAMS-2015)**”, July, 2015, Department of Physics, Jerusalem College of Engineering, Chennai.
2. National Conference on “**Advanced Materials (NCAM-2016)**”, March, 2016, Department of Physics, SSN college of Engineering, Chennai.

Seminar/Webinar

1. State level Seminar on “**Thin films and Its Applications**”, Feb, 2009, Department of Physics, Lady Doak College, Madurai.
2. State level Seminar on “**Nano science and Its Applications**”, Feb, 2010, Department of Physics, Lady Doak College, Madurai.

Program Attended

FDP/STTP

1. Refresher Course on “**Astronomy and Astro Physics**”, National level, during May 11 - June 12, 2009, IUCAA, Pune, India.

Workshop

1. “**Materials in Research and Development**”, National level, July, 2014, Jeppier College of Engineering, Chennai.
2. “**Crystal growth and Characterization**”, National level, March, 2009, Alagappa University, Karikudi.
3. “**Image Processing using MatLab**”, July, 2008, Lady Doak College, Madurai.
4. “**Data Analysis and data reduction**”, State level (IUCAA sponsored), Feb, 2008, The American College, Madurai.

Conference

1. “**Advanced Materials Science-2015**”, National Level, July, 2015, Jerusalem College of Engineering, Chennai.
2. “**Nano science and Its Applications**”, State level, Feb 2010, Lady Doak College, Madurai.
3. “**Recent trends in Crystal growth, Thin films and Nano structured materials**”, National Level, August, 2009, Aditanar college of Arts and science, Tiruchendur.
4. “**Thin films and Its Applications**”, State level, Feb 2009, Lady Doak College, Madurai.
5. “**Experimental Physics**”, State level (UGC-DRS sponsored), Jan, 2009, Madurai Kamaraj University, Madurai.
6. “**Advances in Astrophysics and optics**”, State level (UGC sponsored), Feb, 2008, Lady Doak College, Madurai.
7. “**Nano materials**”, (UGC sponsored), National Level, March, 2007, SFR college for women, Sivakasi.
8. “**Thrust Areas in Material Science**”, State level (UGC sponsored), July, 2004, Lady Doak College, Madurai.

