Faculty Profile

Name	**:**	**Dr. Rupali Gajanan Korpe**
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Contact Details	**:**	Mobile: +919767085735 Home:+917083577662 Email: rupalikorpe@gmail.com
Designation	**:**	Assistant Professor
Department	**:**	Department of Physics
Date of birth	**:**	**27th April, 1980**
Area of specialization	**:**	**Digital Electronics**
Date of Appointment	**:**	**20th September, 2019**
Research Field	**:**	**Luminescence Materials**
Academic qualification	**:**	

Examination Passed	Board/ University	Subject / Specialization	Year of passing	Division/ Grade/ Merit
B.Sc.	S.G.B. Amravati University, Amravati	Physics, Mathematics, Electronics	2000	**I st**
M.Sc.	S.G.B. Amravati University, Amravati	Physics	2002	**I st (University 3rd Merit)**
B.Ed.	S.G.B. Amravati University, Amravati	Education	2003	**I st**
M. Phil.	S.G.B. Amravati University, Amravati	Advanced Electronics, Materials Science, Research Methodology	2008	-----
	Title of Dissertation: Study of Inversion Time and Angle of Divergence in the Cyclic Laser.			
Ph.D.	S.G.B. Amravati University, Amravati	Physics	2017	-----
	Title: Development of VUV (Vacuum Ultraviolet) Phosphors for Mercury-Free Lamps.			

Teaching Experience UG and PG : 05 Years

- Shri Shivaji College of Science, Morshi Road, Amravati UG and PG – **02 Years**
- College of Engineering and Technology, Akola – **01 Years**
- Assistant Professor on Clock Hours Basis (CHB) UG and PG, Shri Shivaji College of Arts, Commerce and Science, Akola – **02 Years**

Role in College Activities:

- Member of NAAC Criterion – VII, Innovations and Best Practices Committee.
- Member Local Organizing Committee, National Conference on Recent Advances in Physical and Mathematical Sciences, 18th January, 2020.
- Member Scientific Programme Committee, National Symposium on Innovative Materials and Devices, Organized by Department of Physics, Sant Gadge Baba Amravati University, Amravati, 24-25 June, 2019.

Research Experience : 08 Years

Research Guidance:

- ✓ **Guided 03 M.Sc. Students for their Project.**

Tittle of PG Dissertation:

- Luminescence Studies of Eu^{3+} Doped Y_2O_3 Phosphor.
- Synthesis and Photoluminescence Studies of Carbon Quantum Dots from Citrus Fruits.
- Synthesis and Photoluminescence Studies of Carbon Quantum Dots from Medicinal Plants.

Research Publications:

- **Publications in Journals:**

1. Combustion synthesis and optimization of Tb^{3+} doped $AZr_2(PO_4)_3$ (A^+ = Li, Na, K) phosphors for mercury free lamp and plasma display panels application. R. N. Wankhade, N. S. Bajaj, V. B. Bhatkar, S. K. Omanwar, Journal of the Chinese Advanced Materials Society, 3 (2015) 300-309. Taylor & Francis Publication.

2. Novel Preparation Method and Luminescent Properties of Eu^{3+} Doped YBO_3 Phosphor Under VUV Excitation. R. N. Wankhade, N. S. Bajaj, V. B. Bhatkar , S. K. Omanwar, International Journal of Science, Environment and Technology, 4 (2015) 1.

3. VUV Properties of Eu^{3+}- doped YBO_3 Phosphor Prepared via Aldo-Keto and Solid-State Process. R. N. Wankhade, N. S. Bajaj, G. V. Korpe, V. B. Bhatkar, S. K. Omanwar, Journal of Advances in Physics, 7 (2015) 1897.

4. Low Temperature Stearic Acid Sol-Gel Synthesis of Nano Crystalline MgO. R. N. Wankhade, G. V. Korpe, N. S. Bajaj, V. S. Hingwe, Review of Research / Recent Advances in Nano Technology, 1, (2019) 3.

5. VUV Properties of Eu^{3+}- Doped Y_2O_3 Phosphor Prepared via Solution Combustion and Solid-State Diffusion Method. R. G. Korpe and S. K. Omanwar, Carbon Science and Technology, Communicated.

- **Presentation in seminars, Workshop and Conference:**

1. "Effect of Preparation Methods on Luminescent Properties of Eu^{3+} Doped YPO_4 Phosphor under VUV Excitation", International Conference on Contemporary Research in Chemical and Life Sciences, Rayat Shikshan Sanstha's Sadguru Gadage Maharaj College, Karad, 22 – 23, April, 2015.

2. "VUV Excited Luminescent Studies of CaF_2: Eu Tailored by Carbon Reducing Treatment to Eu ion", National Conference on Luminescence and its Applications (NCLA), CSIR- Indian Institute of Chemical Technology (IICT) Hyderabad. 9-11th January, 2017

3. "Combustion Synthesis and VUV Investigation of $MAl_{12}O_{19}$:Eu (M = Ca, Sr, Ba)-Phosphors**",** UGC Sponsored National Conference on Recent Advances in Chemical Sciences, Department of Chemistry and IQAC, Shri Shivaji College of Arts, Commerce and Science, Akola, February 26 – 27, 2018.

4. "Combustion Synthesis and Optimization of Tb^{3+} - Doped $AZr_2(PO_4)_3$ (A^+ = Li, Na, K) Phosphors for Mercury-Free Lamp and Plasma Display Panels Applications", UGC (CPE) and DST Sponsored International Conference on Recent Trends in Science and Technology, S.S.S.K.R. Innani Mahavidyalaya, Karanja, 22-23, March, 2018.

5. "VUV Properties of Eu^{3+} Doped Y_2O_3 Phosphor Prepared Via Solution Combustion Method and Solid-State Diffusion Method", National Symposium on Innovative Materials and Devices, Department of Physics, Sant Gadge Baba Amravati University, Amravati, 24 – 25, June, 2019.

6. "Green Synthesis of Carbon Quantum Dots from Citric acid and Thiourea" National Conference on Innovative Research inn Science and Technology, Shri Shivaji Science College, Amravati, 17th and 18th December, 2019.

7. "Green Synthesis of Carbon Quantum Dots using Salicylic Acid and Urea" Multidisciplinary Research in Science and Technology for Healthy Lifestyle Management, Shri R. L. T. College of Science, Akola, 24th January, 2020.

8. "Study of VUV Properties of Y_2O_3 Phosphor Prepared Via Solution Combustion Method with different Concentration of Eu^{3+} as Dopant" Recent Advances in Physical and Mathematical Sciences, Organized by Shri Shivaji College of Arts, Commerce and Science, Akola, 18th January, 2020.

- **Participation in Seminars, Workshop and Conference:**

1. Participated in UGC Sponsored, National Seminar on Current Trends in Physical and Electronics Research, Organized by Department of Physics and Electronics, Shri Shivaji College of Arts, Commerce and Science, Akola on 28th March, 2010.

2. Participated in One Day International Conference on Impact of Values Based on M. K. Gandhi, Pt. J. Nehru, Dr. B. R. Ambedkar and Dr. Panjabrao Deshmukh's Philosophies in Present Situation" Organized by Shri Shivaji College of Arts, Commerce and Science, Akola, 21st January, 2020.