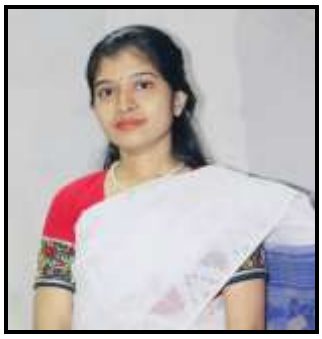
# Dr. Nupur Bhakta



**Contact: Email id: nupurbhaktadgc@gmail.com**

**Qualification: M.Sc., Ph.D**

**Designation: Assistant Professor**

**Teaching Experience (in years): UG: 6 years**

**Research Experience (in years): 8 years**

**Date of Joining Present Institution: 24.11.2015**

**Institutions/Companies Previously Served:**

| Name of Institution/Company | Designation | Tenure | |
|---|---|---|---|
| | | From (DD-MM-YYYY) | To (DD-MM-YYYY) |
| **Durgapur Government College** | **Assistant Professor** | **24.11.2015** | **till date** |

**Examinations cleared:** NET JRF (2013 and 2014) & GATE (2013)

**Specialization/Research Interest: Spintronics systems, Multiferroic systems, Magnetic Nanoparticles.**

## Courses taught

| | B.Sc Honours | B.Sc. Program |
|---|---|---|
| **Semester-I** | Mechanics | Mechanics |
| **Semester-II** | - | Electricity and Magnetism |
| **Semester-III** | - | Thermal Physics-I |
| **Semester-IV** | Electromagnetic Theory | - |
| **Semester-V** | Thermal Physics-II | - |
| **Semester-VI** | Condensed Matter Physics | - |

## Online Mode of Teaching

Using MoodleCloud to share study materials with students. Video Conference app has been used for Video lecture and to interact with students.

## Publications

**Journals:**

1. **N. Bhakta**, A. Mitra, A. Mallick, S. Sadhukhan, A. Bajorek, P.K. Chakrabarti* **(2021)**, Rietveld analysis, enhanced magnetic, dielectric and ferroelectric properties of $Gd^{3+}$ and $Ti^{4+}$ co-doped $LaFeO_3$ multiferroic, *Materials Science and Engineering B* 262 (2021) 114810. https://doi.org/10.1016/j.mseb.2020.114810
2. **N. Bhakta**, A. Bandyopadhyay, A. Bajorek, P. K. Chakrabarti* **(2019)**, Microstructural analysis, dielectric properties and room temperature magnetic ordering of Pr-doped ZnO nanoparticles, *Applied Physics A (Materials Science & Processing)*, 125:811. https://doi.org/10.1007/s00339-019-3016-8

3. **N. Bhakta**, P. K. Chakrabarti* **(2019)**, Defect induced room temperature ferromagnetism and optical properties of (Co, Y) co-doped ZnO nanoparticles, *Journal of Magnetism and Magnetic Materials,* 485, 419-426. https://doi.org/10.1016/j.jmmm.2019.03.106
4. **N. Bhakta**, A. Das, D. Das, K. Yoshimura, A. Bajorek, P.K. Chakrabarti* **(2019),** Microstructural analysis, optical and magnetic properties of nanocrystalline Ni doped $Dy_2O_3$, *Materials Chemistry and Physics,* 227, 332–339. https://doi.org/10.1016/j.matchemphys.2019.02.026
5. **N. Bhakta**, P. K. Chakrabarti* **(2019)**, XRD analysis, Raman, AC conductivity and dielectric properties of Co and Mn co-doped $SnO_2$ nanoparticles, *Applied Physics A (Materials Science & Processing),* 125:73. https://doi.org/10.1007/s00339-018-2370-2
6. **N. Bhakta**, T. Inamori, R. Shirakami, Y. Tanioku, K. Yoshimura, P.K. Chakrabarti* **(2018)**, Room temperature magnetic ordering and analysis by bound magnetic polaron model of $Yb^{3+}$ doped nanocrystalline zinc oxide ($Zn_{0.98}Yb_{0.02}O$), *Materials Research Bulletin,* 104, 6-14. https://doi.org/10.1016/j.materresbull.2018.03.020
7. A. Mitra, A.S. Mahapatra, A. Mallick, A. Shaw, **N. Bhakta**, P.K. Chakrabarti* **(2018)**, Improved magneto-electric properties of $LaFeO_3$ in $La_{0.8}Gd_{0.2}Fe_{0.97}Nb_{0.03}O_3$, *Ceramics International*, 44, 4442-4449. http://dx.doi.org/10.1016/j.ceramint.2017.12.045
8. A. Bandyopadhyay, **N. Bhakta**, S. Sutradhar, B. J. Sarkar, A. K. Deb, S. Kobayashi, K. Yoshimura and P. K. Chakrabarti* **(2016),** Microstructure investigation, optical properties and magnetic phase transition of $Tm^{3+}$ substituted nanocrystalline ZnO ($Zn_{0.95}Tm_{0.05}O$), *RSC Adv.* 6, 101818–101826. http://dx.doi.org/10.1039/c6ra16194d

**Books:**

1. **Nupur Bhakta (2020),** Recent Developments in Nonlinear Dynamics and its Applications, ISBN: 978-81-944611-1-1, Published by BOOK CENTRE, Auroma Market, Simantapally, Santiniketan-731235, India.

## Paper Presentation in seminar/conference/symposium/workshop/discussion meeting

1. Poster Presentation on "*Magnetic behaviour of Co-Y co-doped ZnO nanoparticles* (**Nupur Bhakta**)'' in the International Conference on Recent Developments in Nonlinear Dynamics and its Applications (CRDNDA-18) held on March 12-14, 2019 organized by Department of Physics, Durgapur Government College, Durgapur, W.B.
2. Poster Presentation on "*Rietveld analysis and dielectric properties of Co and Mn co-doped $SnO_2$ nanoparticles* (**Nupur Bhakta**)'' in the National Seminar on Recent Trends in Condensed Matter Physics including Laser Applications (NSCMPLA-2019), held on January 16-18, 2019 organized by Department of Physics, The University of Burdwan, W.B.
3. Poster Presentation on "*Rietveld analysis and magnetic properties of Ni doped $Dy_2O_3$ nanoparticles* (**Nupur Bhakta**)'' in the ***A National Conference on Condensed Matter Physics (CMDAYS-18)*** held on August 29-31, 2018 organized by Department of Physics, The University of Burdwan, W.B.
4. Poster Presentation on "*Magnetic behavior of $Zn_{1-x}Yb_xO$ (x=0.0 and 0.02)* (**Nupur Bhakta,** A. Mitra, P. K. Chakrabarti)" in the ***National Seminar on Recent trends in condensed Matter Physics including Laser Applications (NSCMPLA-2017)*** held on March 8-9, 2017 organized by Department of Physics, The University of Burdwan, W.B.

## Participation in Faculty Development Programmes

1. UGC sponsored "Online Refresher Course in Disaster Management" from 28/09/2020 to

12/10/2020 organised by UGC-HRDC, Kumaun University, Nainital (Uttarakhand).

2. UGC sponsored "Online Guru-Dakshta, Faculty Induction Programmes (FIP)" from 27/07/2020 to 25/08/2020 organised by the UGC-HRDC, Gujarat University, Ahmedabad.
3. MHRD sponsored (under the PMMMNMTT scheme) "Online Faculty Development Programme on Advanced Concepts for Developing MOOCS" from 02/07/2020 to 17/07/2020 organised by Teaching Learning Centre and Research Development and Services Cell, Ramanujan College, University of Delhi.

## Organization of events (Durgapur Government College)

**1.** International Conference on ''*Recent Developments in Nonlinear Dynamics and its Applications (CRDNDA-18)*'' organized by Department of Physics, Durgapur Government College held on March 12-14, 2019 (**Nupur Bhakta**, *Treasure of Organizing Committee, Department of Physics*)

**2.** National Conference on "Nonlinear Dynamics and its Applications (CNDA-16)" organized by Department of Physics, Durgapur Government College held on February 07-09, 2017 (**Nupur Bhakta**, *Treasure of Organizing Committee, Department of Physics*)

## Participation in committees of Durgapur Government College since 2017

1. NAAC Steering Committee (**Nupur Bhakta**, Member-2020-21)
2. RUSA PMU Unit (**Nupur Bhakta**, Member-2018-19, 2019-20, 2020-21)
3. UG Odd Examination Cell (**Nupur Bhakta**, Member-2020-21)
4. Central Purchase and e-tender committee (**Nupur Bhakta**, Member-2019-20)
5. UG Even Semester Examination Cell (**Nupur Bhakta**, *Jt. Convener Sem-6 & Member (Sem-2,4)* 2019-20)
6. Girls' Common Room Monitoring Unit & Students' Health & Hygiene Advisory Sub-Committee (**Nupur Bhakta**, Member- 2019-20)
7. Poster, Banner, Flex Sub-Committee for celebration of Bi-Centenary Birth Anniversary of Pandit Iswar Chandra Vidyasagar (**Nupur Bhakta**, Member- 2019)
8. Government e-market place (**Nupur Bhakta**, Member- 2018-19)
9. Admission Sub-Committee (**Nupur Bhakta**, Member- 2018-19)
10. Journal and Publication Committee (**Nupur Bhakta**, Member- 2018-19)
11. Essay Competition Sub-Committee for the celebration of 'Sampriti Saptaha' (**Nupur Bhakta**, Member- 2018)
12. Committee for Gender Sensitization and Protection against Sexual Harassment at Work Place (**Nupur Bhakta**, Member- 2017-18)
13. Kazi Nazrul University 1st Semester Examination Sub-Committee (**Nupur Bhakta**, Member-2017-18)