# Faculty - Biodata

## Personal Information

1. Name: Dr. Kakali Sarkar
2. Mobile Number: 7003014721/ 8906757823
3. Email: kakaliece.nano@gmail.com
4. Date of Birth: 23/01/1987
5. Gender: Female
6. Father's Name: Hayma Pada Sarkar
7. Hobbies: Writing Research Articles; Listening music

## Academic Qualifications

| Degree | Specialization | Institution | Year of Completion | CGPA /Percentage | Thesis/Project Title |
|---|---|---|---|---|---|
| Ph.D. | Dielectric Materials/ Nanotechnology | Jadavpur University, Kolkata | 2017 | 10.00 | Synthesis of Metal Niobate Ceramics Materials and its Morphological Characterization & Property Evaluation |
| M.Tech | Nano Science and Technology | Jadavpur University, Kolkata | 2012 | 9.00 | Synthesis, characterization and property evaluation of Ni and Co doped bismuth ferrite multiferroic materials |
| B.Tech | Electronics and Communication Engineering | HETC, Hooghly, W. B | 2009 | 8.01 | Temperature Dependent Speed Regulator of Fan |

## Professional Experience

1. Current Designation: Assistant Professor

2. Department: Electronics and Communication Engineering

3. Total Teaching Experience (Years): 1 Year 5 Months 16 Days

4. Subjects Taught: Semiconductor Physics & Devices (SP & D); Electrical and Electronic Material (EEM); Microprocessors

5. Industry/Research Experience:

- Organization: Tata Consultancy Services, Mumbai-Hyderabad
- Designation: ASE (Assistant System Engineer)
- Duration: 1 year

## Additional Responsibilities at VVIT

1. Training & Placement Officer: No

2. Hostel Warden: No

3. Other Responsibilities: i. Worked as Principal of VVIT from July 2023 to June 2024.

ii. NAAC Co-Ordinator/ Secretary of IQAC Cell (June 2024 onwards)

## Technical Skills

1. Simulation Software: NA

2. Programming Languages: C and C++

3. Professional Certifications:

- Certification 1: One Week International FDP at Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (Year: 2024)
- Certification 2: Online FDP (ATAL) on "Sensors Technology" at NIT Jamshedpur (Year: 2020)
- Certification 3: 5-days Workshop on "Research Tools and Techniques" at NIT Puducherry (Year 2020)

## Research Work and Publications

1. Research Interests: Condensed Matter Physics; Hydroelectric cells

2. Journals Published: 16

- Title: Structural dependence of magnetic, luminescence and band gap of Li-Mg ferrite nanomaterials; https://doi.org/10.1007/s42247-024-00912-w (Year: 2024)

- Title: Luminescence and dielectric investigations of crystalline niobate nanoceramics prepared through aqueous chemical process; https://doi.org/10.1088/1402-4896/ad7999 (Year: 2024)

-Title: A Review on Developments in Spinel Ferrite Nanomaterials: Synthesis, Characterization, and Diverse Applications; https://doi.org/10.47392/IRJAEH.2024.0228 (Year: 2024)

-Title: A Novel Ag-MgFe2O4 nanocomposite based Hydroelectric Cell: Green energy source illuminating the future; https://doi.org/10.1016/j.jallcom.2024.175032 (Year: 2024)

-Title: Enhancing the structural; optical; magnetic and ferroelectric properties of perovskite BiFeO3 through metal substitution; https://doi.org/10.1016/j.chphi.2024.100478 (Year: 2024)

-Title: Tailoring the structural, optical, and dielectric properties of nanocrystalline niobate ceramics for possible electronic application; https://dx.doi.org/10.47392/irjash.2023.001 (Year: 2023)

-Title: Investigation of opto-electronic properties and morphological characterization of magnesium niobate ceramics synthesized by two-stage process; https://doi.org/10.1016/j.matpr.2021.02.476 (Year: 2022)

-Title: Studies of structural, electrical and optical properties of MgNb2O6-Mg4Nb2O9 nanocomposite for possible opto-electronic applications; https://doi.org/10.1016/j.matpr.2020.12.524 (Year: 2021)

-Title: Sol-gel assisted synthesis and tuning of structural, photoluminescence, magnetic and multiferroic properties by annealing temperature in nanostructured zinc ferrite; https://doi.org/10.1016/j.matpr.2021.05.215 (Year: 2021)

-Title: Synthesis and investigation of properties of nanostructured cubic PMN ceramics for possible applications in electronics; https://doi.org/10.1007/s10854-020-03988-2 (Year: 2020)

-Title: Synthesis, Characterization and Property Evaluation of Single Phase Mg4Nb2O9 by two stage process; https://doi.org/10.1080/0371750X.2016.1237895 (Year: 2017)

-Title: Synthesis, Characterization and Property Evaluation of Single Phase $MgNb_2O_6$ by Chemical route; (Year: 2016)

-Title: Characterization and Evaluation of Property of Columbite - $MgNb_2O_6$ Synthesized by Chemical Route; https://doi.org/10.1007/s40033-015-0094-4 (Year: 2015)

-Title: Structural, electrical and magnetic behaviour of undoped and nickel doped nanocrystalline bismuth ferrite by solution combustion route;
https://doi.org/10.2298/PAC1501053S (Year: 2015)

-Title: Effect of Nickel and Cobalt Doping on Nano Bismuth Ferrite Prepared by the Chemical Route; https://doi.org/10.1007/BF03401099 (Year: 2015)

-Title: Synthesis, Characterization and Studies on Optical, Dielectric and Magnetic Properties of undoped and Cobalt doped Nanocrystalline Bismuth Ferrite;
https://doi.org/10.1007/s40033-014-0051-7 (Year: 2014)

3. Patents (if any):
   - Granted: Nil
   - Published: Nil

## Reviewer/Conference Participation

1. Journals Reviewed For: Materials Letters (Elsevier); Discover Applied Sciences (Springer)
2. Conferences Attended: ICASEM-2024, VVIT Purnea; ICASET-2023, VVIT Purnea; ICMET 2022, VVIT Purnea; TIME 2021, 2021, SISTEC, Bhopal; ICAMME 2021, 2021, MANIT, Bhopal; ICMPC 2020, IIT, Indore
3. Workshops Organized: Nil

## Professional Profiles (Optional)

1. Google Scholar: https://scholar.google.co.in/citations?user=KBPMSogAAAAJ&hl=en
2. ResearchGate: https://www.researchgate.net/profile/Kakali-Sarkar
3. ORCID: https://orcid.org/0000-0003-3717-7734

## Declaration

I, Dr. Kakali Sarkar, hereby declare that the above information is true and correct to the best of my knowledge.


Date: 27-10-24

Place: Purnea