

Detailed Bio data

- Name & full correspondence address:** Dr. Vinita
Assistant Professor,
Department of Chemistry,
Deen Dayal Upadhyaya Gorakhpur University
Gorakhpur-273009
- Email(s) and contact number(s) :** vinitavermabhu@gmail.com
vinita.chem@ddugu.ac.in
Mob No. +918808988521
- Institution:** Department of Chemistry, DDU Gorakhpur University,
Gorakhpur
- Date of Birth:** 01-01-1990
- Gender:** F
- Whether differently abled:** No

7. Academic Qualifications (Undergraduate Onwards):

| S.No. | Degree | University | Year | Subjects | Percentage |
|-------|--------|---|------|------------------------|--|
| 1. | B.Sc. | Banaras Hindu University (BHU), Varanasi, UP, India | 2011 | Chemistry Hons | 67.60% (first class) |
| 2. | M.Sc. | Banaras Hindu University (BHU), Varanasi, UP, India | 2013 | Inorganic Chemistry | 71.30% (first class) |
| 3. | Ph.D. | Indian Institute of Technology, BHU, Varanasi, UP, India | 2019 | Materials Chemistry | 88.80% (Ph.D. Course Work) (first class) |

8. Ph.D. thesis title, Guide Name, Institute/Organization/University, Year of Award:

Ph.D.: Materials Science
Thesis Title: *Synthesis of metal nanomaterials and coordination polymers for catalytic & sensing applications.*
Thesis Supervisor: Prof. Rajiv Prakash
Institute/University: Indian Institute of Technology, BHU, Varanasi, India.
Date of Ph.D. Registration: 23rd July 2015
Date of Thesis Submission: 28th June 2019
Year of Award: 08th November 2019

9. Teaching experience (in chronological order)

| S. No. | Organization | Designation | From | To | Pay Scale |
|--------|--------------|-------------|------|----|-----------|
|--------|--------------|-------------|------|----|-----------|

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|----|--|---------------------|------------|-------|--------------|
| 1. | Department of Chemistry, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur-273009 | Assistant Professor | 04-07-2018 | Cont. | 68900-205500 |
|----|--|---------------------|------------|-------|--------------|

10. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

| S.No | Name of Award | Awarding Agency | Year |
|------|--|--------------------------|----------------|
| 1. | GATE 2015 | MHRD | 2015 |
| 2. | CSIR-JRF 2015 | CSIR | 2015 |
| 3. | GATE 2016 | MHRD | 2016 |
| 4. | CSIR-JRF 2016 | CSIR | 2016 |
| 5. | Best Poster Award | NSC 45 Conference | 2017 |
| 6. | Best Poster Award | IIT BHU | 2018 |
| 7. | Runner-up Award for best research work | IIT BHU | 2018 |
| 8. | Best Teacher Award | DDU Gorakhpur University | 05/09/ 2022 |

11. Publications (List of SCI journals, in year wise descending order)

| S.No | Author(s) | Title | Name of Journal | Volume | Page | Year |
|------|---|---|-------------------------|------------|-------------|-----------------|
| 1. | Vinita, Narsingh R. Nirala, Rajiv Prakash | Facile and sensitive colorimetric assay of choline based on AuNps@WS2-QDs as a peroxidase mimetic. | Microchemical journal | 167 | 106312 | 2021 |
| 2. | Vinita, Madhu Tiwari, Neha Agnihotri, Monika Singh, Akhilesh Kumar Singh, and Rajiv Prakash | Nanonetwork of Coordination Polymer AHMT-Ag for the Effective and Broad Spectrum Detection of 6-Mercaptopurine in Urine and Blood Serum | ACS OMEGA | 4 | 16733-16742 | 2019 |
| 3. | Vinita, Narsingh R. Nirala, Rajiv Prakash | One step synthesis of AuNPs@MoS2-QDs composite as a robust peroxidase- mimetic for instant unaided eye detection of glucose in serum, saliva and tear | Sensors and Actuators B | 263 | 109-119 | 2018 |
| 4. | Vinita, Madhu Tiwari, Rajiv | Colorimetric detection of picric | Applied Surface | Volume 449 | Pages | 15 August 2018, |

| | | | | | | |
|----|--|---|-------------------|--------------------------------------|---------|------|
| | Prakash | acid using silver nanoparticles modified with 4-amino-3-hydrazino-5-mercapto-1,2,4-triazole | Science | doi.org/10.1016/j.apsusc.2018.01.198 | 174-180 | |
| 5. | Vinita, Narsingh R. Nirala, Madhu Tiwari, Rajiv Prakash | A nanoporous palladium(II) bridged coordination polymer acting as a peroxidase mimic in a method for visual detection of glucose in tear and saliva | Microchimica Acta | 185(4) : 245 | 1-10 | 2018 |
| 6. | Narsingh R. Nirala, Vinita, Rajiv Prakash | Quick colorimetric determination of choline in milk and serum based on the use of MoS ₂ nanosheets as a highly active enzyme mimetic | Microchimica Acta | 185(4):224 | 1-8 | 2018 |
| 7. | Narsingh R. Nirala, Gaurav Khandelwal, Brijesh Kumar, Vinita, Rajiv Prakash, Vinod Kumar | One step electro-oxidative preparation of graphene quantum dots from wood charcoal as a peroxidase mimetic | Talanta | 173 | 36–43 | 2017 |

12. Detail of patents.

| S.No | Patent Title | Name of Applicant(s) | Patent No. | Filed Date | Agency/ Country | Status |
|------|---|---|--------------|----------------|-----------------|---------------|
| 1 | A portable biosensing system and method for visual detection of glucose in biological fluids. | Rajiv Prakash, Narsingh R. Nirala, Vinita | 201811010352 | March 21, 2018 | India | Granted(2022) |
| 2 | A portable Test kit for detection of glucose in biological fluids and a | Rajiv Prakash, Vinita, Narsingh R. Nirala | 201811009239 | March 13, 2018 | India | Granted(2022) |

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|--|-----------------|--|--|--|--|--|
| | method thereof. | | | | | |
|--|-----------------|--|--|--|--|--|

13. Books/ Reports/Chapters/General articles etc

| Title of the book | Title of chapter | Name and Address of publisher | Authors name | ISBN Number | Year of publication |
|--|---|--|--------------------------------------|-----------------------------------|---------------------|
| Environmental aspect of alternative energy sources | Role of Coordination polymers in fuel cell application | Bharti Publications 4819/24, 3rd Floor, Mathur Lane Ansari Road, Darya Ganj, New Delhi-110002 Phone: 011-23247537 Mobile : +91-989-989-7381 E-mail : bhartipublications@gmail.com info@bharatipublications.com Website : www.bhartipublications.com | Vinita | 978-93-89657-43-2 | 2020 |
| Versatile Solicitations of Material Science in Diverse Science Fields | Nanomaterials as Intrinsic Enzyme Mimetic Catalysts | Nova Science Publishers | Vinita | 978-1-53619-763-1 | 2021 |
| Emerging nanomaterials and their impact on society in the 21st century | Nanoemulsions: Preparation, Properties and Applications | Materials Research Foundations, Vol. 135, pp 200-225, 2023 DOI: https://doi.org/10.21741/9781644902172-9 | Preeti Gupta, Vinita, S.S. Das | 978-1-64490-216-5 | 2023 |

14. Any other relevant information

Seminar/ Conference Paper Presented:

- (i) National Seminar on Molecules to Materials for Sustainable development, Vinita, Department of Chemistry DDU Gorakhpur University, (25-26 March 2022)
- (ii) 2nd National Seminar on Applied Research organized by RESEARCH DEVELOPMENT CELL SHARDA UNIVERSITY on **28-30 December 2022**
- (iii) Coordination Polymer for Catalysis and Sensing, **Vinita, Oral Presentation** in National Seminar on Applied Research held online at Research Development Cell, Sharda University, Greater Noida, UP, India on 21-22 October **2021**.
- (iv) Functional Nanomaterials in Catalysis and Sensing Applications, **Vinita, Oral Presentation** in International Conference on Sustainable and Futuristic Materials (SFM-2021) at Department of Chemistry, Kamla Nehru Mahavidhyalaya, Nagpur on 29-30 November, **2021**.
- (v) Deliverd **Invited lecture** on "Importance of Innovation in Medical Diagnosis and Treatment." Organized by Department of Chemistry, K.N. Govt. P.G. College, Gyanpur, Bhadohi under DBT Star College Scheme on 31st March 2021.

- (vi) **Oral presentation in the “International Conference on Futuristic Materials (ICFM-20)”** organized by Department of Physics DDU Gorakhpur University India (Dec 18-20, 2020)
- (vii) **Oral presentation in the “National Conference on Omics for Food, Health and Environment” (OFHE-2020)** organized by Department of Biotechnology DDU Gorakhpur University India (Feb 14-15, 2020) on the topic “Nanomaterials acting as a peroxidase mimic in Biosensing.
- (viii) **Oral presentation in the “National Conference on Smart And Sustainable Technology” (NCSMST-2019)** organized by Department of Chemistry, DDU Gorakhpur University India (Feb 23-24, 2019) on the topic Nanomaterials acting as a peroxidase mimic for visual detection of glucose.
- (ix) **Oral presentation in 4th International Conference on Electrochemistry** organized by Rome, Italy (June 11-12, 2018) on topic Nanocrystalline scaffold of AMT-Ag for Electro-sensing of ciprofloxacin drug in biological fluid and pharmaceutical formulation.
- (x) **Poster presentation in Institute day 2018 on Nanomaterials** organized by Indian Institute of Technology, BHU, Varanasi.(2018)
- (xi) **Poster presentation in International Conference on Emerging Trends in Chemical Sciences (ICETCS 2018)** Conference organized by Department of Chemistry, Deen Dayal Upadhyay University, Gorakhpur, India (Feb 24-25, 2018)
- (xii) **Oral presentation in the 4th international conference on Nanoscience and Nanotechnology (ICONN 2017)** organized by SRM University India (Aug 9-11, 2017)
- (xiii) **Poster presentation in 45th national seminar on crystallography (NSC 45)** Conference organized by School of Materials Science and Technology, IIT, BHU, Varanasi, India (July 9-12, 2017)
- (xiv) **Poster presentation in Institute day 2017 on Nanomaterials and Nanotechnology** organized by Indian Institute of Technology, BHU, Varanasi, UP, India (Feb 25-26, 2017)
- (xv) **Poster presentation in National conference on energy, environment and its impact on society (NCEEIS-2017)** organized by Faculty of Science, K.N.G.P.G. College, Gyanpur, Bhadohi, UP, India (Jan 19-20, 2017)
- (xvi) **Poster presentation on 4th international conference on advances in materials and materials processing (ICAMMP-IV)** organized by department of metallurgical and Materials Engineering, IIT, Kharagpur (Nov 5-7, 2016).

Workshop/Seminar/Webinar attended:

- (1) **Science Academics Lecture Workshop on Molecular Spectroscopy: Theory, Instrumentation and Application** organized by department of Chemistry, Faculty of Science, Banaras Hindu University (2-3 March, 2012)
- (2) **15th CRSI National Symposium in Chemistry** organized by department of chemistry, Faculty of Science, Banaras Hindu University, Varanasi, India (1-3 Feb, 2013)
- (3) **7th RSC-CRSI Symposium in chemistry** organized by department of chemistry, Faculty of science, Banaras Hindu University, Varanasi, India (31 Jan, 2013)
- (4) **Global Initiative for academic Networks** organized by Indian Institute of Technology, BHU, Varanasi, India (19-23 Dec, 2016)
- (5) **Webinar on ‘CONTRIBUTION OF INDIAN WOMEN SCIENTISTS IN CHEMISTRY ’**Organized by Vigyan Bharti Malwa Prant, School of Studies in

Chemistry & Biochemistry and Institute of Pharmacy, Vikram University, Ujjain, M. P., India (Oct 5, 2020)

- (6) Social, Cultural and Scientific Dimension of Nath Panth organization MYGSGSP, Gorakhpur at the occasion of 6th International Day of Yoga (June 21-22, 2020).
- (7) webinar “Leveraging Science and Technology to Combat COVID-19, May 23-24, 2020” organized by Faculty of Science, DDU Gorakhpur University, Gorakhpur via virtual-platform.
- (8) Workshop on Faculty Leadership Summit, 5-6 September, 2024 organized by Global strategy for society programs, American Chemical Society at DDU Gorakhpur University Gorakhpur.

Other administrative responsibilities

- (1) Member of **IQAC** of DDUGU, Gorakhpur since October 2019.
- (2) **Assistant Dean of Students Welfare** (ADSW) of DDUGU, Gorakhpur since September 2018.

Membership of professional bodies

- (1) Life membership of The Indian Science Congress Association, Kolkata (Membership number L39594)

Place & date:

Name & Signature of the investigator



Gorakhpur, India
Dec 2024

Dr. Vinita
Assistant Professor,
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Deen Dayal Upadhyaya Gorakhpur
University
Gorakhpur, UP – 273009, India.