

### **Detailed Bio data**

- 1. Name & full correspondence address:** Dr. Vinita  
Assistant Professor,  
Department of Chemistry,  
Deen Dayal Upadhyaya Gorakhpur University  
Gorakhpur-273009
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Mob No. +918808988521
- 3. Institution:** Department of Chemistry, DDU Gorakhpur University,  
Gorakhpur
- 4. Date of Birth:** 01-01-1990
- 5. Gender:** F
- 6. 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.	B.Ed	Banaras Hindu University (BHU), Varanasi, UP, India	2015	Life Sciences	82.90% (first class)
4.	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:** 23<sup>rd</sup> July 2015

**Date of Thesis Submission:** 28<sup>th</sup> June 2019

**Year of Award:** 08<sup>th</sup> November 2019

**9. Teaching experience (in chronological order)**

S. No.	Organization	Designation	From	To	Pay Scale
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	Sensors and Actuators B	263	109-119	2018

		tear				
4.	Vinita, Madhu Tiwari, Rajiv Prakash	Colorimetric detection of picric acid using silver nanoparticles modified with 4-amino-3-hydrazino-5-mercapto-1,2,4-triazole	Applied Surface Science	Volume 449 doi.org/10.1016/j.apsusc.2018.01.198	Pages 174-180	15 August 2018,
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 <sub>2</sub> 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	Rajiv Prakash, Vinita, Narsingh R.	201811009239	March 13, 2018	India	Granted(2022)

	glucose in biological fluids and a method thereof.	Nirala				
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### 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: <a href="https://doi.org/10.21741/9781644902172-9">https://doi.org/10.21741/9781644902172-9</a>	Preeti Gupta, Vinita, S.S. Das	<a href="#">978-1-64490-216-5</a>	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 31<sup>st</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> international conference on Nanoscience and Nanotechnology (ICONN 2017)** organized by SRM University India (Aug 9-11, 2017)
- (xiii) Poster presentation in **45<sup>th</sup> 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 **4<sup>th</sup> 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) **15<sup>th</sup> CRSI National Symposium in Chemistry** organized by department of chemistry, Faculty of Science, Banaras Hindu University, Varanasi, India (1-3 Feb, 2013)
- (3) **7<sup>th</sup> 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 6<sup>th</sup> 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:**

Gorakhpur, India  
Dec 2024

**Name & Signature of the investigator**



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University  
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