CURRICULUM VITAE

Dr. Bhuneshwari Sahu

M.Sc., M.Phil., Ph.D. (Chemistry)

Mobile no: 7898754055, 6264301051 Email Id: bhuneswarisahu90@gmail.com



CAREER OBJECTIVE

To work on a challenging job profile which provides an opportunity to enhance my knowledge skills, this could provide me an insight into new aspects so that it would be helpful for my career.

EDUCATIONAL DETAILS

Course	Institute	Board / University	Year	Marks	% marks / CGPA	Remark
Ph.D (Analytical and Nanochemistry)	School of Studies in Chemistry, Pt. R.S.U. Raipur (C.G.)	Pt. Ravishankar Shukla University Raipur (C.G.)	2018-2022 (December)			Awarded
M.Phil. (Chemistry)	School of Studies in Chemistry, Pt. R.S.U. Raipur (C.G.)	Pt. Ravishankar Shukla University Raipur (C.G.)	July 2018	408/500	81.60	First Division
M.Sc. (Chemistry)	School of Studies in Chemistry, Pt. R.S.U. Raipur (C.G.)	Pt. Ravishankar Shukla University Raipur (C.G.)	August, 2017	1753/2400	71.63 %	First Division
B.Sc. (CBZ)	Govt. N. P. G. College of Science, Raipur	Pt. Ravishankar Shukla University Raipur (C.G.)	July, 2015	1149/1800	63.83 %	First Division
12 th (Biology)	Govt. Girls H. S. School Choubey Colony, Raipur	Chhattisgarh Board of Secondary Education	2012	379/500	75.8 %	First Division
10 th	Indian Convent School, Raipur	Chhattisgarh Board of Secondary Education	2010	440/600	73.33 %	First Division

RESEARCH PUBLICATIONS

National/International Journal

S. No.	Title	Name of Journal
1.	A simple and cost-effective paper-based and colorimetric dual-mode	RSC Advances
	detection of arsenic (III) and lead (II) based on glucose	@ RSC (Published)
	functionalized gold nanoparticles@2021, 11, 20769- 20780.	(I.F 4.036)
	(Bhuneshwari Sahu, Ramsingh Kurrey, Manas Kanti Deb*, Kamlesh	
	Shrivas, Indrapal Karbhal and Beeta Rani Khalkho)	
2.	$\alpha\text{-}Cyclodextrin$ functionalized silver nanoparticles as colorimetric	Colloids and Surfaces A:
	sensor for micro extraction and trace level detection of chlorpyrifos	Physicochemical and Engineering Aspects @
	pesticide in fruits and vegetables@654, 2022, 129947.	Elsevier (Published)
	(Bhuneshwari Sahu, Ramsingh Kurrey, Manas Kanti Deb*, Beeta Rani	(I.F 5.518)
	Khalkho)	
3.	Recognition of malathion pesticides in agricultural samples by using	Talanta@ Elsevier
	α -CD functionalized gold nanoparticles as a colorimetric sensor.	(Published)
	(Bhuneshwari Sahu, Ramsingh Kurrey, Manas Kanti Deb*, Beeta Rani	(I.F 6.057)
	Khalkho, Suryakant Manikpuri)	
4.	Colorimetric and paper-based detection of lead using PVA capped	Microchemical Journal
	silver nanoparticles: Experimental and theritical approach@150	@ Elsevier (Published)
	(2019) 104156	(I.F4.821)
	(Kamlesh Shrivas, <u>Bhuneshwari Sahu</u> , Manas Kanti Deb, Santosh Singh	
	Thakur, Sushama Sahu, Ramsingh Kurrey, Tushar Kant, Tarun Kumar	
_	Patle, Rajendra Jangde)	
5.	Silver nanoparticles for selective detection of phosphorus pesticide	
	containing π -conjugated pyrimidine nitrogen and Sulphur moieties	-
	through non-covalent interactions@2019, 275, 297–303.	(Published)
	(Kamlesh Shrivas, Sushama Sahu, <u>Bhuneshwari Sahu</u> , Ramsingh Kurrey,	(I.F 6.633)
	Tarun Kumar Patle, Tushar Kant, Indrapal Karbhal, Manmohan L.	
_	Satnami, Manas Kanti Deb, Kallol Kumar Ghosh)	A 1 2 1 1
6.	Smartphone coupled with paper based chemical sensor for on-site	Analytical and
	determination of iron (III) in environmental and biological	Bioanalytical Chemistry
	samples@ DOI 10.1007/s00216-019-02385-x .	@ Springer (Published)
	(Kamlesh Shrivas, Monisha, Tushar Kant, Indrapal Karbhal, Ramsingh	(I.F 4.478)
	Kurrey, Bhuneshwari Sahu, Deepak Sinha, Gautam Kumar Patra)	

7. A simple and convenient dry-state SEIRS method for glutathione New Journal of Chemistry detection based on citrate functionalized silver nanoparticles in @ RSC (Published) human biological fluids@ 2021,45, 1339-1354. (I.F.-3.925)(Beeta Rani Khalkho, Ramsingh Kurrey, Manas Kanti Deb, Indrapal Karbhal, Bhuneshwari Sahu, Shubhra Sinha, Yaman Kumar Sahu and Vikas Kumar Jain) 8. Simple and cost effective polymer modified gold nanoparticles Journal of Ravishankar based on colorimetric determination of L-cysteine in food University-B (Published) samples@2021, 34 (1), 41-57. (Beeta Rani Khalkho, Anushree Saha, Bhuneshwari Sahu, Manas Kanti Deb*) 9. Functionalized Gold Nanoparticles Assisted Micro Citrate Spectrochimica Acta Part Extraction of L-cysteine in Milk and Water Samples using Fourier A: Molecular and Transform Infrared Spectroscopy@267, 2022, 120523. Biomolecular (Beeta Rani Khalkho, Manas Kanti Deb.* Ramsingh Kurrey, Spectroscopy @ Elsevier Bhuneshwari Sahu, Anushree Saha, Tarun Kumar Patle, Ravishankar (I.F.- 4.831) Chauhan, Kamlesh Shrivas)

10. Recent advances on analytical methodologies for screening and detection of biophenols and their challenges: A brief review. (Anushree Saha, Ramsingh Kurrey, Shubhra Sinha, Yogeshwari Sahu, Madhuri Khute, **Bhuneshwari Sahu**)

Results in Chemistry@ Elsevier (Published)

Coupling reagent assisted microextraction combined with UV-Vis Communicated

spectrophotometry and FTIR for detection of organophosphorus pesticide in agricultural and environmental samples. (Chhaya Bhatt, Ramsingh Kurrey*, Manish Kumar Rai*, Bhuneshwari

SEMINAR/CONFERENCES & WORKSHOP ATTENDED

Paper present in National/International Conferences

Sahu, Joyce Rai, Joanna Rai)

11.

S.No.	Name	Place and Date			
	Conferences				
1.	104 rd Indian Science Congress	S. V. University of Tirupati, Tirupati			
		(India). January 3-7, 2017			
2.	21 th CRSI National Symposium in Chemistry	Department of Chemistry, Pt. R. S.			
	· ·	University, Raipur (India).			
		February 1-4, 2018			
3.	National seminar on recent developments in chemical	Department of Chemistry, IGNTU,			
	sciences, RDCS-2018	Amarkantak, M.P.			
		February 23-24, 2018			

5.	advances in environmental & chemical sciences	R.S.U. Raipur. March 22-23, 2018
	One day conference on "Recent advances in functional nanomaterials" (On the occasion of 125 th Birth Anniversary of Prof. S.	School of Studies in Chemistry, Pt. R.S.U. Raipur. September 28, 2018
5.	N. Bose) International Conference on Modern Trends in Chemical sciences including Green Chemistry (MTCSGC-2018) (Best Poster Presentation Award)	SRM Institute of Science and Technology, Ramapuram Campus, Chennai. December 27-29, 2018
7.	UGC-SAP (DRS-II) 3 rd National conferences on advances in environmental & chemical sciences	School of Studies in Chemistry, Pt. R.S.U. Raipur. March 27-28, 2019
8.	56 th Annual Convention of Chemists 2019 & International Conference on Recent Trends in Chemical Sciences (Indian Chemical society) (Professor G. Gopalarao Centenary Young Scientist Award)	School of studies in Chemistry, Pt. Ravishankar Shukla University, Raipu November 14-16, 2019
9.	38 th Annual Conference of Indian Council of Chemists & Symposium on "Water, our future, Indian Scenario"	Jaipur National University, Main Campus, Jaipur, Rajasthan. December 26-28, 2019
10.	57 th Annual convention of chemists, 2020 International conference on recent trends in chemical sciences (Indian Chemical Society Research Excellence Award)	Indian Chemical Society, Kolkata, West Bengal. December 26-29, 2020
11.	National Quiz on Chemical Sciences – 2021 (Score-80%)	Department of Applied Chemistry, Karunya Institute of Technology & Sciences, Coimbatore – 641 114, Tan Nadu, India
12.	National conference on National Science Day	Center for Basic Science, Pt. Ravishankar Shukla University, Raip Chhattisgarh. March 5, 2022
13.	National conference on Current Trends in Chemical Sciences (NCCTCS-2022)	Department of Chemistry, Sant Gadg Baba Amravati University, Amravati Maharashtra, June 28-29, 2022
14.	18 th Chhattisgarh Young Scientist Congress (CYSC-2023)	Ravishankar Shukla University, Raip Chhattisgarh. May 3 & 4, 2023
15.	"One-day Workshop on New Methodology of NAAC with special reference to NAAC Benchmark"	MMTC, HRDC Building, PRSU, Raipur, C.G. December 23, 2023.
16.	19 th Chhattisgarh Young Scientist Congress (CYSC-2023)	National Institute of Technology Raipur and Chhattisgarh Council of Science and Technology (CCOST), February 26-27, 2024

1.	Participated in Inspire Internship	School of Studies in Chemistry Pt. Ravishankar Shukia
	Camp	University, Raipur, C.G. during session 2017-2018.
		27-31-December, 2017
2.	Participated in Inspire Internship	School of Studies in Chemistry Pt. Ravishankar Shukla
	Camp	University, Raipur, C.G. during session 2017-2018.
		07-11-August, 2018
3.	Participated in Inspire Internship	School of Studies in Chemistry Pt. Ravishankar Shukla

	Camp	University, Raipur, C.G. during session 2018-2019.
		06-10-August, 2019
4.	Vice-President in Chemical	School of Studies in Chemistry Pt. Ravishankar Shukla
	Society	University, Raipur, C.G. during session 2019-2020.

AWARD AND HONOUR AND RESPONSIBILITIES

- 1. I have got 2nd Prize in **Best Poster Presentation Award** at International Conference on Modern Trends in Chemical sciences including Green Chemistry (MTCSGC-2018) SRM Institute of Science and Technology, Ramapuram Campus, Chennai, December 27-29, 2018.
- 2. **Professor G. Gopalarao Centenary Young Scientists Award** at 56th Annual Convention of Chemists 2019 & International Conference on Recent Trends in Chemical sciences, (Indian Chemical Society), School of Studies in Chemistry Pt. Ravishankar Shukla University Raipur, November 14-16, 2019.
- 3. I have awarded **Indian Chemical Society Research Excellence Award** at 57th Annual convention of chemists, 2020 International conference on recent trends in chemical sciences, Indian Chemical Society, Kolkata, West Bengal. December 26-29, 2020.

RESEARCH WORK DONE IN Ph.D.

Ph.D. THESIS TITLE: FUNCTIONALIZED NANOMATERIALS FOR SEPARATION AND DETECTION OF POLLUTANTS FROM ENVIRONMENTAL SAMPLES.

RESEARCH WORK DONE IN M.Phil.

TITLE: POLYMER CAPPED SILVER NANOPARTICLES AS CHEMICAL SENSOR FOR DETECTION OF PB (II) IN WATER SAMPLES.

TEACHING EXPERIENCE

- 1. 6-month teaching experience as a Guest-Lecturer in S.O.S. in Chemistry, Pt. Ravishankar Shukla University. (Teaching and research guidance experience of M.Sc. and Ph.D. students).
- 2. 5 year teaching experience in higher classes at Shivam educational Academy, Raipura, Raipur. (18.07.2018 to 14.04.2023)
- 3. 8 year teaching experience at Chanakya Classes Aamapara, i.e. from Aug. 2015 to March 2023.
- 4. Teaching experience as a Guest-Lecturer in S.O.S. in Chemistry, Pt. Ravishankar Shukla University. (Teaching and research guidance experience of M.Sc. and Ph.D. students). Also guided M.Sc. IV semester students for their dissertation work during the session. (19.07.2023 to 05.06.2024).

RESEARCH GUIDANCE EXPERIENCE

I have guided 5 students of M.Sc. IV semester for their research project work during the session (2023-24) to fulfil their master degree in different filled like synthesis of ZnO nanoparticles for the antibacterial studies, green synthesis of carbon quantum dots, green synthesis of silver nanoparticles and different functionalized silver nanoparticles of the detection of various heavy metal ions and pesticides etc. entitled are as follows:

- 1. Integration of Silver Nanoparticles in colorimetric sensor for pesticides detection.
- 2. Influence of the various synthesis method on the ZnO nanoparticles property made using the bark extract of Terminilia arjuna.
- 3. Synthesis of polymer stabilized silver nanoparticles for detection of lead ions.
- 4. Green synthesis of nitrogen doped carbon quantum dots from lemon juice as sensor for the detection of heavy metal ions: Hg⁺².
- 5. Synthesis of silver nanoparticles for detection of metal ions.

TECHNICAL SKILLS

	INSTRUMENTATION				
1.	Fourier transform infrared spectrophotometer	2.	Conductometer		
	Nicolet iS10. (FTIR)				
3.	UV-Visible Spectrophotometer	4.	Flame Photometer		
5.	pH. Meter	6.	Atomic Absorption Spectroscopy		
			(AAS)		
7.	Nephlometer	8.	Turbidimeter		
9.	Gas chromatography-Mass spectrometer (GC -	10.	Fluorimeter		
	MS)				
11.	Surfacetensiometer				

PERSONAL DETAILS

FERSONAL DETAILS	<u>-</u>
Name	Dr. Bhuneshwari Sahu
Father's Name	Mr. Gunaram Sahu
Mother's Name	Mrs. Sushila Sahu
Husband's Name	Mr. Suraj Kumar Sahu
Date of Birth	14-09-1994
Gender	Female
Blood Group	A^{-}
Category	OBC
Marital status	Married
Religions	Indian
Hobbies	Book's Reading, Playing badminton, Cricket
Languages Known	Hindi, English, Chhattisgarhi
Permanent Address	Near Masjid Gali, Old Dhamtari Road, Santoshinagar, Raipur (C.C
	Pin-492001
Present Address	Near Masjid Gali, Old Dhamtari Road, Santoshinagar, Raipur (C.C
	Pin-492001
Email ID and Mob. No.	bhuneswarisahu90@gmail.com

DECLARATION

7898754055, 6264301051

bhuneshwarichem14@gmail.com

I declare that all the above given details are true to the best of my knowledge and belief and I shall prove as an asset to the organization if a chance given to me.

Date:	
Place: Raipur	Dr. Bhuneshwari Sahu