

FOR SELF APPRAISAL OF TEACHERS

General Information

Name : Dr. (Mrs.) Bina Rani

Address (Residential) : 402, Aangan Apartment
Jagatnarayan Road
Kadam Kuan , Patna- 03.
Mobile No.09431808891

E-Mail Id : bina4@gmail.com

PAN No. : ABSPRO967Q

Aadhar No. : 404929903594

Mobile No. : 9431808891

Ph. No. : 0612 - 2672616

Designation : Associate Professor

Department : Chemistry

Date of Birth : 14.11.1957

Date of Joining : 16/04/1980

Date of conformation :

Date of Promotion :

f) Area of Specialization : Inorganic Chemistry (Co-ordination Chemistry)



Academic Qualifications

Exam Passed	Board / University	Subjects	Year	Division/Grade Merit etc.
High School	B.S.E.B Patna	Hindi, English, Physics, Chemistry, Math, Social Science	1971	2 nd Division
Higher Secondary or Pre-degree I.Sc.	Ranchi University	Phy, Chem, Math, Eng, Hindi	1973	2 nd Division
Bachelor's Degree (s) B.Sc. (Chemistry)	Ranchi University Ranchi	Chemistry Honours, Physics, Math	1975	2 nd Class
Master's Degree (s) M.Sc. (Chemistry)	Ranchi University Ranchi	Special paper organic chemistry	1977	2 nd Class
Research Degree (s) PhD	Patna University Patna	Studies on some transition metal complexes	1992	Result Published on 14.09.1992
Teacher Fellowship award, U.G.C	Patna University	Studies on some transition metal complexes	Oct. 1984	For Ph.D
UGC Sponsored – Refresher Course in Chemistry	Patna University	Spectroscopic Studies and Group Theory	1999	Reg. No. RC/99/2-Chem/32, Certificate no.1049

Research Experience & Training

Research Stage	Title of work / Theses	University where the work was carried out
PhD	Guided one student for PhD degree & another thesis is under examination	Awarded by Patna University
Research Guidance (give names of students guided successfully)		
Madhu Kumari Gupta	Structural and Biochemical process of Macro Cyclic Biguanide Derivative Complexes of Metal Ions.	Awarded in 2013.
Pinky Kumari	Studies on structural aspects of complexes of transition metals with biguanide and substitute biguanide	Patna University, Reg. Nov-2009 continuing her work for PhD degree.
Ms Divya Singh	Magnetic & Spectral Study on some biguanide complexes	Registered in July 2012 Patna University

Publications

S. No	Title of the Paper	Name of the Journals	Remarks	Year
01.	Toxicology of effect of arsenic, radium, mercury and beryllium ions in mankind	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN:2328–3491/ 6.3	2017
02.	Studies on isomeric complexes of nickel	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN:2328–3491/ 6.3	2017
03.	Synthesis and Spectral Studies of Complexes of Cr(III) and Cu(II) Complexes with Hexamethylenedibiguanide [Hm(Bigh ⁺) ₂ /C ₁₀ H ₂₄ N ₁₀]	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328 - 3491	2016
04.	Synthesis and Resolution of (α -picolinato) bis (biguanidinium) Cobalt (III) salts into their dl (+) enantiomers	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328 - 3491	2016
05.	Spectral Characterization and Magnetic properties of Ni(II) complexes with Naphthylbiguanide as a Ligand	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328 - 3491	2016
06.	Structural and Magnetic Aspects of the complexes of Mn ^{IV} with Hexamethylene dibiguanide (C ₁₀ H ₂₄ N ₁₀) ⁺	International Journal of Advanced Research in Science, Engineering and Technology	ISSN: 2350-0328	2016
07.	Synthesis, Resolution and Characterization of 2(2-Pyridyl)-Benzimidazolebisbiguanidiniumcobalt (III) complexes.	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328-3491	2015
08.	Industrial Ecosystem and Our Environment	JPSC	ISSN: 2347 – 9604 Vol-3, 101-104	2015
09.	Growing impact of environment toxicology and man	JPSC	ISSN: 2347 – 9604 Vol-3, 101-104	2015
10.	Synthesis and Structural Studies of some complexes of Ni(II) and Co(III) with Hexamethylenedibiguanide	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328 - 3491	2014

11.	Antifungal Activity of the Complex of Nickel Metal with p-phenylenedibiguanide	Journal of Patna Science College Patna	ISSN: 2347 – 9604 26Vol.2, 101-104 (2014)	2014
12.	Studies on spectral and antifungal activity of some complexes of chromium, nickel and copper metals with p-phenylenedibiguanide [C ₁₀ H ₁₆ N ₁₀ , Ph (BigH) ₂] molecule	American International Association of Scientific Innovation and Research	ISSN: 2328 – 3491, 2328 – 3580 (Print) on May 2014	2014
13.	Synthesis and spectral studies of isomeric copper (II) complex salts with phenylbiguanide [PhBigH ⁺ /C ₈ H ₁₁ N ₅]	American International Journal of Research in Science, Technology, Engineering & Mathematics	ISSN: 2328 – 3491 (Print) ISSN:2328 – 3580 (Online), Vol:2, pp-108-111 dated September – November - 2014.	2014
14.	Antifungal activity of the complex of nickel metal with p-phenylenedibiguanide	JPSC	ISSN: 2347 – 9604 Vol.2, 101 – 104	2014
15.	Comparative study of the antifungal activities of p-phenylne dibiguanide complexes of Cr, Ni & Cu in PDA and SDA media	Patna University, Journal of Science,	ISSN – 2249 – 6165, p-17-27, 2013.	2013
16.	Ultraviolet-visible and infrared spectral study of complexes of Co (III) with mixed ligands biguanide C ₂ H ₇ N ₅ and pyridine C ₅ H ₅ N	JPSC	ISSN: 2347 – 9604 Vol-1, 91 - 101	2013
17.	Hyophonic: A method to analyze the effect of the micronutrients concentration on the growth of moong plant.	Jigyasa	I – P6, 2279 – 0551.	2012

Research Projects carried out

Title of the Project	Name of the funding Agency	Duration	Remarks
Studies on antifungal activities of some metal – ion complexes of substituted biguanide molecules.	U.G.C. Minor Science Research Project	24 Months 2014 - 2016	Completed

Seminars, Conferences, Symposia Workshops etc. attended

Sl. No.	Name of the Seminar/ Conference / Symposia Workshop, etc.	Name of the Sponsoring Agency	Place and Date	Year
1.	International seminar on ground water quality management in developing countries. Title: Ground water: i. vital resource. ii. Assessment of ground water contamination health hazards.	UGC	Science College, Deptt. Zoology	27 – 29 Nov. 2017
2.	National Seminar on reaching the unreached through science and technology. Collaboration with Indian Society of Life Science. Amrit tubidiya Title: i. Study and pharmaceutical properties of giloy leaves. ii. Medicinal benefits of Makhana. iii. Medicinal properties of Papaya seeds. (Carica Papaya Seeds)	Indian Science Congress	P.G. Deptt. of Chemistry, Magadh University, Bodh Gaya	18 – 19 Nov. 2017.
3.	104 th Indian Science congress (i) resolution of (α -picolinato) bis (biguanidinium) cobalt (III) complexes (ii) Assessment and mitigation of environmental pollution in terms of organic and inorganic pollutants for better livelihood.	104 th Indian Science Congress	Tirupati, S.V.University 3-7 Jan. 2017	2017
4.	Indian Science congress association Patna Chapter.	Science Technology for National Development	I.G.S.C, Taramandal, Patna 16 Dec. 2016	2016
5.	53 rd Annual Convention of Chemists (i) Menace of thermal pollution: Endangering aquatic ecosystem. (ii) Synthesis and spectroscopic studies of antifungal activities of hexamethylenedibiguanide molecule.	Indian Chemical Society	GITAM University Visakhapatnam, A.P. 27-29 Dec.2016	2016
6.	Indian Science congress association Patna Chapter.	Science Technology for National Development	I.G.S.C, Taramandal, & IIM, Budhmarg Patna 16 – 18 Dec. 2016	2016
7.	Hkkjr ljdkj ekuo lalk/ku fodkl ea=ky; oSKkfud rFkk rdfudh 'kCnkoyh vk;ksx-	Central Govt.	New Delhi 11 – 12 Jan. 2016	2016
8.	Ground water quality issue in Bihar	A.N. Sinha Institute, Patna	Govt. of India, Ministry of water Resources 18.3.2016	2016
9.	Science and Technology for Indigenous Development in India	ISCA, Patna Chapter	Planetarium 8.2.2016	2016

	(a) Heavy metal contamination			
10.	Science and Technology Topic: (a) Sources and effect of radioactive pollutants	ISCA, Patna Chapter	Ganga Devi Mahila College, Patna 6 March 2016	2016
11.	Mortin India Innovation Growth Programme	DST, Lockheed	Ashoka Patliputra 25 Jan 2016	2016
12.	Indian Science Congress Topic: (a) Bening environment: Need for an industrial ecosystem with better industrial process (b) Preparation and regulation of 2(2-pyridyl) Benzimidazole Bis-Biguanidium Co (III) complexes.	ISC	Mysure 3-7 Jan 2016	2016
13.	Exhibition on “Chemical Wonders”	M.M. College	M.M. College 27.02.2016	2016
14.	Physics education issue challenges and prospects	UGC	M.M. College 30-31 Jan 2016	2016
15.	National symposium on Emerging Trends in Chemistry – Fundamental Application. Topic: (a) Synthesis spectroscopic characterization and studies on antifungal activities of some metals with mecro ligands hexamethylenedibiguanide molecule. (b) Green coal from Biomass Briquettes (c) Carbon foot print every steps counts	National	PG. Dept. of Chemistry, P.U., 21 – 22 April, 2016	2016
16.	UGC sponsored seminar on Environmental Pollutants: Safety Measure and Management” Topic: (a) Solid wastes and their impact on the environment. (b) Environmental pollution types causes and preventive measurement. (c) Effects of noise pollution on mankind and its surrounding.	UGC	MM College, Patna, 5-6 Dec. 2015	2015
17.	Nalanda Open University workshop for educational technology and its application uses.	At Biscoman	March 27, 2015	2015
18.	National Seminar on Sustainable Solutions to Water, Wastewater and Solid Waste. Topic: Sources and Measures of Solid Waste Management.	CSIR, NEERI Mumbai Zonal Center	A.N. College, Patna 8 th – 9 th May 2015	2015
19.	National Seminar on Sustainable Solutions to Water, Wastewater and Solid Waste. Topic: Attempt for solution to water waste management and solid waste management.	CSIR, NEERI Mumbai Zonal Center	A.N. College, Patna 8 th – 9 th May 2015	2015
20.	National Seminar on Novel Journey from conventional to green chemistry: A bliss	UGC	Patna Science College, Deptt. of	2015

	to Environment: a. Green chemistry and sustainable future b. Green chemistry and solvents c. Biological importance of copper d. Growing impact of environmental toxicology and man		Chem, on 21 st Feb. 2015	
21.	Chemical Science - Biochemical effect of chromium complex with p – phenylenedibiguanide on fungal growth.	102 Indian Science Congress Association	Bombay, 03.01.2015 to 07.01.2015	2015
22.	Use of pesticides in agriculture endangering life and eco system	102 Indian Science Congress Association	Bombay, 03.01.2015 to 07.01.2015	2015
23.	Studies on antimicrobial activities of newly synthesized substituted bio-guanide derivative by petri potato dextrose agar method.	51th Annual Convention of chemist.	9 -12 Dec. 2014 Kurushetra, Hariyana	2014
24.	Arsenic contamination of ground water in middle Ganga plain of Bihar, Issues, Concerns and Remedial measures.	A.N.Sinha Institute of Social Study, Patna Govt. of India, Ministry of water resource RD and G.R. CGWA, CGWB, Patna	25.03.2015	2015
25.	Carcinogenicity of heavy metals	National Symposium on recent scenario and advance in concern research.	Hotel Ashoka, Patliputra, Patna on 22 nd – 23 rd March 2014	2014
26.	An executing member of International Conference organized by MMC and Bihar Brains	International Level at Magadh Mahila College, Patna	22 – 24 Dec. 2014	2014
27.	Synthesis and spectral study of complexes of Co (III) with mixed ligand Biguanide C ₂ H ₇ N ₅ and pyridine	101 Indian Science Congress	Jammu on 03 rd – 07 th Jan. 2014	2014
28.	N.O.U, Patna and Maulana Mazharul Haque Arbic and Persian University. Patna under the Aegis of Governor Secretary	Higher education exploring new trends as a member of organization committee (Finance Committee Co-ordinaitor)	Raj Bhawan, Bihar	2013
29.	Self purification of Natural Water	Management of ground water resources in India with special reference to Bihar.	Patna University, Dept. of Zoology, 19 th March 2013.	2013
30.	Blue smoke: A modification of Nanofoam carbon.	Application of Nano Sciences and Nanotechnology,	Women's College, Patna Proceeding	2013

		Patna		
31.	Synthesis and studies on antifungal activities of some Hetro complexes of Co(III) ion with Biguanide (C ₂ H ₇ N ₅ , Bigh) Molecule: Acetylacetonato (acae) Bis biguanidine Co (III) salt.	100 th Indian Science Congress – 2013	Kolkata, 3 rd to 7 th Jan. 2013	2013
32.	Self purification of Natural Water	Management of ground water resources in India with special reference to Bihar.	Patna University, Dept. of Zoology, 19 th March 2013.	2013
33.	Blue smoke: A modification of Nanofoam carbon.	Application of Nano Sciences and Nanotechnology, Patna	Women's College, Patna Proceeding	2013
34.	Workshop on Chemistry Practical under C.P.E. Extension Programme approved by U.G.C. (Resource Person)	Workshop	M.M. College, Patna 23,24 September 2013	2013
35.	Workshop: India Innovative Growth Programme 2012.	DST, Lockneed Mortin	Ashoka Hotel, Patna 09.01.2012	2012
36.	Spectroscopical and biochemical aspects of complexes of Co (III) with mixed ligandsbiguanide C ₂ H ₇ N ₅ and pyridine C ₂ H ₇ N	99 th Indian Science Congress Association	Bhubaneswar on dated 3 – 7 Jan. 2012	2012
37.	Synthesis and Spectral of isomeric Copper (II) Salts with Phenylbiguanide [PhBigH ⁺ /C ₈ H ₁₁ N ₅]	99 th Indian Science Congress Association	Bhubaneswar on dated 3 – 7 Jan. 2012	2012
38.	UGC Sponsored National Conference on Women in Science Dr. Kiran Mazumdar Shaw –An Enterprenurial Scientist in Biotechnology	Dept. Of Physics Magadh Mahila College, Patna	14, 15 th March 2012	2012
39.	Attended as Joint Secretary UGC sponsored National seminar on Chemistry is Life Harmful effect of Chloroflorocarbon CFCS Green Chemistry for Sustainable development A Challenge of 21 st Century	Dept of Chemistry, Magadh Mahila College, Patna	23, 24 Feb,2012	2012
40.	Green Chemistry and sustainable development.	Proceedings on Chemistry is Life	M. M. College, Patna on 23 – 24, 2012	2012
41.	International Seminar genomics 2012 on New frontiers in Environmental Pollutants, Health & Application Molecular Genetics – Nuclear Accident at Heroshima & its Hazardous effects on mankind. Environmental laws and Management the waste management.	UGC	Mahabir Cancer Sansthan & research Center, Phulwarisarif Patna. 2012	2012

	Conventional Breeding compared with biotechnology A natural technique to get rid of pollutants such as oilspill Pop's Heavy metals and health.			
42.	Proceeding of 49 th International Annual Convention of Chemist	Indian Chemical Society	Shimla Hill, Bhopal, MP, 12-15 Dec. 2012	2012

Teaching Experience

Course Taught	Name of the University/ College / Institution	Duration
U.G. B.Sc. (Pass) B.Sc. Hons.	Magadh Mahila College Patna University, Patna	16.04.1980 to till date
P.G. M.Sc	M.Sc. in Patna University Magadh Mahila College Patna	1984 to till date
Any other	PhD Guidance	Two Completed

Total Teaching Experience : 37+ Years

Under-graduate (Pass) : 37+ Years.

Under-graduate (Hons.) : 37+ Years.

Post-graduate : 34+ Years.

Innovations/ Contributions in Teaching

- Design of Curriculum : Follow U.G.C. Syllabus
- Teaching methods : Theoretical on black boards and with diagrams
- Laboratory experiments : Help in experiments of course with students
- Evaluation methods : Centralized done periodically part wise of the question

Extension Work / Community Service

- Actively take part in the programme of Science for Society, Bihar, Patna
- Organised Seminar and Workshop for students and society on environment to develop issue a scientific temperament along with.

National Literacy Mission

- Have taught my made servant for doing signature and reading news paper etc.

Participation in Corporate Life

College / University / Institution

- Admission Incharge (three years ago)

- Bursar, from July 2011 to July 2015.
- Vice President Science and IT Society, Magadh Mahila College, Patna University, Patna
- Assistant Center Superintendent of University Examination for B.Sc. Vocational Courses Part – I, II & III, 2010 - 16
- Admission incharge of M.Sc. 2016
- Member of general routine committee
- Department routine incharge
- Member of NAAC Committee
- Member of Finance Committee in Herbal Chemistry

Co-curricular Activities

- Took part actively children science congress science for society, Bihar dated 1990.
- Acted on Judge in poster demonstration in S.C.R.T
- Published Research Papers in Patna University Journals
- Contributed article in college magazine
- Member of external examination committee
- Joint Secretary of Science Symposium Conducted in Dec.2009
- Attended and Presented in no of seminars / symposium / workshop
- Delivered lecture at state education training and research council, Patna.

Enrichment of Campus Life : I have active involvement in such activities (Hostels, sports, games, cultural activities)

Students Welfare and Discipline : I care for the problem of students with their possible redressal but not at cost of discipline

Membership / Participation in Bodies / Committees on Education and National Development:
Member of Joint Secretary in National Seminar and Workshop

Professional Organization of Teachers : Life member of Indian Chemical Society, Kolkata and Indian Science Congress Association, Kolkata and Institute of Chemist, Kolkata

Membership of Professional Bodies, Societies etc.

- Life member of Indian Chemical Society, Kolkata – Memo No.LF2815/1988
- Indian Science Congress Association, Kolkata – Memo No. L2389/1988
- Annual member of CSIR January 2011 to January 2012.
- Life member of Association of Chemistry Teachers – Memo No. LMNO 1063
- Editorship of Journals

Any other information : I have been awarded “Shiksha Ratan Puraskar” from Indian International friendship society, New Delhi, 2011