

BIO-DATA

1. Name and full correspondence address:

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3. Date of Birth: 14/04/1987

4. Gender: F

5. Category: Gen

6. Whether differently abled: No

7. Academic Qualification:

	Degree	Year	Subject	University	% of marks
1.	B.Sc. (Honours)	2008	Chemistry (Honours), Physics, Mathematics	University of Calcutta	63.6
2.	M.Sc.	2010	Chemistry	University of Calcutta	73.1
3.	Ph.D.	2019	Chemistry	University of Calcutta	NA

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

Ph.D. thesis title: Synthesis, Characterisation, Luminescence Properties And Biological Activities Of Transition Metal Complexes Derived From Fluorescent Schiff Base Ligands

Guide's Name: Dr. Sanchita Goswami

University: University of Calcutta

Year of Award: 2019

9. Work experience:

S. No.	Position held	Name of the Institute	From	to
1.	JRF	University of Calcutta	01/07/2011	30/06/2013
2.	SRF	University of Calcutta	01/07/2013	30/06/2016
3.	Guest Lecturer	City College	01/09/2016	30/06/2017
4.	Contractual Whole-Time Teacher	Muralidhar Girls' College	01/08/2017	Till date

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

S. No.	Name of the Award	Awarding Agency	Year
1.	Jounior Research Fellow, NET-2010 (December)	UGC, Govt. of India	2011
2.	Senior Research Fellow	UGC, Govt. of India	2013

11. Publications:

S. No.	Author (s)	Title	Name of Journal	Volume	Page	Year
1.	S. Mandal , Y. Sikdar, D. K. Maiti, R. Sanyal, D. Das, A. Mukherjee, S. K. Mandal, J. K. Biswas, A. Bauzá, A. Frontera and S.Goswami	New pyridoxal based chemosensor for selective detection of Zn ²⁺ : application in live cell imaging and phosphatase activity response	<i>J. Photochem. Photobiol. A</i>	334	86 – 100	2017
2.	S. Mandal , Y. Sikdar, R. Sanyal and S. Goswami	Synthesis, crystal structure, spectral study, phosphatase activity and DFT calculation of a new copper(II) complex	<i>J. Mol. Struct.</i>	1128	471 – 480	2017
3.	S. Mandal , Y. Sikdar, D. K. Maiti, G. P. Maiti, S. K. Mandal, J. K. Biswas and S. Goswami	A new pyridoxal based fluorescence chemo-sensor for detection of Zn(II) and its application in bio imaging	<i>RSC Adv.</i>	5	72659 – 69	2015
4.	S. Mandal , B. Naskar, R. Modak, Y. Sikdar, S. Chatterjee, S. Biswas, T. K. Mondal, D. Modak and S. Goswami	Syntheses, crystal structures, spectral study and DFT calculation of three new copper(II) complexes derived from pyridoxal hydrochloride, N,N-dimethylethylenediamine and N,N-diethylethylenediamine	<i>J. Mol. Struct.</i>	1088	38 – 49	2015
5.	S. Mandal , S. K. Mandal, A. R. Khuda-Bukhsh and S. Goswami	Pyridoxal Based Fluorescent Chemosensor for Detection of Copper(II) in Solution With Moderate Selectivity and Live Cell Imaging	<i>J. Fluoresc.</i>	25	1437– 47	2015
6.	S. Mandal , S. Chatterjee, R. Modak, Y. Sikdar, B. Naskar and S. Goswami	Syntheses, crystal structures, spectral studies, and DFT calculations of two new square planar Ni(II) complexes derived from pyridoxal-based Schiff base ligands	<i>J. Coord. Chem.</i>	67	699 – 713	2014

7.	S. Mandal , R. Modak, Y. Sikdar, B. Naskar and S. Goswami	Syntheses, crystal structures and spectroscopic characterization of two new octahedral nickel(II) complexes of a Schiff base ligand derived from pyridoxal and 2-(pyrid-2-yl)ethylamine	<i>J. Mol. Struct.</i>	1074	271 – 278	2014
8.	R. Modak, Y. Sikdar, S. Mandal , S. Chatterjee, A. Bieńko, J. Mroziński and S. Goswami	Syntheses, crystallographic characterization, catecholase activity and magnetic properties of three novel aqua bridged dinuclear nickel(II) complexes	<i>Inorg. Chim. Acta</i>	416	122 – 134	2014
9.	R. Modak, Y. Sikdar, S. Mandal , C. J. Gómez-García, S. Benmansour, S. Chatterjee and S. Goswami	Homo and heterometallic rhomb-like Ni ₄ and Mn ₂ Ni ₂ complexes	<i>Polyhedron</i>	70	155 – 163	2014
10.	S. Mandal , R. Modak and S. Goswami	Synthesis and characterization of a copper(II) complex of a ONN donor Schiff base ligand derived from pyridoxal and 2-(pyrid-2-yl)ethylamine – A novel pyridoxal based fluorescent probe	<i>J. Mol. Struct.</i>	1037	352 – 360	2013
11.	R. Modak, Y. Sikdar, S. Mandal and S. Goswami	Syntheses, crystal structures and catecholase activity of new dinuclear and cyclic trinuclear mixed valence cobalt (II, III) complexes	<i>Inorg. Chem. Commun.</i>	37	193 – 196	2013
12.	R. Modak, S. Patra, S. Mandal , Y. Sikdar and S. Goswami	Bis{2-[(5-hydroxypentyl)iminomethyl]phenolato κ ² N,O1} copper(II)	<i>Acta Crystallogr. E</i>	69	m412 – m413	2013

12. Any other Information:

Research Experience:

- Synthesis and characterization of ligands and their metal complexes
- Operating Single crystal X-Ray Diffractometer (Bruker)
- Operating steady-state spectroscopic instruments like UV-Visible absorption spectrophotometer and Fluorimeter
- Operating time-resolved spectroscopic instruments like picosecond time correlated single photon counting (TCSPC) apparatus
- Operating ESI-MS instrument
- Operating pH-meter and conductivity meter
- Performing theoretical calculations based on Gaussian version 09 software
- Analyzing NMR data ($^1\text{H-NMR}$, $^{13}\text{C-NMR}$, DEPT)

Brief details of attended international symposiums and participation in poster presentation:

- National Seminar on Inorganic Chemistry - 2011 and Celebration of 150th Birth Anniversary of Acharya P. C. Ray” during July 08-09, 2011; (organized by Department of Chemistry, Jadavpur University).
- International Symposium on “Chemistry and Complexity” during December 6-8, 2011; (organized by Indian Association for the Cultivation of Science, India).
- International Symposium named The 100th Indian Science Congress Association, January 3-7, 2013; (organized by the University of Calcutta, Kolkata, India).
- **Poster presentation** at the International Symposium on Molecular Organisation and Complexity: A Chemical Perspective, February 6-8, 2013; (organized by the Department of Chemistry, University of Calcutta, Kolkata, India).
- **Poster presentation** at the Acharya Prafulla Chandra Ray Memorial Symposium on Chemistry & Industry (2013), August 02-03, 2013; (organized by the Indian Chemical Society).
- **Poster presentation** at the CRSI-RSC Joint Symposium in Chemistry, February 6-9, 2014; (organized by the Department of Chemistry, IIT, Bombay).
- National Symposium on Recent Advances in Chemistry & Industry (2014), August 01-02, 2014; (organized by the Indian Chemical Society).
- International Conference on Structural Chemistry of Molecules and Materials, November 30th-December 2nd, 2014; (organized by the Department of Chemistry, University of Calcutta, Kolkata, India).
- National Symposium on Recent Advances in Chemistry & Industry (2015), July 31-August 01, 2015; (organized by the Indian Chemical Society).
- International Symposium on Modern Trends in Inorganic Chemistry - XVI (MTIC-XVI) during December 3-5, 2015; (organized by Department of Chemistry, Jadavpur University).
- **Poster presentation** at the 18th CRSI National Symposium in Chemistry (NSC-18) and 10th RSC-CRSI symposium, February 4-7, 2016; (organized by Punjab University, Chandigarh).
- **Poster presentation** at the National Symposium on Recent Advances in Chemistry Research, March 04, 2016; (organized by the Viswa-bharati University, Santiniketan, India).
- National Symposium on Current Perspectives in Chemical Research, March 30, 2016, (organized by the Department of Chemistry, University of Calcutta, Kolkata, India).