

## Brief Profile

**Name:** Dr. Soumavo Ghosh

**Designation:** State Aided College Teacher-1

**Department:** Chemistry

**Email:** sanju.chem08@gmail.com

**Highest Qualification:** Ph.D.

**Year of completion of Ph.D.:** 2016

**Ph.D. awarded from the University or Institute:** University of Calcutta

**Teaching Experience:** 7 years 6 months 3 days as on 04.03.2024

**Subjects Taught:** Inorganic Chemistry, Analytical and Industrial Chemistry.

**Vidwan id:** 495456

**Scopus/Orcid/any other id:** Scopus- 55782362000, Orcid- 0000-0001-5889-5335

### **Research Experience:**

(1) JRF from 01/08/2011 to 31/07/2013;

(2) SRF from 01/08/2013 to 31/07/2016.

**Research Interest:** Synthesis and structure determination of polynuclear transition and inner transition metal complexes and their detail characterization of properties like coordination chemistry, magnetism, spectroscopy, electrochemistry and catalysis.

### **Awards or Recognitions received (Achievements):**

(1) Qualified CSIR-UGC NET JRF examination in Chemical sciences in 2010;

(2) Qualified GATE examination in Chemistry in 2010 (All India Rank 126).

## List of Selected Publications:

Sr. No.	Title	Name of the authors	Journal Name	Year Vol. Page	ISSN No.	Impact factor (2024)	Link
1.	Role of Redox-Inactive Metal Ions in Modulating the Reduction Potential of Uranyl Schiff Base Complexes: Detailed Experimental and Theoretical Studies	T. K. Ghosh, S. Maity, <b>S. Ghosh</b> , R. M. Gomila, A. Frontera* and A. Ghosh*,	<i>Inorg. Chem.</i>	2022 61, 7130	0020-1669	4.6	<a href="https://doi.org/10.1021/acs.inorgchem.2c00645">https://doi.org/10.1021/acs.inorgchem.2c00645</a>
2.	Reaction of Cu(II) chelates with uranyl nitrate to form a coordination complex or H-bonded adduct: Experimental observations and rationalization by theoretical calculations	P. Bhunia, <b>S. Ghosh</b> , R. M. Gomila, A. Frontera*, A. Ghosh*,	<i>Inorg. Chem.</i>	2020, 59, 15848	0020-1669	4.6	<a href="https://doi.org/10.1021/acs.inorgchem.0c02338">https://doi.org/10.1021/acs.inorgchem.0c02338</a>
3.	In situ transformation of a tridentate to a tetradentate unsymmetric Schiff base ligand via deaminative coupling in Ni(II) complexes: Crystal structures, magnetic properties and catecholase activity study	M. Mondal, <b>S. Ghosh</b> , S. Maity, S. Giri, A. Ghosh*,	<i>Inorg. Chem. Front.</i>	2020, 7, 247	2052-1553	7.0	<a href="https://doi.org/10.1039/c9qi00975b">https://doi.org/10.1039/c9qi00975b</a>
4.	Elucidating the secondary effect in the Lewis acid mediated anodic shift of electrochemical oxidation of a Cu(II) complex with a N <sub>2</sub> O <sub>2</sub> donor unsymmetrical ligand	S. Maity, <b>S. Ghosh</b> *, A. Ghosh*	<i>Dalton Trans.</i>	2019, 48, 14898	1477-9226	4.0	<a href="https://doi.org/10.1039/c9dt03323h">https://doi.org/10.1039/c9dt03323h</a>
5.	Synthesis, structure and magnetic properties of three Cu <sup>II</sup> Ln <sup>III</sup> complexes (Ln = Pr, Nd and Sm) with an unsymmetrical Schiff base ligand	S. Maity, <b>S. Ghosh</b> , P. Mahapatra and A. Ghosh*	<i>Inorg. Chim. Acta.</i>	2018 482 860	0020-1693	2.8	<a href="https://doi.org/10.1016/j.ica.2018.07.023">https://doi.org/10.1016/j.ica.2018.07.023</a>
6.	Structural Variations in (CuL) <sub>2</sub> Ln complexes of a series of lanthanide ions with salen-type unsymmetrical Schiff base (H <sub>2</sub> L)	P. Mahapatra, <b>S. Ghosh</b> , N. Koizumi, T. Kanetomo, T. Ishida, M. G. B. Drew and A. Ghosh*	<i>Dalton Trans.</i>	2017 46 12095	1477-9226	4.0	<a href="https://doi.org/10.1039/c7dt02061a">https://doi.org/10.1039/c7dt02061a</a>
7.	Subtle structural changes in (Cu <sup>II</sup> L) <sub>2</sub> Mn <sup>II</sup> complexes to induce heterometallic cooperative catalytic oxidase	P. Mahapatra, <b>S. Ghosh</b> , S. Giri, V. Rane, R. Kadam, M. G. B.	<i>Inorg. Chem.</i>	2017 56 5105	0020-1669	4.6	<a href="https://doi.org/10.1021/acs">https://doi.org/10.1021/acs</a>

	activities	Drew and A. Ghosh*					s.inorg chem. 7b002 53
8.	The unusual intermediate species in the formation of Ni(II) complexes of unsymmetrical Schiff bases by Elder's method	P. Mahapatra, <b>S. Ghosh</b> , S. Giri and A. Ghosh*	<i>Polyhedron</i>	2016 117 427	0277- 5387	2.6	https://doi.org/10.1016/j.poly.2016.06.020
9.	Coordination of metalloligand [NiL] (H <sub>2</sub> L = salen type N <sub>2</sub> O <sub>2</sub> Schiff base ligand) to the f-block elements:	<b>S. Ghosh</b> * and A. Ghosh*	<i>Inorg. Chim. Acta.</i>	2016 442 64	0020- 1693	2.8	https://doi.org/10.1016/j.ica.2015.11.029
10.	Syntheses, crystal structure and magnetic properties of an unprecedented one-dimensional coordination polymer derived	<b>S. Ghosh</b> , P. Mahapatra, T. Kanetomo, M. G. B. Drew, T. Ishida and A. Ghosh*	<i>Chemistry Select</i>	2016 1 2722	2365- 6549	2.1	https://doi.org/10.1002/slct.201600637
11.	A pre-designed 1D chain of alternating di- $\mu_{1,1}$ -azido bridged dinuclear Ni(II) and pyrazine: Synthesis, structure and magnetic properties.	R. Biswas, S. Mukherjee, <b>S. Ghosh</b> , C. Diaz, A. Ghosh*	<i>Inorg. Chem. Comm.</i>	2015 56 108	1387- 7003	3.8	https://doi.org/10.1016/j.inoche.2015.03.050
12.	An adaptable heterometallic trinuclear coordination cluster in the synthesis of tailored one dimensional architecture	<b>S. Ghosh</b> , S. Giri and A. Ghosh*	<i>Polyhedron</i>	2015 102 366	0277- 5387	2.6	https://doi.org/10.1016/j.poly.2015.10.014
13.	Key Role of Size and Electronic Configuration on the Sign and Strength of the Magnetic Coupling in a Series of Cu <sub>2</sub> Ln Trimers (Ln = Ce, Gd, Tb, Dy and Er)	<b>S. Ghosh</b> , C. Gómez García, J. Clemente-Juan, A. Ghosh*	<i>Magnetochemistry</i>	2016, 2, 2	2312- 7481	2.7	https://doi.org/10.3390/magnetochemistry201002
14.	Structural and magnetic analysis of retrosynthetically-designed architectures built from a triply-bridged heterometallic (CuL) <sub>2</sub> Co node	<b>S. Ghosh</b> , G. Aromí, P. Gamez and A. Ghosh*	<i>Eur. J. Inorg. Chem.</i>	2015 3028	1434- 1948	2.3	https://doi.org/10.1002/ejic.20150027

	and benzenedicarboxylates.						3
15.	Strong ferromagnetic exchange interactions in hinge-like Dy(O <sub>2</sub> Cu) <sub>2</sub> complexes involving double oxygen bridges.	Y. Ida, <b>S. Ghosh</b> , A. Ghosh*, H. Nojiri* and T. Ishida*	<i>Inorg. Chem.</i>	2015 54 9543	0020- 1669	4.6	<a href="https://doi.org/10.1021/acs.inorgchem.5b01583">https://doi.org/10.1021/acs.inorgchem.5b01583</a>
16.	Trinuclear heterometallic Cu <sup>II</sup> -Mn <sup>II</sup> complexes of a salen type Schiff base ligand: anion dependent variation of phenoxido bridging angles and magnetic coupling	P. Seth, <b>S. Ghosh</b> , A. Figuerola and A. Ghosh*	<i>Dalton Trans.</i>	2014 43 990	1477- 9226	4.0	<a href="https://doi.org/10.1039/c3dt52012a">https://doi.org/10.1039/c3dt52012a</a>
17.	The impact of anion-modulated structural variations on the magnetic coupling in trinuclear heterometallic Cu <sup>II</sup> -Co <sup>II</sup> complexes	<b>S. Ghosh</b> , G. Aromí*, P. Gamez and A. Ghosh*	<i>Eur. J. Inorg. Chem.</i>	2014 - 3341	1434- 1948	2.3	<a href="https://doi.org/10.1002/ejic.201402151">https://doi.org/10.1002/ejic.201402151</a>
18.	Linker stoichiometry controlled stepwise supramolecular growth of a flexible Cu <sub>2</sub> Tb single molecule magnet from monomer to dimer to 1D chain.	<b>S. Ghosh</b> , Y. Ida, T. Ishida* and A. Ghosh*	<i>Cryst. Growth Des.</i>	2014 14 2588	1528- 7483	3.8	<a href="https://doi.org/10.1021/cg500290m">https://doi.org/10.1021/cg500290m</a>
19.	Solvent-templated supramolecular isomerism in 2D coordination polymer constructed by Ni <sup>II</sup> <sub>2</sub> Co <sup>II</sup> node and dicyanamido spacer	<b>S. Ghosh</b> , S. Mukherjee, P. Seth, P. S. Mukherjee* and A. Ghosh*	<i>Dalton Trans.</i>	2013 42 13554	1477- 9226	4.0	<a href="https://doi.org/10.1039/c3dt51326b">https://doi.org/10.1039/c3dt51326b</a>
20.	Metalloligands [CuL] (H <sub>2</sub> L = Salen Type Di-Schiff Bases) in the Formation of Heterobimetallic Copper(II)-Uranyl Complexes: Photophysical Investigations, Structural Variations, and Theoretical Calculations	<b>S. Ghosh</b> , S. Biswas, A. Bauzá, M. Barceló-Oliver, A. Frontera*, A. Ghosh*	<i>Inorg. Chem.</i>	2013 52 7508	0020- 1669	4.6	<a href="https://doi.org/10.1021/ic400422d">https://doi.org/10.1021/ic400422d</a>

### Member of Professional Bodies:

- (1) Life member of Indian Chemical Society,
- (2) Life member of Indian Science Congress Association.