

Name: Dr. Subhadip Roy
Designation: Assistant Professor
Branch: Chemistry



Educational Qualification(s):

Qualification(s)	University
B.Sc Chemistry	Ramakrishna Mission Vivekananda College (Autonomous, affiliated to the University of Madras)
M.Sc Chemistry	University of Hyderabad
PhD	National Institute of Technology Agartala

Experience in years:

Academic: 01 Year 04 Months

Details:

Sl. No.	Organization	Position Held	Duration	
			From	To
1	Indian Institute of Science Education and Research (IISER) Bhopal	SERB-National Post-Doctoral Fellow	23-08-2017	31-12-2018

Other Information:

a) Publication details.

Research Interests: Coordination chemistry, Non-covalent interactions in solid state, Molecular magnetism, Multifunctional magnetic materials

h-index: 14 ; i10-index: 22 ; Total number of citations: 508 [As on 14-05-2022]

No. of M.Sc Project students supervised: 3 (completed); **5** (ongoing)

No. of PhD students supervised: 2 (ongoing)

Reviewer responsibilities: Journal of Molecular Structure (Elsevier), Crystal Growth & Design (American Chemical Society)

List of papers published in SCI Journals, in year wise descending order:

S. No	Author (s)	Title	Name of Journal	Volume	Page	Year
40	S. Dinda, S. Naskar, S. Roy , K. Pramanik* and S. Ganguly*	An insight into the coordination specificity of polyaromatic hydrocarbons (PAHs) grafted hydrazones towards rhodium(III),	Polyhedron (Impact factor: 3.052)	205	11531-8	2021
39	M. Bhattacharjee, S.R. Boruah, R.N. Dutta Purkayastha*, R. Ganguly, D. Maiti, A. Franconetti, A. Frontera*, A.M. Kirillov, S. Chowdhury, S. Roy and P. Nath	Synthesis, characterization, DNA binding ability, in vitro cytotoxicity, electrochemical properties and theoretical studies of copper(II) carboxylate complexes	Inorganica Chimica Acta (Impact factor: 2.545)	518	12023-5	2021
38	S. Adhikari*, T. Bhattacharjee, A. Das, S. Roy, C.G. Daniliuc, J.K. Zaręba, A. Bauzá and A. Frontera*	On the supramolecular properties of neutral, anionic and cationic cadmium complexes harvested from dithiolate–polyamine binary ligand systems	CrystEngCom (Impact factor: 3.545)	22	8023-8035	2020
37	S. Dinda, T. Sultana, S. Sultana, S.C. Patra, A.K. Mitra, S. Roy , K. Pramanik* and S. Ganguly*	Ruthenocycles of benzothiazolyl and pyridyl hydrazones with ancillary PAHs: synthesis, structure, electrochemistry and antimicrobial activity	New Journal of Chemistry (Impact factor: 3.591)	44	1102-11034	2020
36	A. Paul, R. Nasani, A. Mondal, S. Roy , S. Vela and S. Konar*	Reversible Magnetic Transition in a Bench-Stable Radical Cation Triggered by Structural Transition in the Magnetically Silent Counteranion	Crystal Growth & Design (Impact factor: 4.076)	20	6296-6301	2020
35	D.J. Mondal, S. Roy , J. Yadav, M. Zeller and S. Konar*	Solvent-Induced Reversible Spin-Crossover in a 3D Hofmann-Type Coordination Polymer and Unusual Enhancement of the	Inorganic Chemistry (Impact factor: 5.165)	59	1302-13028	2020

		Lattice Cooperativity at the Desolvated State				
34	A. Mondal, S. Roy , and S. Konar*	Remarkable Energy Barrier for Magnetization Reversal in 3D and 2D Dysprosium-chloranilate Based Coordination Polymers	Chemistry – A European Journal (Impact factor: 5.236)	26	8774-8783	2020
33	T.N.S. Sidharth, R. Nasani, A. Gupta, B.N.S. Sooraj, S. Roy , A. Mondal and S. Konar*	Reversal of magnetic exchange coupling between copper(II) and Blatter radical depending on the coordination environment	Inorganica Chimica Acta (Impact factor: 2.545)	503	11939-5	2020
32	S. Dinda, S.C. Patra, S. Roy , S. Halder, T. Weyhermüller, K. Pramanik* and S. Ganguly*	Coligand driven diverse organometallation in benzothiazolyl-hydrazone derivatized pyrene: ortho vs. peri C–H activation	New Journal of Chemistry (Impact factor: 3.591)	44	1407-1417	2020
31	R. Nasani, T. N. S. Sidharth, S. Roy , A. Mondal, J. M. Rawson* and S. Konar*	Probing through-space and through-bond magnetic exchange couplings in a new benzotriazinyl radical and its metal complexes	Dalton Transactions (Impact factor: 4.390)	48	14189 - 14200	2019
30	S. Das,* R. Banik, B. Kumar, S. Roy , Noorussabah, K. Amhad and P. K. Sukul*	A Green Approach for Organic Transformations Using Microwave Reactor	Current Organic Synthesis (Impact factor: 1.975)	16	730 - 764	2019
29	B. Dey, S. Roy , J. Titiš, R. Boča, S. P. Bera, A. Mondal and S. Konar*	Above Room Temperature Spin Transition in Thermally Stable Mononuclear Fe(III) Complexes	Inorganic chemistry (Impact factor: 5.165)	58	1134-1146	2019
28	P. Mondal, B. Dey, S. Roy , S. P. Bera, R. Nasani, A. Santra and S. Konar*	Field-Induced Slow Magnetic Relaxation and Anion/Solvent Dependent Proton Conduction in Cobalt(II)	Crystal Growth & Design (Impact factor: 4.076)	18	6211-6220	2018

		Coordination Polymers.				
27	M. K. Singh, S. Sutradhar, B. Paul, S. Adhikari, F. Laskar, S. Acharya, D. Chakraborty, S. Biswas, A. Das,* S. Roy and A. Frontera*	Mixed-ligand complexes of zinc(II) with 1,1-dicyanoethylene-2,2-dithiolate and N-donor ligands: A combined experimental and theoretical study.	Journal of Molecular Structure (Impact factor: 3.196)	1164	334-343	2018
26	B. Dey, S. Roy , A. K. Mondal, A. Santra and S. Konar*	Zero Field SMM Behavior and Magnetic Refrigeration in Rare Heterometallic Double Stranded Helicates of Cu ₂ Ln ₂ (Ln = Dy, Tb, Gd).	European Journal of Inorganic Chemistry (Impact factor: 2.524)	–	2429-2436	2018
25	P. Paul, K. R. N. Bhowmik, S. Roy , D. Deb, N. Das, M. Bhattacharjee, R. N. Dutta Purkayastha,* L. Male, V. McKee, R. Pallepogu, D. Maiti, A. Bauza, A. Frontera* and A. M. Kirillov	Synthesis, structural features, antibacterial behaviour and theoretical investigation of two new manganese(III) Schiff base complexes.	Polyhedron (Impact factor: 3.052)	151	407-416	2018
24	S. P. Bera, A. Mondal, S. Roy , B. Dey, A. Santra and S. Konar*	3D isomorphous lanthanide coordination polymers displaying magnetic refrigeration, slow magnetic relaxation and tunable proton conduction.	Dalton Transactions (Impact factor: 4.390)	47	15405 - 15415	2018
23	D. Debnath, S. Roy , A. Purkayastha, A. Bauzá, R. Choudhury, R. Ganguly*, A. Frontera* and T. K. Misra*	Synthesis and structure of 1,3-dimethyl-5-(<i>p</i> -sulfonamide-phenylazo)-6-aminouracil and its Ni(II) complex: Topological insights and investigation for noncovalent interactions	Journal of Molecular Structure (Impact factor: 3.196)	1141	225-236	2017
22	K. S. Singh*, M. Roy, S. Roy , B. Ghosh, N. M. Devi, C. B. Singh and L. K.	Synthesis, characterization and antimicrobial activities of	Journal of Coordination Chemistry	70	361-380	2017

	Mun*	triorganotin(IV) complexes with azo-azomethine carboxylate ligands: crystal structure of a tributyltin(IV) and a trimethyltin(IV) complex	(Impact factor: 1.751)			
21	S. Roy , I. Oyarzabal, J. Vallejo, J. Cano, E. Colacio,* A. Bauza, A. Frontera,* A.M. Kirillov, M G. B. Drew and S Das*	Two polymorphic forms of a six-coordinate mononuclear cobalt(II) complex with easy-plane anisotropy: Structural features, theoretical calculations, and field-induced slow relaxation of the magnetization	Inorganic Chemistry (Impact factor: 5.165)	55	8502-8513	2016
20	S. Roy , A. Bauza, A. Frontera,* F. Schaper, R. Banik, A. Purkayastha, B.M. Reddy, B. Sridhar, M.G.B. Drew, S.K. Das and S. Das*	Structural diversity and non-covalent interactions in Cd(II) and Zn(II) complexes derived from 3,5-dinitrobenzoic acid and pyridine: Experimental and theoretical aspects	Inorganica Chimica Acta (Impact factor: 2.545)	440	38-47	2016
19	R. Banik,‡ S. Roy ,‡ A.M. Kirillov, A. Bauza, A. Frontera,* A. Rodriguez-Dieguez, J.M. Salas, W. Maniukiewicz, S. K. Das and S. Das [‡ Equal contribution]	Two mixed-ligand cadmium(II) compounds bearing 5-nitrosopyrimidine and <i>N</i> -donor aromatic blocks: self-assembly generation, structural and topological features, DFT studies, and hirshfeld surface analysis	CrystEngComm (Impact factor: 3.545)	18	5647–5657	2016
18	M. Roy, S. Roy , N.M. Devi, C.B. Singh, K.S. Singh*	Synthesis, structural characterization and antimicrobial activities of diorganotin(IV)	Journal of Molecular Structure (Impact factor: 3.196)	1119	64-70	2016

		complexes with azo-imino carboxylic acid ligand: Crystal structure and topological study of a doubly phenoxide-bridged dimeric dimethyltin(IV) complex appended with free carboxylic acid groups				
17	M. Roy, S. Roy , K.S. Singh*, J. Kalita, S.S. Singh	Synthesis, characterization and anti-diabetic assay of diorganotin(IV) azo-carboxylates: crystal structure and topological studies of azo-dicarboxylic acid ligand and its cyclic tetranuclear dimethyltin(IV) complex	New Journal of Chemistry (Impact factor: 3.591)	40	1471-1484	2016
16	M. Roy, S. Roy , K.S. Singh*, J. Kalita, S.S. Singh	Synthesis, characterisation and anti-diabetic activities of triorganotin (IV) azo-carboxylates derived from amino benzoic acids and resorcinol: Crystal structure and topological study of a 48 membered macrocyclic-tetrameric trimethyltin (IV) complex	Inorganica Chimica Acta (Impact factor: 2.545)	439	164-172	2016
15	R. Banik, ‡ S. Roy , ‡ L. Dihan, J. Titis*, R. Boca*, A.M. Kirillov*, A.D. Martin, A. Bauza, A. Frontera*, A. Rodriguez-Dieguez,	Self-assembly synthesis, structure, topology, and magnetic properties of a mononuclear Fe(III)-violurate	Dalton Transactions (Impact factor: 4.390)	45	16166 - 16172	2016

	J.M. Salas and S. Das* [‡ Equal contribution]	derivative: A combined experimental and theoretical study				
14	A. Purkayastha, D. Debnath, S. Roy , A. Bauzá, R. Choudhury, A. Frontera* and T. K. Misra*	Synthesis and investigation of solid- and solution-state structures of nickel(II) complexes with 1,3-dimethyl-5-(arylo)-6-aminouracil	European Journal of Inorganic Chemistry (Impact factor: 2.524)	—	5585-5593	2016
13	M. Roy, S.S. Devi, S. Roy , C.B. Singh and K.S. Singh*	Synthesis, characterization, crystal structures and in vitro antimicrobial activities of triorganotin (IV) complexes of azo-dicarboxylates	Inorganica Chimica Acta (Impact factor: 2.545)	426	89-98	2015
12	R. Banik, ‡ S. Roy , ‡ A. Bauza, A. Frontera* and S. Das* [‡ Equal contribution]	Cadmium(II) complexes containing <i>N,N'</i> -dimethylviolate as ligand or counteranion: synthesis, characterization, crystal structures and DFT study	RSC Advances (Impact factor: 3.361)	5	10826 - 10836	2015
11	R. Banik, ‡ S. Roy , ‡ A. Bauza, A. Frontera*, A. Rodríguez-Diéguez, J.M. Salas, A.M. Kirillov, S. Chowdhury, S.K. Das and S. Das* [‡ Equal contribution]	Supramolecular interactions through lone pair(lp)- π and hydrogen bonding in cobalt(III) and manganese(II) derivatives of <i>N,N'</i> -dimethylviolate: A combined experimental and theoretical study	Inorganica Chimica Acta (Impact factor: 2.545)	435	178-186	2015

10	P. Paul, S. Roy , S. Sarkar, S. Chowdhury, R.N.D. Purkayastha*, P. Raghavaiah, P. McArdle, L. Deb and S.I. Devi	Synthesis, structure and some properties of a manganese(II) benzoate containing diimine	Journal of Molecular Structure (Impact factor: 3.196)	1102	153-160	2015
9	D. Debnath, S. Roy , B.-H. Li, C.-H. Lin and T.K. Misra*	Synthesis, structure and study of azo-hydrazone tautomeric equilibrium of 1,3-dimethyl-5-(arylo)-6-amino-uracil derivatives	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Impact factor: 4.098)	140	185-197	2015
8	S. Roy , A. Bauza, A. Frontera*, R. Banik, A. Purkayastha, M.G.B. Drew, B.M. Reddy, B. Sridhar, S.K. Das and S. Das*	Experimental observation and theoretical investigation of a novel Cd(II) complex with π -hole interactions involving nitro groups.	CrystEngComm (Impact factor: 3.545)	17	3912-3916	2015
7	S.S. Devi, M. Roy, S. Roy and K.S. Singh*	Crystal structure and spectral characterization of di-n-butyltin(IV) compound of vanillin	Main group Chemistry (Impact factor: 1.039)	14	339-348	2015
6	S. Roy , A. Bauza, R. Banik, S. Chandra Biswas, A. Frontera* and S. Das*	Structural basis for molecular recognition, theoretical studies and anti-bacterial properties of three bis-uracil derivatives	Tetrahedron (Impact factor: 2.457)	70	6931-6937	2014
5	S. Roy , R. Banik, S. Das* and A.J. Thakur	(E)-5,5'-(3-phenylprop-2-ene-1,1-diyl)bis[6-amino-1,3-dimethylpyrimidine-2,4(1H,3H)-dione]: Synthesis characterization, crystal structure and	Journal of Indian Chemical Society (Impact factor: 0.284)	19	2117-2125	2014

		antimicrobial activity				
4	K. R. Nath Bhowmik, P. Paul, S. Roy , A. K. De, D. Deb and R. N. D. Purkayastha*	Syntheses, characterization, and structures of polynuclear tartrato and malato complexes of bivalent manganese	Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry (Impact factor: 1.716)	44	634-641	2014
3	D. Dey, S. Roy , R. N. Dutta Purkayastha*, R. Pallepogu and P. McArdle	Zinc carboxylates containing diimine: Synthesis, characterization, crystal structure, and luminescence	Journal of Molecular Structure (Impact factor: 3.196)	1053	127-133	2013
2	D. Dey, S. Roy , R.N.D. Purkayastha*, R. Pallepogu, L. Male and V. McKee	Syntheses, characterization and crystal structures of two zinc(II) carboxylates containing pyridine	Journal of Coorination Chemistry (Impact factor: 1.751)	64	1165-1176	2011
1	K.R.N. Bhowmik, P. Paul, A.K. De, S. Roy and R.N.D. Purkayastha*	Fluoride assisted stabilization of manganese(III) in aqueous medium. Synthesis and spectral characterization of new mixed-ligand fluoromanganate(III), containing hydroxyl-carboxylic acids as ancillary ligands	Journal of Indian Chemical Society (Impact factor: 0.284)	88	1423-1427	2011

(b) Details of Seminar/Workshop/Conference.

- Participated in a Two days' workshop on "**Material & Green Chemistry**" at NIT Agartala (29-30, November, 2013).
- Delivered oral presentation in a National Conference on "**Recent Development & Applications in Chemical Sciences (RDACS-2016)**" at NIT Agartala (20-21, May, 2016).

- Participated in “**Inter-Disciplinary Explorations in Chemistry (I-DEC 2018)**” at IISER Bhopal (06-08, December, 2018).
- Participated in International Conference on Recent Trends in Chemistry of Materials 2021 (ICRTCM 2021) in virtual mode organized by the Department of Chemistry (20th September, 2021 - 24th September, 2021)