

DR. RUPAM DINDA

Professor

E-mail: rupamdinda@nitrrkl.ac.in

Phone: +91-661-2462657

Fax: +91-661-2462022

Office: Main Building – 425



Academic profile:

- ✚ Ph. D. (Chemistry), Jadavpur University (IACS), Kolkata
- ✚ M. Sc. (Chemistry), University of Calcutta
- ✚ B. Sc. (Hons.) in Chemistry, University of Calcutta

Research & Professional Experience:

- ✚ DFG, Visiting Scientist, German Science foundation DFG (Deutsche Forschungsgemeinschaft), May 2018 – July 2018
- ✚ DAAD Fellow (Visiting Scientist) (Academic host: Prof. Winfried Plass) Friedrich-Schiller-Universität Jena, Germany May 2017 – July 2017
- ✚ Professor, NIT Rourkela, India January 2018 – till date
- ✚ Associate Professor, NIT Rourkela, India July 2012 – January 2018
- ✚ Assistant Professor, NIT Rourkela, India July 2007 – June 2012
- ✚ Postdoctoral Researcher, University of Heidelberg, Germany (2006-2007)
- ✚ Postdoctoral Researcher, Missouri University of Science and Technology, USA (2003-2006)
- ✚ Senior Research Fellow, CSIR, IACS Kolkata, India – July 2001 to September 2002
- ✚ Junior Research Fellow, CSIR, IACS Kolkata, India – July 1999 to June 2001

Honors and Affiliation:

- ✚ 2021 Prof. Dayanidhi Patnaik Memorial Award, Orissa Chemical Society
- ✚ 2020 DAAD Research Grants-Bi-nationally Supervised Doctoral Degrees
- ✚ 2018 Life Member, Chemical Research Society of India
- ✚ 2016 Life Member, Orissa Chemical Society
- ✚ 2006 Post-Doctoral Fellowship, University of Heidelberg, Germany
- ✚ 2005 Member, American Chemical Society, USA
- ✚ 2003 NIH Post-Doctoral Fellowship, Missouri University of Science and Technology, USA
- ✚ 2002 Life Member, Indian Association for the Cultivation of Science, Kolkata, India
- ✚ 2000 CSIR-NET for Lectureship and Fellowship, Govt. of India
- ✚ 1999 GATE for Research Fellowship

Research Interest:

Over the years, we have been exploring the pharmacological, catalytic and magnetic chemistry of a wide range of transition metals, both in artificial and biological settings.

Synthetic and Bio-Inorganic Chemistry: - Study of biological activity of transition metal complexes in terms of their interaction with biomolecules like double stranded DNA, quadruplex DNA and model proteins and in addition, their insulin mimetic activity. Study of anticancer properties through cell viability assay, study of apoptosis,

generation of reactive oxygen species (ROS), study of mitochondria membrane potential (MMP) and finally through cell cycle analysis.

Molecular Spintronic: - Single molecule magnets (SMM), Molecular magnetic qubits, Single chain magnets (SCM).

Research Group

Present Group Members

Ph. D. Students:

- (1) Sudhir Lima (Since July, 2017)
- (2) Gurunath Sahu (Since July, 2018)
- (3) Sushree Aradhana Patra (Since July, 2018)
- (4) Kausik Sahu (Executive Ph.D, Since July, 2019)
- (5) Deepika Mohapatra (Since January, 2021)
- (6) Pratikshya Das Pattanayak (Since July,2021)

M.Sc. Project:

- (1) Ravi Khangar (2022)
- (2) Satyam Mishra (2022)

Past Group Members

Ph. D. Students:

- ✚ Monalisa Mohanty (Ph. D. degree awarded in 2021)
- ✚ Atanu Banerjee (Ph. D. degree awarded in 2021)
- ✚ Sudarshana Majumder (Ph. D. degree awarded in 2018)
- ✚ Satabdi Roy (Ph. D. degree awarded in 2017)
- ✚ Saswati (Ph. D. degree awarded in 2015)
- ✚ Subhashree Priyadarshini Dash (Ph. D. degree awarded in 2014)
- ✚ Sagarika Pasa(Ph. D. degree awarded in 2013)

M. Sc. Project:

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|-------------------------------|----------------------------------|---------------------------------|
| (1) Saurav Goswami (2008) | (10) Punam Kumari (2012) | (19) Aniruddha Singha (2016) |
| (2) Saroj K. Panda (2008) | (11) Sangeeta Sethy (2012) | (20) Monojit Dasbairagya (2016) |
| (3) Paresh K. Maji (2009) | (12) SwastikaMitra (2012) | (21) Deepti Raj (2017) |
| (4) Sarita Rani Behera (2009) | (13) Deepak Ranjan Parida (2012) | (22) Sourav Sen (2017) |
| (5) Purabi Kar (2010) | (14) Upasana Panda (2013) | (23) Nilakshi Deka (2018) |
| (6) Saswati (2010) | (15) Nayan Shree (2013) | (24) Shibshankar Paul (2018) |
| (7) Purabi Pradhan (2011) | (16) Parbati Tudu (2014) | (25) Sonaleen Biswal(2019) |
| (8) Runa Mohanta (2011) | (17) Shweta (2014) | (26) Premnath Das (2019) |
| (9) Asish Behera (2011) | (18) Usha Mishra (2015) | (27) Shivani kesarwani (2020) |
| (28) Rajib Samanta (2020) | (29) Manoj Kumar Behera (2021) | (30) Subhrasmita Sahu (2021) |

Recent Publications:

- ✚ Mo(VI) Potential Metallodrugs: Explaining the Transport and Cytotoxicity by Chemical Transformations, M. Mohanty, G. Sahu, A. Banerjee, S. Lima, S. A. Patra, A. Crochet, G. Sciortino, D. Sanna, V. Ugone, E. Garribba,* and **Rupam Dinda***, *Inorg. Chem.* **2022**, *61*, 4513–4532
- ✚ Water-Soluble Dioxidovanadium(V) Complexes of Aroylhydrazones: DNA/BSA Interactions, Hydrophobicity, and Cell-Selective Anticancer Potential, Gurunath Sahu, Atanu Banerjee, Rajib Samanta, Monalisa Mohanty, Sudhir Lima, Edward R. T. Tiekink, and **Rupam Dinda***, *Inorg. Chem.* **2021**, *60*, 15291–15309
- ✚ Study of DNA Interaction and Cytotoxicity Activity of Oxidovanadium(V) Complexes with ONO Donor Schiff Base Ligands, Gurunath Sahu 1, Edward R. T. Tiekink 2 and **Rupam Dinda***, *Inorganics* **2021**, *9*, 66
- ✚ Protein binding and cytotoxic activities of monomeric and dimeric oxido-vanadium(V) salan complexes: Exploring the solution behavior of monoalkoxido-bound oxido-vanadium(V) complex, Sushree Aradhana Patra, Monalisa Mohanty, Atanu Banerjee, Shivani Kesarwani, Felix Henkel, Hans Reuter, **Rupam Dinda***, *Journal of Inorganic Biochemistry* **224** (2021) 111582
- ✚ Synthesis, Characterization and DFT studies of Novel-CH₂-Capped and Non-capped Salan Complexes, S. Roy, S. Lima, N. Ribeiro, I. Correia, F. Avecilla, M.L. Kuznetsov, J.C. Pessoa, W. Kaminsky, **Rupam Dinda***, *Inorganica Chimica Acta*, **2021**, *519*, 120265.
- ✚ Probing CO Generation through Metal-Assisted Alcohol Dehydrogenation in Metal-2-(aryloxy)phenol Complexes Using Isotopic Labeling (Metal = Ru, Ir): Synthesis, Characterization, and Cytotoxicity Studies, S. Roy, M. Mohanty, R. G. Miller, S. A. Patra, S. Lima, A. Banerjee, N. M. Nolte, E. Sinn, W. Kaminsky, **Rupam Dinda***, *Inorganic Chemistry*, **2020**, *59*, 15526.
- ✚ New V^{IV}, V^{IV}O, V^VO and V^VO₂ Systems: Exploring their Interconversion in Solution, Protein Interactions and Cytotoxicity', A. Banerjee, S. P. Dash, M. Mohanty, G. Sahu, G. Sciortino, E. Garribba, M. F. N. N. Carvalho, F. Marques, J. C. Pessoa, W. Kaminsky, K. Brzezinski, **Rupam Dinda***, *Inorganic Chemistry*, **2020**, *59*, 14042.
- ✚ Unusual chemistry of Cu(II) salan complexes: synthesis, characterization and superoxide dismutase activity, S. Roy, A. Banerjee, S. Lima, A. Horn Jr, R. M. S. N. Sampaio, N. Ribeiro, I. Correia, F. Avecilla, M. F. N. N. Carvalho, M. L. Kuznetsov, J. C. Pessoa, W. Kaminsky and **Rupam Dinda***, *New Journal of Chemistry*, **2020**, *44*, 11457.
- ✚ Synthesis, structure and characterization of new dithiocarbamate based mixed ligand oxidovanadium(IV) complexes: DNA/HSA interaction, cytotoxic activity and DFT studies, A. Banerjee, M. Mohanty, S. Lima, R. Samanta, E. Garribba, T. Sasamori, and **Rupam Dinda***, *New Journal of Chemistry*, **2020**, *44*, 10946.
- ✚ Investigation of DNA interaction and antiproliferative activity of mixed ligand dioxidomolybdenum(VI) complexes incorporating ONO donor aroylhydrazone ligands', **Rupam Dinda***, A. Panda, A. Banerjee, M. Mohanty, S. Pasayat, E. R. T. Tiekink, *Polyhedron*, **2020**, *183*, 114533.
- ✚ Polynuclear zinc(II) complexes of thiosemicarbazone: Synthesis, X-ray structure and biological evaluation, Saswati, M. Mohanty, A. Banerjee, S. Biswal, A. H. Jr, G. Schenk, K. Brzezinski, E. Sinn, H. Reuter and **Rupam Dinda***, *Journal of Inorganic Biochemistry*, **2020**, *203*, 110908.
- ✚ In vitro cytotoxicity and catalytic evaluation of dioxidovanadium(V) complexes in an azohydrazone ligand environment, M. Mohanty, S. K. Maurya, A. Banerjee, S. A. Patra, M. R. Maurya, A. Crochet, K. Brzezinski and **Rupam Dinda***, *New Journal of Chemistry*, **2019**, *43*, 17680.

- ✚ Synthesis, structure and biological evaluation of mixed ligand oxidovanadium(IV) complexes incorporating 2-(aryloxy) phenolates, S. Lima, A. Banerjee, M. Mohanty, G. Sahu, C. Kausar, S. K. Patra, E. Garribba, W. Kaminsky, and **Rupam Dinda***, *New Journal of Chemistry*, **2019**, *43*, 17711.
- ✚ Chemistry of mixed-ligand oxidovanadium(IV) complexes of aroylhydrazones incorporating quinoline derivatives: Study of solution behavior, theoretical evaluation and protein/DNA interaction, A. Banerjee, S. P. Dash, M. Mohanty, D. Sanna, G. Sciortino, V. Ugone, E. Garribba,* H. Reuter, W. Kaminsky, **Rupam Dinda***, *Journal of Inorganic Biochemistry*, **2019**, *199*, 110786.
- ✚ Synthesis, structure, solution behavior, reactivity and biological evaluation of oxidovanadium(IV/V) thiosemicarbazone complexes, Saswati, Pedro Adão, Sudarshana Majumder, S. P. Dash, S. Roy, M. L. Kuznetsov, J. Costa Pessoa,* C. S. B. Gomes, M. R. Hardikar, E. R. T. Tiekink and **Rupam Dinda***, *Dalton Transaction*, **2018**, *47*, 11358.
- ✚ Anionic Dinuclear Oxidovanadium(IV) Complexes with Azo Functionalized Tridentate Ligands and μ -Ethoxido Bridge Leading to an Unsymmetric Twisted Arrangement: Synthesis, X-ray Structure, Magnetic Properties, and Cytotoxicity, S. Roy, M. Bohme, S. P. Dash, M. Mohanty, A. Buchholz, W. Plass, S. Majumder, S. Kulanthaivel, I. Banerjee, H. Reuter, **Rupam Dinda***, *Inorganic Chemistry*, **2018**, *57*, 5767.
- ✚ Synthesis, structural studies and catalytic activity of a series of dioxidomolybdenum(VI)-thiosemicarbazone complexes, S. Roy, Saswati, S. Lima, S. Dhaka, M. R. Maurya, R. Acharyya, C. Eagle, **Rupam Dinda***, *Inorganica Chimica Acta*, **2018**, *474*, 134.
- ✚ Chemistry of oxidomolybdenum(IV) and -(VI) complexes with ONS donor ligands: Synthesis, computational evaluation and oxo-transfer reactions, Saswati, S. Roy, S. P. Dash, R. Acharyya, W. Kaminsky, V. Ugone, E. Garribba, C. Harris, J. M. Lowe, **Rupam Dinda***, *Polyhedron*, **2018**, *141*, 322.
- ✚ Dioxidomolybdenum(VI) complexes bearing sterically constrained aroylazine ligands: Synthesis, structural investigation and catalytic evaluation, S. Majumder, S. Pasayat, S. Roy, S. P. Dash, S. Dhaka, M. R. Maurya, M. Reichelt, H. Reuter, K. Brzezinski, **Rupam Dinda***, *Inorganica Chimica Acta*, **2018**, *469*, 366.
- ✚ Monomeric and Dimeric Oxidomolybdenum(V and VI) Complexes, Cytotoxicity, DNA Interaction Studies: Molybdenum Assisted C=N Bond Cleavage of Salophen Ligands, S. Majumder, S. Pasayat, A. K. Panda, S. P. Dash, S. Roy, A. Biswas, M. E. Varma, B. N. Joshi, E. Garribba, C. Kausar, S. K. Patra, W. Kaminsky, A. Crochet, **Rupam Dinda***, *Inorganic Chemistry*, **2017**, *56*, 11190.
- ✚ Ruthenium(II) complexes of thiosemicarbazones: Synthesis, X-ray crystal structures, spectroscopy, electrochemistry, DFT studies and fluoride sensing properties, B. Ghosh, P. Adak, S. Naskar, B. Pakhira, P. Mitra, **Rupam Dinda**, S. K. Chattopadhyay*, *Inorganica Chimica Acta*, **2017**, *459*, 1.
- ✚ Synthesis, structure and cytotoxicity of a series of dioxidomolybdenum(VI) complexes featuring salan ligands, S. Roy, M. Mohanty, S. Pasayat, S. Majumder, K. Senthilguru, I. Banerjee, M. Reichelt, H. Reuter, E. Sinn, **Rupam Dinda***, *Journal of Inorganic Biochemistry*, **2017**, *172*, 110.
- ✚ Versatile Reactivity and Theoretical Evaluation of Mono- and Dinuclear Oxidovanadium(V) Compounds of Aroylazines: Electrogeneration of Mixed Valence $V^{IV}V^V$ Complexes', S. P. Dash, S. Roy, M. Mohanty, M. F. N. N. Carvalho, M. L. Kuznetsov, J. Costa Pessoa, A. Kumar, Y. P. Patil, A. Crochet, **Rupam Dinda***, *Inorganic Chemistry*, **2016**, *55*, 8407.

- ✚ Chemistry of monomeric and dinuclear non-oxido vanadium(IV) and oxidovanadium(V)-aroylhydrazone complexes: Exploring novel solution behavior', S. P. Dash, S. Majumder, A. Banerjee, M. Fernanda N.N. Carvalho, P. Adão, J. Costa Pessoa, K. Brzezinski, E. Garribba, H. Reuter, **Rupam Dinda***, *Inorganic Chemistry*, **2016**, *55*, 1165.
- ✚ Study of DNA/BSA interaction and catalytic potential of oxidovanadium(V) complexes with ONO donor ligands, S. P. Dash, A. K. Panda, S. Dhaka, S. Pasayat, A. Biswas, M. R. Maurya, P. K. Majhi, A. Crochet, **Rupam Dinda***, *Dalton Transaction*, **2016**, *45*, 18292.
- ✚ Synthesis, theoretical evaluation and catalytic applications of oxidometal (Mo/V) complexes: Unexpected coordination due to ligand rearrangement through metal mediated C–C bond formation, S. Pasayat, M. Böhme, S. Dhaka, S. P. Dash, S. Majumder, M. R. Maurya, W. Plass, W. Kaminsky, **Rupam Dinda***, *European Journal of Inorganic Chemistry*, **2016**, 1604.
- ✚ Synthesis, X-ray structure and *in vitro* cytotoxicity studies of Cu(I/II) complexes of thiosemicarbazone: Special emphasis on their interactions with DNA, S. Bhakat, A. Chakraborty, S. P. Dash, A. K. Panda, **Rupam Dinda***, A. Biswas, S. Mukhopadhyay, S. K. Bhutia, A. Crochet and R. Acharyya, *Dalton Transaction*, **2015**, *44*, 6140.
- ✚ Evaluation of the cell cytotoxicity and DNA/BSA binding and cleavage activity of some dioxidovanadium(V) complexes containing aroylhydrazones, S. P. Dash, A. K. Panda, S. Pasayat, S. Majumder, A. Biswas, W. Kaminsky, S. Mukhopadhyay, S. K. Bhutia, **Rupam Dinda***, *Journal of Inorganic Biochemistry*, **2015**, *144*, 1.
- ✚ Oxidovanadium(V) complexes of aroylhydrazones containing bioactive heterocycles: Synthesis, characterisation and study of DNA binding, photo-induced DNA cleavage and cytotoxic activities, S. P. Dash, A. K. Panda, S. Pasayat, **Rupam Dinda***, A. Biswas, E. R. T. Tiekink, S. Mukhopadhyay, S. K. Bhutia, W. Kaminsky and E. Sinn, *RSC Advances*, **2015**, *5*, 51852.
- ✚ Syntheses and structural investigation of some alkali metal ion-mediated $LV^VO_2^-$ (L^{2-} = Tridentate ONO ligands) species: DNA binding, photo-induced DNA cleavage and cytotoxic activities, S. P. Dash, A. K. Panda, S. Pasayat, **Rupam Dinda***, A. Biswas, E. R. T. Tiekink, Y. P. Patil, M. Nethaji, W. Kaminsky, S. Mukhopadhyay and S. K. Bhutia, *Dalton Transaction*, **2014**, *43*, 10139.
- ✚ Synthesis, structural studies and catalytic activity of dioxidomolybdenum(VI) complexes with aroylhydrazones of naphthol-derivative, S. Pasayat, S. P. Dash, S. Roy, **Rupam Dinda***, S. Dhaka, M. R. Maurya, W. Kaminsky, Y. P. Patil and M. Nethaji, *Polyhedron*, **2014**, *67*, 1.
- ✚ Synthesis, Structure, Characterization and Study of Antiproliferative Activity of Dimeric and Tetrameric Oxidomolybdenum(VI) Complexes of *N, N'*-Disalicyloylhydrazine, S. Pasayat, S. P. Dash, S. Majumder, **Rupam Dinda***, E. Sinn, H. Stoeckli-Evans, S. Mukhopadhyay, S. K. Bhutia and P. Mitra, *Polyhedron*, **2014**, *80*, 198

- ✚ Highly Stable Hexacoordinated Nonoxidovanadium(IV) Complexes of Sterically Constrained Ligands: Syntheses, Structure, and Study of Antiproliferative and Insulin Mimetic Activity, S. P. Dash, S. Pasayat, S. Bhakat, S. Roy, **Rupam Dinda***, E. R. T. Tiekink, S. Mukhopadhyay, S. K. Bhutia, M. R. Hardikar, B. N. Joshi, Y. P. Patil, and M. Nethaji, *Inorganic Chemistry*, **2013**, *52*, 14096.
- ✚ Mixed-ligand nickel (II) thiosemicarbazone complexes: Synthesis, characterization and biological evaluation. Saswati, **Rupam Dinda***, C. S. Schmiesing, E. Sinn, Y. P. Patil, M. Nethaji, H. Stoeckli-Evans and R. Acharyya*, *Polyhedron*, **2013**, *50*, 354.
- ✚ Mixed-ligand aroylhydrazone complexes of molybdenum: Synthesis, structure and biological activity, S. Pasayat, S. P. Dash, Saswati, P. K. Majhi, Y. P. Patil, M. Nethaji, H. R. Dash, S. Das and **Rupam Dinda***, *Polyhedron*, **2012**, *38*, 198.
- ✚ Oxovanadium(V) complexes incorporating tridentate aroylhydrazoneoximes: Synthesis, characterizations and antibacterial activity, S. P. Dash, S. Pasayat, Saswati, H. R. Dash, S. Das, Ray J Butcher, **Rupam Dinda***, *Polyhedron*, **2012**, *31*, 524.
- ✚ Synthesis and Characterization of a Series of Structurally and Electronically Diverse Fe(II) Complexes, P. Paraskevopoulou, Lin Ai, Q. Wang, D. Pinnapareddy, R. Acharyya, **Rupam Dinda**, P. Das, R. elenligil-etin, G. Floros, Y. Sanakis, A. Choudhury, N. P. Rath and Pericles Stavropoulos, *Inorganic Chemistry*, **2010**, *49*, 108.
- ✚ Alkali metal (Na⁺ and K⁺)- mediated supramolecular assembly of oxovanadium(V) complexes: Synthesis and structural characterization, **Rupam Dinda***, P. K. Majhi, P. Sengupta, S. Pasayat, S. Ghosh, L. R. Falvello, T. C.W. Make, *Polyhedron*, **2010**, *29*, 248.
- ✚ Solution Study of a Structurally Characterized Monoalkoxo-Bound Monooxo- Vanadium(V) Complex: Spontaneous Generation of the Corresponding Oxobridged Divanadium (V,V) Complex and Electroreduction to a Mixed-Valence Species in Solution, **Rupam Dinda**, P. Sengupta, M. Sutradhar, T. C. W. Mak and S. Ghosh, *Inorganic Chemistry*, **2008**, *47*, 5634.
- ✚ Synthesis, Characterization, and Reactivity of Iron Trisamidoamine Complexes That Undergo Both Metal- and Ligand-Centered Oxidative Transformation, R. Çelenligil-Çetin, P. Paraskevopoulou, **Rupam Dinda**, R. J. Staples, E. Sinn, N. P. Rath, and P. Stavropoulos, *Inorganic Chemistry*, **2008**, *47*, 1165.
- ✚ Oxidative Ligand Rearrangement Due to Incipient Aminyl Radicals in the Oxidation of Fe(II) Species with Dioxygen, R. Çelenligil-Çetin, P. Paraskevopoulou, **Rupam Dinda**, N. Lalioti, Y. Sanakis, A. Monem Rawashdeh, R. J. Staples, E. Sinn, Pericles Stavropoulos, *European Journal of Inorganic Chemistry*, **2008**, *673*.
- ✚ Synthesis and Structural Characterization of a Stable Dimeric Boron(II) Di cation, **Rupam Dinda**, Oxana Ciobanu, Hubert Wadepohl, Olaf Hübner, Rama Acharyya, and Hans-Jörg Himmel, *Angewandte Chemie International Edition*, **2007**, *46*, 9110.

- ✚ ‘Synthesis, Structure, and Reactivity of Some New Dipyridyl and Diamine -Bridged Dinuclear Oxomolybdenum(VI) Complex’, **Rupam Dinda**, S. Ghosh, L. R. Falvello, M. Tomas, T. C. W. Mak, *Polyhedron*, **2006**, *25*, 2375.

- ✚ ‘Synthesis, crystal structure determination, spectroscopic and electrochemical studies of trans-[Ru(PPh₃)₂(bbpH₂)Cl]Cl·CHCl₃·H₂O (bbpH₂=2,6-bis(benzimidazolyl)pyridine)-an infinite double columnar supramolecule in the solid state’, D. Mishra, S. Naskar, S. K. Chattopadhyay, M. Maji, P. Sengupta, **Rupam Dinda**, S. Ghosh, T. C. W. Mak, *Transition Met. Chem.*, **2005**, *30*, 352.

- ✚ ‘Synthesis, characterization and electrochemistry of [Ru(L)(2,2'-bpy)Cl₂]: (L = 4 aryl substituted thiosemicarbazide; bpy = bipyridine)’, M. Maji, P. Sengupta, **Rupam Dinda** *, *Indian Journal of Chemistry, Section A: Inorganic, Bio-inorganic, Physical, Theoretical & Analytical Chemistry*, **2004**, 790.

- ✚ ‘Synthesis, Structure and Reactivity of A New Mononuclear Molybdenum (VI) Complex Resembling Active Centre of Molybdenum Oxotransferases’, **Rupam Dinda**, P. Sengupta, S. Ghosh, W. S. Sheldrick, *Eur. J. Inorg. Chem.*, **2003**, 363.

- ✚ ‘Synthesis and characterisation of some biologically active ruthenium(II) complexes of thiosemicarbazones of pyridine 2-aldehyde and thiophene 2-aldehyde involving some ring substituted 4-phenylthiosemicarbazides and cis-[Ru(PPh₃)₂(L⁶H)₂](ClO₄)₂·2H₂O’ [L⁶H = 4-(cyclohexyl) thiosemicarbazone of pyridine 2-aldehyde], P. Sengupta, **Rupam Dinda**, S. Ghosh, W. S. Sheldrick, *Polyhedron*, **2003**, *22*, 447.

- ✚ ‘A series of new oxomolybdenum(IV) complexes involving some NSO donors as the main ligand frame; the first use of diacetyldihydrazones to stabilize the MoO⁺² acceptor centre’, A. Rana, **Rupam Dinda** *, S. Ghosh, A. J. Blake, *Polyhedron*, **2003**, *22*, 3075.

- ✚ ‘Valence Delocalisation in a Mixed-Oxidation Divanadium(IV,V) Complex Electrogenerated from its Structurally Characterised Divandium(V) Analogue with a Tridentate (ONO) Ligand’, **Rupam Dinda**, P. Sengupta, S. Ghosh, T. C. W. Mak, *Inorg. Chem.*, **2002**, *41*, 1684.

- ✚ ‘A family of mononuclear molybdenum -(VI) and -(IV) oxo complexes with a tridentate (ONO) ligand’ **Rupam Dinda**, P. Sengupta, S. Ghosh, H. M. Figge, W. S. Sheldrick, *J. Chem. Soc. Dalton Trans.*, **2002**, 4434.

- ✚ ‘Synthesis, characterisation and crystal structure of cis-dioxomolybdenum(VI) complexes of some potentially pentadentate but functionally tridentate (ONS) donor ligands’, A. Rana, **Rupam Dinda**, P. Sengupta, S. Ghosh, L. R. Falvello, *Polyhedron*, **2002**, *21*, 1023.

- ✚ ‘The reactivity of a ruthenium(III) ammine complex, $[\text{Ru}(\text{NH}_3)_5\text{Cl}]\text{Cl}_2$, towards α -N heterocyclic mono- and di-carboxylic acids. The Synthesis and characterisation of biologically active mixed ligand ruthenium(III) complexes’, P. Sengupta, **Rupam Dinda**, S. Ghosh, A. K. Guha, *Transition Met. Chem.*, **2002**, *27*, 290.

- ✚ ‘Ruthenium(II) complexes of NSO donor ligands in the form of ring-substituted 4-phenyl-thiosemicarbazones of salicylaldehyde and o-hydroxyacetophenone’, P. Sengupta, **Rupam Dinda**, S. Ghosh, *Transition Met. Chem.*, **2002**, *27*, 665.

- ✚ ‘Synthesis and characterization of some ruthenium(II) complexes of α -N heterocyclic carboxylic acids – X-ray structures of $\text{cis-}[\text{Ru}(\text{PPh}_3)_2(\text{L}^1)_2].2\text{CH}_3\text{OH}$ and $\text{cis-}[\text{Ru}(\text{PPh}_3)_2(\text{L}^1)_2]$ (L^1H = pyridine 2-carboxylic acid and L^3H_2 = Imidazole 4,5-dicarboxylic acid)’, P. Sengupta, **Rupam Dinda**, S. Ghosh, W. S. Sheldrick, *Polyhedron*, **2001**, *20*, 3349.

Patents: NIL

Conferences:

Recent List of Invited Talk/ Paper Presented in Conferences /Symposia

S.No.	Names of the Authors	Title of the Paper/Talk	Name of the Conference Date, Year and Place
1	Rupam Dinda	Exploring the solution behaviour and biological evaluation of transition metal complexes	RAIC-2022, IIT BBSR
2	Rupam Dinda	Probing CO Generation through Metal-Assisted Alcohol Dehydrogenation	Guru Ghasidas Vishwavidyalaya, Bilaspur, 2021
3	Rupam Dinda	Variable Valence Non-oxido and Oxido-vanadium Systems: Exploring their Interconversion in Solution, Biomolecular Interactions, Antiproliferative and Insulin Mimetic Activity	12 th International Vanadium Symposium, 2021
4	Sushree Aradhana Patra and Rupam Dinda	Protein Binding and Cytotoxic Activities of Monomeric and Dimeric Oxido-Vanadium(V) Salan Complexes: Exploring the Solution Behavior of Monoalkoxido-Bound Oxido-Vanadium(V) complex.	12 th International Vanadium Symposium, 2021

5	Sudhir Lima and Rupam Dinda	Synthesis, Structure and Biological Evaluation of Mixed Ligand Oxidovanadium(IV) Complexes Incorporating 2-(aryloxy) Phenolates	12 th International Vanadium Symposium, 2021
6	Gurunath Sahu and Rupam Dinda	Chemistry of dioxidovanadium(V) complexes with dibasic ONO donor ligands: Study of DNA/BSA interactions, and anticancer potential	12 th International Vanadium Symposium, 2021
7	Rupam Dinda	Chemistry of Oxidometal (Mo and V) Complexes Featuring O-N Donor Ligands	Frontiers in Chemistry-II 2018
8	M. Mohanty, S. Majumder, A. Banerjee and Rupam Dinda	Monomeric and Dimeric Oxidomolybdenum (V and VI) Complexes of Salophen Ligands: Synthesis, Characterization, DNA Interaction and Cytotoxicity	22nd CRSI National Symposium in Chemistry and 12th CSIR-RSC Symposium, Raipur , Pt. Ravishankar Shukla University, Chhattisgarh, India, 1- 4 February, 2018.
9	Rupam Dinda S. P. Dash and S. Majumder,	Chemistry of Oxidometal (Mo and V) Complexes: Metal Assisted Organic Transformation and Novel Solution Behavior	National Symposium on Modern Trends in Chemistry (MTIC-XVII), CSIR-NCL Pune , India, 11-14 December, 2017.
10	Rupam Dinda S. P. Dash and S. Majumder	Variable valence oxidometal (Mo and V) complexes of mono- and dibasic ligands: Exploring solution behavior biological activities	National Symposium on Recent Advances in Chemistry and Industry (2017), Department of Chemistry IEST, Shibpur , India, 2-3 August, 2017
11	Rupam Dinda S. P. Dash and S. Majumder	Chemistry of variable valence oxidometal (Mo and V) complexes: Solution behaviour, theoretical and biological evaluation	2 nd National Conference on New Frontiers in Chemistry - From Fundamentals to Applications – II (NFCFA – 2017), BITS-Pilani, Goa Campus, Goa, India, 28-29 January, 2017
12	Rupam Dinda S. P. Dash and S. Majumder	Versatile reactivity and theoretical evaluation of non-oxido and oxidometal (Mo and V) complexes of mono- and dibasic Ligands: Solution behavior and biological activities	5th Symposium on Advanced Biological Inorganic Chemistry (SABIC-2017), Kolkata, India, 7-11 January, 2017
13	S. Roy, M. Mohanty, S. Majumder, A.	Dioxidomolybdenum(VI) complexes featuring O-N donor ligands: Synthesis, Characterization, DNA Interaction and Cytotoxicity	International Conferences on Recent Advances In Materials Chemistry (RAMC 2017), Utkal University,

	Banerjee and Rupam Dinda		Bhubaneswar, India, 24-26 February, 2017
14	A. Banerjee, S. P. Dash, S. Roy, S. Majumder, M. Mohanty, D. Raj and Rupam Dinda	Study of DNA/BSA Interaction of Oxidovanadium(V) Complexes of Aroylazines	20th CRSI National Symposium in Chemistry (NSC-20), Guwahati University, Guwahati, Assam, India, 3-5 February, 2017
15	Rupam Dinda	Chemistry of non-oxido vanadium(IV) and oxidovanadium(V) complexes of aroylazines: Versatile reactivity and theoretical evaluation	The 10th International Vanadium Symposium (V10): Chemistry, Biological Chemistry, & Toxicology, Howard International House, Taipei, Taiwan, 6-9 November, 2016
16	S. Majumder, S. Roy, W. Kaminsky, E. Sinn and Rupam Dinda	Molecular and supramolecular structures of oxidomolybdenum(VI) complexes with aroylhydrazones of acetylacetone: Synthesis, characterization and study of biological activity	Sixth International Conference on Metals in Genetics, Chemical Biology and Therapeutics (ICMG-2016), Bangalore, India, 17-28 February, 2016
17	S. Roy, S. Majumder, B. N. Joshi, Rupam Dinda	Mono and dinuclear oxido bridged vanadium(IV) multidentate azo complexes: Potent cytotoxic and insulin-mimetic agent	National Symposium on Modern Trends in Chemistry (MTIC-XVI), Jadavpur University, India, 3-5 December, 2015
18	S. Majumder, S. Roy, H. Reuter and Rupam Dinda	Dioxidomolybdenum(VI) complexes of aroylhydrazones: synthesis, structure and study of reactivities	17th CRSI National Symposium in Chemistry, NCL Pune, India. 6-8 February, 2015.
19	S. P. Dash, Saswati, K. Brezezinski, H. Reuter and Rupam Dinda	Chemistry of mononuclear nonoxido V ^{IV} , oxido V ^V , and binuclear oxido V ^V V ^V complexes with a tridentate (ONO) ligand: Exploration of Solution behaviour	17th CRSI National Symposium in Chemistry, NCL Pune, India. 6-8 February, 2015.
20	Saswati, R. Acharyya, S. P. Dash, S. Pasayat, W. Kaminsky, M. R. Hardikar, B. N. Joshi and Rupam Dinda	Synthesis, characterization and study of cytotoxic activity of oxidovanadium and oxidomolybdenum complexes of thiosemicarbazone: potential antitumor agents	41 st International Conference on Coordination Chemistry (ICCC41), SNIC Singapore, 21-25 July 2014.
21	S. Roy, S. P. Dash, S. Majumder, A. Levina, P. A. Lay, H. Reuter and Rupam Dinda	Synthesis, Characterization and Cancer Cell Cytotoxicity of Ethoxo Bridged Azo Functionalized DinuclearOxidovanadium(IV) Complexes	41 st International Conference on Coordination Chemistry (ICCC41), SNIC Singapore, 21-25 July 2014.
22	Saswati, R. Acharyya, S. Majumder, A. Crochet, S. Mukhopadhyay, S.	Cu(I) and Cu(II) complexes of thiosemicarbazone: Synthesis, structure and study of anticancer activity.	16th CRSI National Symposium in Chemistry, IIT Bombay, India. 7-9 February, 2014

	K. Bhutia, and Rupam Dinda		
23	S. Roy, S.P. Dash, W. Kaminsky and Rupam Dinda	Ethoxo bridged dioxidovanadium (IV) complexes featuring azo ligands: Synthesis, structure and study of reactivity	16th CRSI National Symposium in Chemistry, IIT Bombay, 7-9 February, 2014
24	S. Majumder, S. Pasayat, S.P. Dash, W. Kaminsky, S. Mukhopadhyay, S. K Bhutia, Rupam Dinda	Synthesis, structural and antiproliferative effect of dioxidomolybdenum(VI) complexes: Generation of metal-metal bond	ACBIR , NIT Rourkela, India, 10-11 January, 2014.
25	S. P. Dash, S. Pasayata, S. Dhaka, M. R. Maurya, Y. P. Patil, M. Nethaji and Rupam Dinda	A family of oxidovanadium(v) complexes: structure, catalytic study and exploration of solution behaviour	National Symposium on Modern Trends in Inorganic Chemistry (MTIC-XV), IIT Roorkee. 13-16 December 2013.
26	S. P. Dash, S. Roy, S. Pasayat, Saswati, Y. P. Patil, M. Netaji and Rupam Dinda	Synthesis and characterization of a series of hexacoordinated non-oxo vanadium (IV) complex	15th CRSI National Symposium in Chemistry, BHU Varanasi, 1-3 February, 2013
27	S. Pasayat, S. P. Dash, M. Nethaji, E. Sinn and Rupam Dinda	Synthesis, structural and antibacterial activities of dioxomolybdenum(VI) complexes with the dianionic tridentate isonicotinoyl hydrazide derivatives	14th CRSI National Symposium in Chemistry, Trivandrum, India, 3-5 February, 2012
28	S. P. Dash, S. Pasayat, Y. P. Patil, M. Nethaji and Rupam Dinda	Complexation of Isoniazid and its derivatives with vanadium: synthesis, characterization and antimicrobial activity	National Symposium on Modern Trends in Inorganic Chemistry“ (MTIC-XIV), University of Hyderabad, 10-13 December, 2011

Sponsored/ Consultancy Projects:

S.No	Title of the Project	Sponsoring Agency	Year	Value (lakhs)	P.I./Co-Investigator	Completed/ongoing
1.	“Oxovanadium Complexes Featuring O- and/or N- donor Ligands in Relation to Biological and Catalytic Activities”	DST	2009-12	19.93	P.I.	Completed
2.	“Oxomolybdenum complexes of aroylhydrazones: Characterization, biological and catalytic evaluation ”	CSIR	2013-16	16.50	P.I.	Completed

3.	“Ruthenium catalyzed atom economic transformation”	BRNS	2014-17	17.00	Co-Investigator	Completed
4.	“Molecular design, synthesis and evaluation of novel hydrazone derivatives and their transition metal complexes as potential anticancer agents”	DBT	2015-18	27.00	P.I.	Completed
5.	“Evaluation of biological potential of transition metal complexes of dithiocarbazates incorporating bio-active derivatives”	CSIR	2018	12.00	P.I.	Completed
6.	Magnetic interaction, solution behaviour and biological activity studies of variable valence vanadium complexes involving azo functionalized mono-and diabasic ligands	CSIR	2022	19.00	P.I.	Ongoing