Moumita Pait
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Personal Date of Birth: 26/03/1987
Nationality: Indian

Education

2009: M.Sc. (Applied Chemistry), BESU (Presently IIEST, Shibpur)
2007: B.Sc.(Chemistry Honors), University of Calcutta
2004: 12^{th} (Science), WBCHSE
2002: 10^{th} (All), WBBSE

Research Interest

Synthetic Inorganic Chemistry, Bioinorganic Chemistry, Coordination Chemistry, Molecular Magnetism, Structural Chemistry.

Publications

1. A New Family of Ni_4 and Ni_6 Aggregates from Self-Assembly of $\{Ni_2\}$ Building Units: Role of Carboxylate and Carbonate Bridges. **Pait, M**.; Bauzá, A.; Frontera, A.; Colacio, E.; Ray, D. (*Inorganic Chemistry, Accepted*).

2. **Pait, M**.; Shatruk, M.; Lengyel, J.; Gómez-Coca, S.; Bauzá, A.; Frontera, A.; Bertolasi, V.; Ray, D. Two Types of Nitrito Support for μ_4-Oxido-Bridged $[Cu_4]$ Complexes: Synthesis, Crystal Structures, Magnetic Properties and DFT Analysis. *Dalton Trans*. **2015**, *44*, 6107-6117.

3. **Pait, M**. ; Colacio, E.; Ray, D. Novel anion-tunable structural diversity and new topologies in Cu^{II} complexes of a Schiff base. *Polyhedron* **2015**, *88*, 90–100.

4. **Pait, M**.; Kundu, B.; Kundu, S. C.; Ray, D. Copper(II) complexes of piperazine based ligand: Synthesis, crystal structure, protein binding and evaluation of anti-cancerous therapeutic potential. *Inorg. Chim. Acta* **2014**, *418*, 30-41.

5. **Pait, M**.; Sarkar, A.; Colacio, E.; Ray, D. Hydrolysis on Di-Schiff Base Ligand During Dinuclear Ni(II) Complex Formation: Synthesis, Crystal Structures and Magneto-Structural Correlation Studies. *Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci*. **2014**, *84*, 189-196.

6. Ghosh, A. K.; **Pait, M**.; Clérac, R.; Mathonière, C.; Bertolasi, V.; Bauzá, A.; Frontera, A.; Pramanik K.; Ray, D. A dodecanuclear copper(II) cage self-assembled from six dicopper building units. *Dalton Trans*. **2014**, *43*, 4076-4085.

7. Ghosh, A. K.; **Pait, M**.; Shatruk, M.; Bertolasi V.; Ray, D. Self-assembly of a [Ni_8] carbonate cube incorporating four μ_4-carbonato linkers through fixation of atmospheric CO_2 by ligated [Ni2] complexes. *Dalton Trans*. **2014**, *43*, 1970-1973.

8. Sarkar, A.; Ghosh, A. K.; **Pait, M**.; Mandal, H.; Mahapatra, T. S.; Sharangi, B.; Sarkar, M.; Ray, D. Rhomboidal [Cu_4] coordination cluster from self-assembly of two asymmetric phenoxido-bridged Cu_2 units: Role of $\mu_{1,1}$-azido clips. *J. Chem. Sci*. **2012**, *124*, 1377-1383.

Manuscripts submitted for publication and under preparation:

1. New family of [Mn_3] and [Mn_4] Coordination Assemblies: Co-ligand Controlled Synthesis, Structural Diversity, Magnetic Properties and Catechol Oxidation. **Pait, M**.; Shatruk, M.; Ray, D. (*Communicated*).
2. Family of μ_4-Oxido-Bridged Tetranuclear Copper Complexes: Synthesis, Crystal Structures, and Catechol Activity. **Pait, M**.; Shatruk, M.; Ray, D. (*under preparation*).

Awards

2008 (December): Qualified **NET** (CSIR) and
2009: Qualified **GATE** (Graduate Aptitude Test in Engineering), with All India Rank 353 (94 percentile).

Poster Presentations

2013: Poster presented at International conference on **Modern Trends in Inorganic Chemistry** (MTIC XV), IIT Roorkee, India.

Technical Exposure

Single Crystal X-ray Diffractometer (solve), Powder X-ray Diffractometer, NMR Spectroscopy, UV-Vis, FT-IR and Fluorescence Spectrophotometer.