



## Research Scholars Details

Name of the scholar	Shibani Jena
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Registration Number	Not Registered
Name of the department & address	School of Chemistry Sambalpur University, Jyoti Vihar, Burla, 768019
Name of the supervisor & correspondence address	Dr. Nabakrushna Behera, School of Chemistry
Details of funding agency/scheme	UGC, New Delhi (UGC-BSR Fellowship)
Title of the research topic	Development of novel complexes of transition as well as rare earth metals based on triazole schiffbase ligands and evaluation of their fluorescence properties.
Abstract of the research work (max. 300 words)	The excellent co-ordination behaviour towards metal ions as well as exhibition of biological properties of organic heterocyclic ligands that contain nitrogen atom as the hetero element in their ring structures has received considerable interest by the research community. The co-ordination activity of these nitrogen based ligands stems from its $\pi$ -electron availability. In particular, five membered ring triazole that has ample $\pi$ -electrons acts as a very good $\pi$ -donor ligand to the Lewis acid moieties. Triazole based metal complexes are found to have varied applications in different fields such as in catalysis, sensor, and biological activity like cytotoxicity, antifungal, antibacterial etc. Encouraged by the various roles of triazole based metal complexes, it has been planned for research that to development the novel complexes of transition as well as rare earth metals based on triazole Schiff base ligands and evaluation of their fluorescence properties.
Progress of the research work	~ 40% progress
Journal publication	Nil
Conference attended	<ul style="list-style-type: none"><li>• National Conference on Recent Trends in Chemical Sciences (RETICS-2017) held during 22-23<sup>rd</sup> March, 2017 at School of Chemistry, Sambalpur University, Jyoti Vihar, Burla-768019, Odisha.</li><li>• National Conference on Surfactants, Emulsions and Bio-colloids (NATCOSEB-2017) held during 10-12<sup>th</sup> November, 2017 at School of Chemistry, Sambalpur University in association with Indian Society for Surface Science and Technology.</li></ul>
Awards	Nil