

Our contributions towards carbohydrate derived diagnostics and therapeutics

- ✚ [1,6-Heptadiynes Based Cyclopolymerization Functionalized with Mannose by Post Polymer Modification for Protein Interaction](#): Pawan Kumar, Pintu Kanjilal, Rituparna Das, Tapan K. Dash, Manikandan Mohanan, Trong-Nghia Le, N. Vijayakameswara Rao, Balaram Mukhopadhyay and Raja Shunmugam, *Carbohydr. Res.* **2021**, 508, 108397.
- ✚ [A Brief Insight to the Role of Glyconanotechnology in Modern Day Diagnostics and Therapeutics](#): Rituparna Das and Balaram Mukhopadhyay, *Carbohydr. Res.* **2021**, 108394 (**Review Article**).
- ✚ [Allyl piperidine-1-carbodiethioate and benzyl 1H-imidazole 1 carbodithioate: two potential agents to combat against mycobacteria](#): Goutam Mukherjee, Koushik Mukherjee, Rituparna Das, R. S. Mandal, I. Roy, Balaram Mukhopadhyay, Alok Kumar Sil, *J. Appl. Microbiol.* **2021**, 130, 786-796.
- ✚ [A 'Turn-on' Fluorescence Glycosyl Dithiocarbamate Probe for Selective Fluoride Sensing in Aqueous Medium](#): Rituparna Das, Bedangshu Mishra and Balaram Mukhopadhyay, *Synlett* **2018**, 29, 2001–2005.
- ✚ [Distinct Mechanoresponsive Luminescence, Thermochromism, Vapochromism, and Chlorine Gas Sensing by a Solid-State Organic Emitter](#): Anirban Adak, Tamas Panda, Anju Raveendran, Kochan Sathyaseelan Bejoymohandas, K. S. Asha, A. P. Prakasham, Balaram Mukhopadhyay* and Manas K. Panda* *ACS Omega* **2018**, 3, 5291–5300.
- ✚ [Use of Glycosyl Dithiocarbamates: Small Molecule 'Turn-on' Fluorescent Probe for Carbohydrate Binding Proteins](#): Rituparna Das, Bedangshu Mishra and Balaram Mukhopadhyay, *ChemistrySelect* **2018**, 3, 648–652.
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- ✚ [A selective galactose-coumarin-derived galectin-3 inhibitor demonstrates involvement of galectin-3-glycan interactions in a pulmonary fibrosis model](#): Vishal Rajput, Alison MacKinnon, Santanu Mandal, Patrick Collins, Helen Blanchard, Hakon Leffler, Tariq Sethi, Hans Schambye, Balaram Mukhopadhyay and Ulf Nilsson, *J. Med. Chem.* **2016**, 59, 8141–8147.

- ✚ Use of 'click chemistry' for the synthesis of carbohydrate-porphyrin dendrimers and their multivalent approach towards lectin sensing: Rituparna Das and Balaram Mukhopadhyay, *Tetrahedron Lett.* **2016**, *57*, 1775–1781.

- ✚ Galactose-amidine derivatives as selective antagonists of galectin-9: Santanu Mandal, Vishal Kumar Rajput, Anders P. Sundin, Hakon Leffler, Balaram Mukhopadhyay, Ulf J. Nilsson, *Canadian Journal of Chemistry* **2016**, doi: 10.1139/cjc-2015–0598.

- ✚ Carbohydrate derived thiosemicarbazone and semicarbazone palladium complexes: Homogeneous catalyst for C-C cross coupling reactions: Prashant Ranjan Verma, Soumik Mandal, Parna Gupta and Balaram Mukhopadhyay, *Tetrahedron Lett.* **2013**, *54*, 4914–4917.

- ✚ Ruthenium and Osmium complexes of novel carbohydrate derived salen ligands: Synthesis, characterization and in-situ ligand reduction: Soumik Mandal, Santanu Mandal, Dipravath Seth, Parna Gupta and Balaram Mukhopadhyay, *Inorganica Chimica Acta* **2013**, *398*, 83–88.

- ✚ Synthesis of a sugar-functionalized iridium complex and its application as a fluorescent lectin sensor: Soumik Mandal, Rituparna Das, Parna Gupta and Balaram Mukhopadhyay *Tetrahedron Lett.* **2012**, *53*, 3915–3918.

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- ✚ Synthesis of glycosylated N-sulfonylamides using copper catalyzed multicomponent reaction with sugar alkynes and sulfonyl azides: Priya Verma, Balaram Mukhopadhyay, *Trends in Carbohydrate Research* **2010**, *2*, 35–41.

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- ✚ A one-pot synthesis of novel sugar derived 5,6-dihydro-quinazolino[4,3-b]quinazolin-8-ones: an entry towards highly functionalized sugar-heterocyclic hybrids: Abhijeet Deb Roy, Arunachalam Subramanian, Balaram Mukhopadhyay, Raja Roy, *Tetrahedron Lett.* **2006**, *47*, 6857–6860.