**Poster Presentation**

**MS038.P01**

*Coordination Polymers in remediation of oxoanion pollutants and toxic dyes*

Karabi Nath[1], Kumar Biradha [1]
[1]*Department Of Chemistry,Iit Kharagpur, Kharagpur, India*
E-mail: karabi.iitkgpchem@gmail.com

Environmental pollution is a global issue and considerable research attention has been paid to the removal of these pollutants from wastewater. Many techniques such as co-precipitation, chemical reduction to less soluble species, reverse osmosis, bioreactors and vertical flow wetlands have been implemented for the removal of oxoanions and pollutant dyes from waste water. However, these methods incur high start up and maintenance costs and in addition requires the construction of complex space consuming facilities. Ion exchange is considered as one of the most eco-friendly and cost-effective strategy owing to its sensitivity, selectivity and simplicity of operation. Common ion exchangers involving zeolites, layered double hydroxides, sol-gel adsorbents, polymer resins etc. lacks behind in terms of certain inherent drawbacks such as poor selectivity and lower thermal and chemical stability.
Cationic MOFs/CPs, constructed out of neutral nitrogen-containing organic ligands and metal ions, with charge balancing substitutional anions located in the framework voids offers an excellent alternative platform for the wastewater remediation. Very recently, a few studies have been reported where the cationic MOFs exhibits chromate or dichromate trapping through ion exchange. In this presentation, we would like to discuss about some two-dimensional CPs of bis-pyridyl molecules with amide functionalities, acting as anion exchange host materials for the removal of both oxoanions and toxic dyes.
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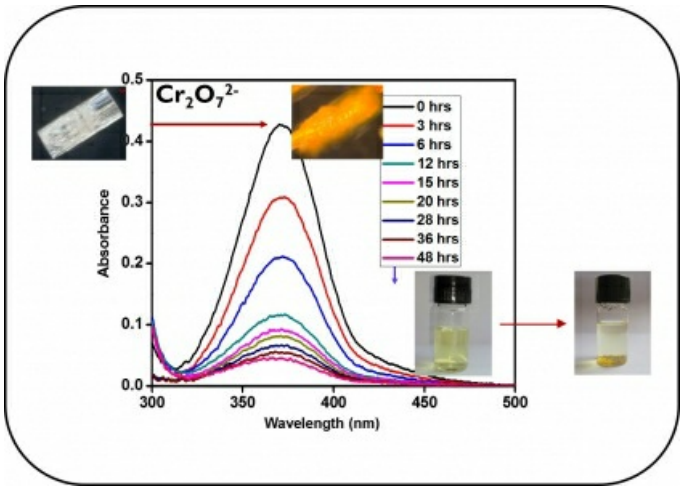


**Keywords:** cationic MOFs, chromate trapping, toxic dyes.