

Photochemistry Derived Polymeric Network for Environmental Remediation

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With the objective set towards discovery of water purifier, our group approached to discover a new class of efficient and cost effective phototriggerable material that can show enormous influential positive impact towards removal of toxicants. The toxicants can expectedly be a dye molecules (methylene blue, fluorescein, rhodamine B, etc) released from textile and paint industries, heavy metals (lead, mercury, arsenic, iron, etc) released from automobiles and water soluble organic solvents (DMF, dioxane and its derivatives) released from petroleum as the byproduct. To avoid toxicity, process of preventive measurement is essential. Our effort resulted in discovery of material that traps out all such toxicants with minimal effort but maximum efficiency. Recyclability of our material has eventually raised the impact of our effort. We look forward to further modification with functionalization along with more resistive material that emphasize on enhanced efficiency.

References:

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