

## Abstract:

Since pollution is very serious problem threatening the environmental eco-system around the world, but people do not usually treat this issue properly. Water is contaminated with different type of pollutants such as organic, inorganic, heavy metals, pesticides, dyes, phenols, and many other pollutants. Using adsorption phenomenon is very practical, easy and common method to remove pollutants from water. Owing to the significant properties of lignin such as high surface area, porosity, availability in huge amount, it was chosen to be used as an adsorbent surface of various pollutants. Herein it is going to review some of important literatures regarding that. Another serious problem that is threatening the marine eco-system, human health, and influence the global warming is the huge consumption of plastic polymers every year. Thus, reducing the consumption of plastic polymers is significantly matter. Lignin chemical structures are highly oxygenated and have several aromatic units, so by definition lignin can act as an antioxidant, free radical scavenger and photo-stabilizers. As the chemical structure of monomer moieties to form lignin are highly aromatic so it is suitable to work as UV- blocker to stop the photo-degradation of plastic.