

Women in Optics and Photonics in India Conference 2025 **Illuminating the Future**



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Title of your presentation (Font-16, Times new roman)

Presenting Author, Second/third author (Font-10, Times new roman)

Demonstrator, Dr, Department of Chemistry, University of Research Centre, University of Yangon

name @emaill.com (Font- 10, Times new roman)

Abstract (font- 14, Times new roman)

Environment pollution is caused by the harmful disposal of substances into the environment. These substances can cause a negative impact on biodiversity, ecosystems, human and animal health. The presence of heavy metals in the environment is a problem to be addressed in the world today due to their high toxicity and non-biodegradability. Heavy metals which originate from the electroplating, mining, chemical industry, laboratory, refinery and other industrial wastewater can cause potential damage to the ecosystem, human and animal health even at low concentration. The adsorption technique is one of the preferred methods for removal of heavy metals because of its efficiency and low cost. In my research, banana peels have been used as adsorbent to remove heavy metals from wastewater of Atomic Absorption Spectrometer. The initial concentration of heavy metals in wastewater of the Atomic Absorption Spectrometer was first analyzed and then the banana peel adsorbent was prepared. The removal efficiency of banana peel adsorbent based on the pH, adsorbent dosage, concentration and contact time were determined. In our country, banana peels are widely available and those materials cause a significant disposal problem. This effort will contribute cheapest and unconventional adsorbent to remove heavy metals and environmental pollution problems. (font-12, Times new roman, max- 350 words)

keywords: Heavy metals, Banana peels, Adsorption (font-12, Times new roman, max- 5 keywords)