

A novel prototype नील- मणि for tertiary wastewater treatment has been prepared and installed in the laboratory of chemistry department. This treatment plant is for the treatment of already treated water from Sewage treatment plant (STP) for removal of PPCPs. Novel materials are synthesized in research lab. These are being studied for adsorption of pharmaceutical and personal care products (PPCP) on lab and pilot scale ultrafiltration based process. These designed MOFs could be scaled up to 10 kg/batch. The batch and column studies show a more than mass equivalence loading of PPCPs on the adsorbents. Studies based on the pilot scale are being examined for ppcp (tetracycline, oxytetracycline, norflox, ofloxacin) removal from sewage water.

A novel copper nanocomposite material is discovered and isolated during the synthesis of MOFs which show a significant removal of environmental contaminants like arsenic and PPCPs.



Prototype of tertiary treatment plant for PPCPs from STPs