

107 D. (20) Pharmaceutical industrial effluent treatment through Plasma process for improved recycling

Pharmaceutical Industrial Effluent Treatment through Plasma process for Improved Recycling

This project will be executed in collaboration with Centre for Sustainable Technologies, IISc, Bengaluru and industry partner Karnataka Antibiotics and Pharmaceuticals Limited (KAPL), Bengaluru. KSCST will undertake the administrative, financial and other management responsibilities of this project.

Project Status: Project proposal has been technically recommended for funding by the DST. Financial sanction order yet to be received from DST, GoI.

The total estimated cost of project is Rs. 46.63 Lakhs

Objectives: This project will involve the 5 KLD lab-scale demonstration with the following broad objectives

1. To quantify the degradation of pharma pollutants and to disinfect the pharmaceutical wastewater using a high throughput cold atmospheric plasma discharge-based advanced oxidation system.
2. To improve the existing Activated Sludge Process (ASP) using BioWin process modelling to generate reusable quality treated water.
3. To evolve a treated water reuse plan.



The concept of high throughput cold atmospheric plasma discharge-based advanced oxidation system is established by IISc, Bengaluru. Figure shows indigenously designed Cold