

Electrochemical Oxidation setup for common effluent treatment

Name of Facility created	A electrochemical cell for treatment of wastewater
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Associated Subject	LET-1 (2153509)
Purpose	To make student aware about working of electrochemical cell for COD & ammonical nitrogen reduction.

INTRODUCTION

Electrochemical oxidation by means anodes generates a very efficient oxidizing environment by forming hydroxyl radicals, providing effective water purification for elimination of persistent pollutants. Electrochemical oxidation setup designed to remove COD from wastewater. It consist of Flow cell having electrodes, impeller for mixing, submerge pump to recycle the wastewater through flow cell. Experiments were performed in laboratory and pilot scale with industrial wastewaters. Performance parameters were evaluated in terms of total organic carbon/chemical oxygen demand (COD) removal, specific energy consumption and current efficiency.



Photo: Electrochemical Setup



Demonstration of electrochemical oxidation setup