

Cetylbenzyl dimethylammonium chloride (CBDAC) based aqueous micellar medium for mediated electrocatalytic dechlorination

G. Muthuraman, K. Chandrasekara Pillai, 문일식<sup>†</sup>  
순천대학교  
(ismoon@sunchon.ac.kr<sup>†</sup>)

Aqueous micellar medium enables the organic insoluble pollutants degradation reactions to be achieved in aqueous media. An effect of benzyl headgroup-in the long tail alkyl tail group namely cetyl-group was studied on the dechlorination of allyl chloride (AC) by electrogenerated  $[\text{Co}(\text{I})(\text{bipyridine})_3]^+$ . First, the surfactant aggregates were characterized by CV and RDE techniques using  $[\text{Co}(\text{II})(\text{bpy})_3]^{2+}/[\text{Co}(\text{I})(\text{bpy})_3]^+$  as redox probes. The information was subsequently used to explain the differences exerted by CBDAC and CTAB surfactants on the AC reduction process.