Title: Role of chloride ion in the electrochemical treatment of contaminated

water: Reactivity and post-treatment

Student: Ivan Ballesta Mondelo

Date: January 2020

Supervisor/s: Dr. Ignacio Sirés Sadornil

Departament de Ciència de Materials i Química Física

The electrochemical technologies have been applied to water treatment more intensely only in recent years, once their advantages as compared to traditional methods have been identified. In this bibliographic study, the attention is paid to the existing alternatives to remove the dissolved organic matter and other pollutants from wastewater and groundwater. Focus is put on the most popular and used electrochemical advanced oxidation processes (EAOPs): how to optimize them, which is the role of chloride ion, since it is frequently present in wastewater and natural water, and how to enhance the oxidation power of the systems. It is also important to elucidate the degradation byproducts formed and the different ways that exist to eliminate them or prevent their accumulation.