

## Femtochemistry of Iron(III) Carboxylates in Aqueous Solutions

**Authors :** Ivan P. Pozdnyakov, Alexey A. Melnikov, Nikolai V. Tkachenko

**Abstract :** Photochemical reactions with participation of iron (III) carboxylates are important for environmental photochemistry and have a great potential of application in water purification (Advanced Oxidation Processes, photo-Fenton and Fenton-like processes). In spite of this information about excited states and primary intermediates in photochemistry of Fe(III) complexes with carboxylic acids is scarce. This talk presents and discusses the results of several recent authors' publications in a field of ultra fast spectroscopy of natural Fe(III) carboxylates.

**Keywords :** carboxylates, iron complexes, photochemistry, radical complexes, ultrafast processes

**Conference Title :** ICPC 2015 : International Conference on Physical Chemistry

**Conference Location :** Copenhagen, Denmark

**Conference Dates :** June 11-12, 2015