



## **Oxidation kinetic of Fe(II) in the presence of exudates from phytoplankton cultures**

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The oxidation of Fe(II) in aerated conditions has been studied in the presence of organic exudates from phytoplankton cultures (*Phaeodactylum tricorutum* and *Dunaliella tertiolecta*). The results have been compared with Fe(II) oxidation experiments without organic material. The differences between both studies allow us to determine the effect of exudates in the oxidation kinetic of Fe(II) and in the speciation.

The experiments were made at different stage of growth and with different concentration of Fe(II).

A kinetic model has been fitted to the experimental data to determine the rate constant at the experimental conditions.

This work helps us to have a greater understanding of biogeochemical cycles of iron in the marine environment.