

# Bacterially promoted dissolution of kaolinite

# Motoharu Kawano[1]; Katsutoshi Tomita[2]

[1] Fac. Agri., Kagoshima Univ; [2] Earth and Environmental Sci., Kagoshima Univ

Dissolution experiments of kaolinite in biotic systems containing *P. fluorescens* ( $1E+5$ ,  $1E+6$ ,  $1E+7$ ,  $1E+8$ ,  $1E+9$  cells/ml) were carried out to confirm the effects of bacteria on dissolution rates and saturation states. The dissolution experiments were performed using batch reactors containing 0.2 g of kaolinite and 100 ml of 10 mM NaCl solution at 25°C for up to 40 days. Results of the experiments indicated that the bacteria have strong increasing effects on both dissolution rates and saturation indices depending on their concentrations.