Charge Effect of Flocculating Agents on the Flocculation Efficiency

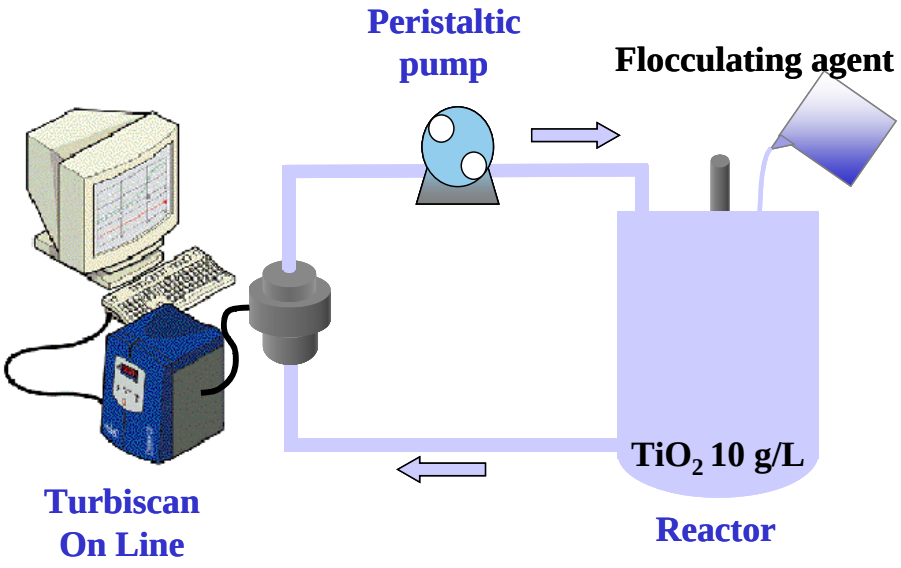
Application
All domains

Objective
Study the effect of the charge of flocculating agent on flocculation efficiency

Device
TURBISCAN® ONLINE

METHOD
Several experiments are made by introducing different flocculating agents in a suspension of titanium dioxide at 10 g/l.
These flocculating agents were acrylamid derivatives which contain more or less ionic copolymers :
acrylic acid for an anionic polymer,
dimethyl-aminoethyl acrylate for a cationic polymer.

For each flocculating agents, the Turbiscan ONLINE follows the evolution of the backscattering light intensity in real time. The time T_0 corresponds to the moment when we introduce the flocculating agent.



RESULTS
Figure 1, we can see that the backscattering is decreasing as a function of time. It corresponds to the particles flocculation (particle size increase) due to the introduction of flocculating agent.