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EDITORIAL

The present AJER-4.1 issue presents six retained papers all dealing with Engineering topics.

The first paper was concerned with the study of clay type material like Bentonite collected from Maghnia (Algeria), modified by oxides and impregnation by a metal of transition and tested as a catalyst for oxidation reactions (*Boudjema et al*)

The second paper proposed an adaptive sliding-mode controller design for a three-axis stabilized rigid satellite attitude system with uncertain disturbances, combining sliding mode control and an adaptive algorithm, which is used to estimate the disturbances uncertainties *(Benmansour et al)*

The third paper concerned the optimization of the production of a home made yogurt by an enrichment with phenolic compounds of the carobpulp (Ceratoniasiliqua L.) as well as following key parameters like the pH and the viscosity (*Benchikh et al*).

The next paper dealt with the modeling and optimization of the degradation of Orange acid 10 by Fenton process, with the objective to use a minimum of experiments by applying a modeling design of the Box-Behnken type. The effects of the different parameters and their interactions on the response were investigated (*Djeghader et al*)

The fifth paper considered the degradation of Rhodamine B (RhB) in aqueous solution using Fenton process. Effects of various experimental parameters of the oxidation reaction of the dye were investigated. The parameters studied were the initial concentrations of $FeSO_4$, of H_2O_2, and of the Rhodamine B (RhB), the temperature and the addition of salts. At the optimal conditions of pH = 3 and concentrations of $[H_2O_2]_0$ and $[Fe^{2+}]_0$both equal to 0,1 mM and for a concentration of dye $[RhB]_0$ equal to 10 mg/L, the efficiency of degradation of RhB obtained after 20 min of reaction was about 83.96%, confirming that the Fenton's reagent was effective for the degradation of RhB dye with a low concentration of H_2O_2 and Fe^{2+}(*Ghodbane et Hamdaoui*).

The last paper explored and compared three different extraction routes of oil from sesame seed (Sesamun indicum L.): Cold pressing CP, Cold pressing coupled to supercritical fluid extraction CP-SFE and Cold pressing coupled to organic solvent extraction CP-OSE. The results showed that CP-SFE was the preferred method leading to oils with high quality, process residues with minimum remained oil content and no further costs induced by the organic solvent recovery for the case of CP-OSE (*Louaer et al*.).

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Prof MENIAI Abdeslam-Hassen

Chief Editor

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