

جامعة صالح بونيدر قسنطينة 3
UNIVERSITE SALAH BOUBNIDER CONSTANTINE 3



ISSN 2572-018X

AJER

المجلة الجزائرية للبحوث الهندسية
ALGERIAN JOURNAL OF ENGINEERING RESEARCH



The merit of biosorbents in the waste waters treatment

AJER, VOL.4(2), 2021

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EDITORIAL

The present AJER-4.2 issue presents five papers all of Engineering aspects.

The first paper was concerned with the study of the ability of chemically treated Okoume sawdust (OST) to biosorb a hazardous triphenylmethane dye, methyl violet 2B (MV2B), from aqueous solutions, investigating the effect of operating parameters such as the effect of the initial basic dye concentration, temperature, initial solution pH, biosorbent particle size, contact time (*Guechi et al*).

The second paper dealt with a numerical study on natural convection in a square cavity heated from the base wall while the upper wall was adiabatic and the vertical walls were maintained at a constant cold temperature. A computing code in FORTRAN was developed to perform the required calculations to obtain the fluid behaviour inside the square cavity (*Zermane et al*).

The third paper concerned the use of Luffa cylindrical fibers to remove the cationic dye methylene blue (MB) from aqueous solutions, discussing screening factors which can affect the sorption process (*Bendebane et al*).

The next paper considered the study of the photochemical degradation of Ibuprofen, the active substance of many drugs, by an organic complex (Fe(III) -Malonate) in aqueous solution by the photo like Fenton process using the system (Fe (III)-Malonate complex / H₂O₂ / UV at 365 nm) (*Adala et al*).

The last paper explored the preparation, characterization of an activated carbon (AC) based a lignocellulosic material, date stones (DS) by chemical process using the zinc chloride (ZnCl₂) as activating agent that produce a large development of porosity, and its application for adsorption of 2,4-Dinitrophenol (2,4-DNP) from aqueous solution. Globally, date stones (DS) offered low-cost adsorbent for the preparation of activated carbon with a high removal capacity for 2,4-DNP from water in less than 2hours (*Hayoun et al*).

The Chief Editor and his staff would like to thank Professor Bouras Ahmed, the rector of University Constantine 3 Salah Boubnider, Professor Benmohamed Karima, the vice rector in charge of postgraduate studies and scientific research, the secretary Mr Aissa Lamri Zeggag and all the reviewers, for their permanent and sustained contribution towards the evolution of this journal.

Prof MENIAI Abdeslam-Hassen

Chief Editor