

EDITORIAL

The present AJER-5.1 issue presents five retained papers related to Engineering topics.

The first paper was a numerical study of impacts jets focusing on the influence of the variation of the impact distance on the thermal and dynamic behavior of a swirling jet impacting a plane plate, using the k-ε model to describe the turbulent states and the method of the finite volumes for the resolution of the model (*Zerrout and Khelil*)

The second paper considered an experimental and anumerical investigation of the hydrodynamic bearing and machine elements with respect to the thin film of fluid separating surfaces in relative motion, insisting on the governing parameters of the behavior of the hydrodynamic bearings particularly the film flow properties such as the speed, the temperature, the pressure, the slope of the inclined plane and the friction coefficient between the oil film and the bearing wall. (Benamara et al)

The third paper concerned the search of materials to incorporate into concrete or cements to influence the key mechanical or physical properties, hence the overall performance (*Chadli* et *al*).

The next paper dealt with the management of university campus wastes through anaerobic digestion to produce biogas and in the perspective of a sustainable development(*Bencheikh Lehocine et al*)

The last paper concerned explored two pretreatment methods (acid esterification and adsorption) of cooking oils to reduce their free fatty acids (FFA), which have a negative effect on biodiesel productiondue to their saponification reaction in the presence of the basic catalyst used to activate the transesterification(*Miroud et al.*).

The Chief Editor and his staff would like to thank all the authors who have shown an interest to the *Algerian Journal of Engineering Research (AJER)* as well as the secretary Mr Aissa Lamri Zeggar for his permanent contribution towards the development of this journal.

Prof MENIAI Abdeslam-Hassen

Chief Editor



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