November 19th 2020

Dear Editor,

We would like to submit the manuscript entitled "*Stiffness behavior of sisal fiber reinforced foam concrete under flexural loading*" for publication in *Fatigue & Fracture of Engineering Materials & Structures*.

The flexural stiffness behavior of foam concrete was investigated using different sisal fiber content to determine the fatigue fracture behavior of these composites when static or cyclic loading is applied. This study mainly focusses on the evaluation of the residual stiffness at fracture and stiffness degradation under cyclic loading. We believe that four aspects in the manuscript will make it interesting to your general readers.

Firstly, under static loading, the residual flexural stiffness of sisal fiber foam concrete is investigated as the specimen fractures. Secondly, the effect of sisal fiber on the flexural stiffness degradation of foam concrete under cyclic loading is studied, especially when all the variables are normalized. Thirdly, linear regressions are introduced to analyze/quantify the relationships between the flexural stiffness and the fatigue life of foam concrete with different sisal fiber volume fraction. Finally, a mathematical model including two variables (flexural stiffness) obtained from different positions is built, for which the flexural stiffness of our composite at one location can be inferred from another one.

With thanks for your consideration.
Sincerely yours,

Jun Huang