World Academy of Science, Engineering and Technology International Journal of Mechanical and Materials Engineering Vol:10, No:01, 2016

Investigation on Mechanical Properties of a Composite Material of Olive Flour Wood with a Polymer Matrix

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Abstract : The bio-composites development from biodegradable materials and natural fibers has a growing interest in the science of composite materials. The present work was conducted as part of a cooperation project between the Sfax University and the Havre University. This work consists in developing and monitoring the properties of a composite material of olive flour wood with a polymer matrix (urea formaldehyde). For this, ultrasonic non-destructive and destructive methods of characterization were used to optimize the mechanical and acoustic properties of the studied material based on the elaboration parameters.

Keywords: bio-composite, olive flour wood, polymer matrix, ultrasonic methods, mechanical properties

Conference Title: ICAMMM 2016: International Conference on Applied Mechanics, Materials, and Manufacturing

Conference Location : Jeddah, Saudi Arabia **Conference Dates :** January 26-27, 2016