

1<sup>st</sup> National Seminar on Structural Mechanics and Materials (SNMSM'25)

October 29-30<sup>th</sup>, 2025



University Mohamed Boudiaf of M'Sila  
Faculty of Technology  
Mechanical Engineering Department



**CERTIFICATE OF PARTICIPATION**

This Certificate is awarded to :

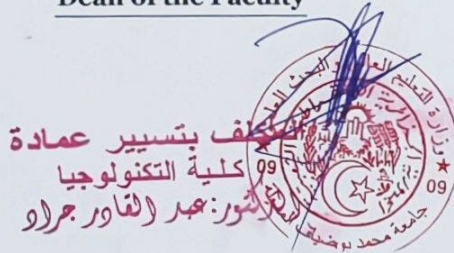
**Khalil Zouaoui**

For the **ORAL** presentation of the paper entitled : **Energy Absorption Performance of 3D-Printed PLA and PLA/Flax Sandwich Cores with Optimized Geometries**

Authors: **Khalil ZOUAOUI, Mohamed-Saïd CHEBBAH and Salah AMROUNE**

at the 1<sup>st</sup> National Seminar on Structural Mechanics and Materials (SNMSM'25), held at M'Sila University-  
Algeria, on October 29-30<sup>th</sup> 2025.

Dean of the Faculty



Conference Chair

Dr. Cherif SAIB

