

1st National Seminar on Structural Mechanics and Materials (SNMSM'25)

October 29-30th, 2025



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



CERTIFICATE Of PARTICIPATION

This Certificate is awarded to :

Younes Benaroua

For the POSTER presentation of the paper entitled: Elaboration and characterization of certain coatings applied in industry.

Authors: **Younes Benaroua**

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

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**1st National Seminar on Structural
Mechanics and Materials
(SNMSM 2025).**

29-30 October 2025: M'sila, Algeria

<https://media.univ-msila.dz/SNMSM25/>



***Elaboration and characterization of certain coatings
applied in industry***

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Abstract – Surface treatments for materials are increasingly used. They allow the modification of the surface characteristics of these materials to optimize their applications. These treatments also enable parts to fulfill opposing functions, such as core ductility and good resistance to wear and corrosion. Among these surface treatments, we can distinguish between surface treatments by structural transformation of mechanical or thermal origin, thermochemical treatments, and the deposition of thin films and coatings. The surface treatment of metallic materials, polymers, glass, and ceramics is therefore largely a service used by many industrial sectors, including automotive, heavy industry, light industry, eyewear, decoration, currency, clothing, telecommunications, renewable energy, construction, medical, aerospace, aeronautics, and nuclear energy. Our purpose is to present various surface treatments applied to certain materials to enhance their surface properties. Regarding the treatments discussed, we will then present some research work that addresses the development and characterization of thin films and metallic coatings deposited on certain materials to improve their mechanical behavior, particularly hardness and adhesion.

Keywords – Coating ; thin films ; surface treatment ; hardness ; adhesion;