

TIPST 21

Low Vacuum Pulsed Laser Deposition for Growth of Carbon Thin Films

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ABSTRACT:

Pulsed Laser Deposition (PLD) is an attractive technique for growth of thin films thanks the advantages in thickness control, the capability to obtain multi-component films, good cleanness and others. Nevertheless, the complexity and price of high vacuum systems are disadvantages that make it difficult to use on an industrial scale. This project presents the design and development of an installation to obtain growth of C layers by PLD using mechanical vacuum. Subsequently the purpose is the production of thin films and characterization of properties obtained in low vacuum.

Key words: Pulsed laser deposition; Carbon Thin films; Low vacuum PLD.