UT Austin Portugal | 2019 Strategic Research Projects

NANOTECHNOLOGIES

Soft4Sense

Smart Surfaces for Reliable Tooling Integration

The measuring devices available in the market for manufacturing processes fail many times to accurately evaluate important process parameters due to positioning problems or deficient signal acquisition and transfer. The Soft4Sense project will create a new set of software to make it easier to layer thin films on top of equipment by providing the required data to avoid mechanical problems during installation.

Keywords: Thin films, multilayer deposition, nanotechnology

Start Date: 01-APR-2020 **Duration: 36 months** **Operation Code: 45921**

Main challenge/problem the project seeks to address

There is a bottleneck which has impeded the commercial application of thin film devices, not just in Portugal but worldwide: their mechanical integrity. The construction of these films is based on a stacking of layers, each one with a specific role, requiring a suitable matching between them. The mechanical/electrical integrity of thin film devices has to be improved and optimized to allow their reliable and reproducible production in order to be offered to the industrial market.

Proposed solution

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Innovative Potential

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Target beneficiaries

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Consortium

PORTUGAL

TEandM – Tecnologia, Engenharia e Materiais S.A (Lead Beneficiary)
Instituto Pedro Nunes – Associação para a Inovação e Desenvolvimento em Ciência e Tecnologia
International Iberian Nanotechnology Laboratory (INL)

USA - UT AUSTIN'S PRINCIPAL INVESTIGATORS

Rui Huang (Cockrell School of Engineering and Center for Mechanics of Solids, Structures and Materials)
Kenneth M. Liechti (Cockrell School of Engineering, and Center for Mechanics of Solids, Structures and Materials)

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UT Austin
(UT Austin Portugal Budget)

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PT2020 Incentive

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FCT Incentive

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