

(My) Experience in MSCA

João Tedim

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OUTLINE



- Preparation of proposals for RISE-MSCA (H2020)
- Presentation of project SMARCOAT



Gabinete de Promoção do Programa Quadro ID&I



Previous experience

International Research Staff Exchange Scheme, FP7 large-scale projects...

Concept

Novelty, Time to market, 'Maturation' time,
Previous failed/winning attempts...

Networking

Intersectorial activities, previous projects and R&D activities...
(do not expect a company to join a consortium just before deadline!)

Transfer (sharing) of knowledge

Intersectorial activities, formation of researchers within a multidisciplinary environment (academia to industry and vice-versa)

Complementarity

Balanced roles, activities

Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)

Project full title

SMARCOAT-Development of Smart Nano and Microcapsulated Sensing Coatings for improving of Material Durability/Performance

Project coordinator

Dr. João Tedim, University of Aveiro (PT)

Duration

48 months

Starting date

01/01/2015

Estimated eligible costs

EUR 900,000.00 (nine hundred thousand EURO)

AIM

Impart sensing functionality and detect substrate degradation.

TARGET

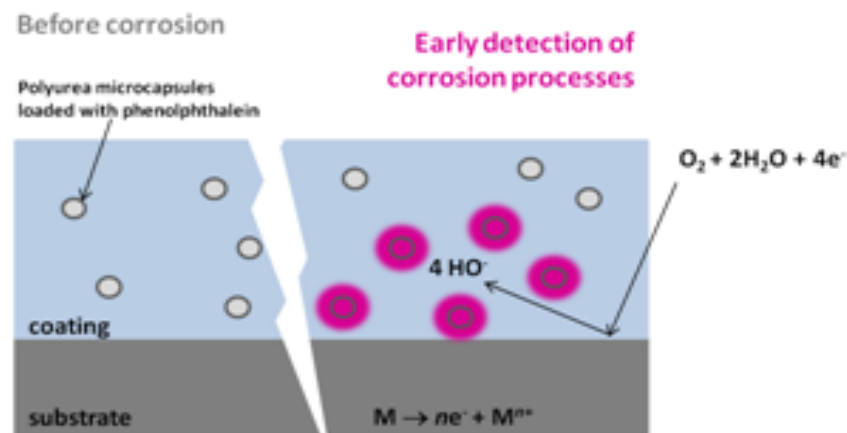
Corrosion of metallic substrates and *mechanical damage* by impact on fibre reinforced plastics and composites, used as structural components in the vehicle industry worldwide.

HOW

Sensing materials based on controlled release of active species.

MAIN GOAL

Produce coatings capable of sensing substrate degradation at early stages, making maintenance operations cost-effective without jeopardizing safety.



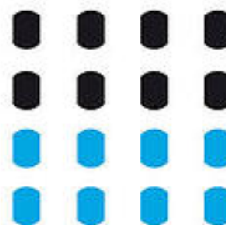
F. Maia, J. Tedim, A.C. Bastos, M.G.S. Ferreira, M.L. Zheludkevich, *RSC Adv.*, 2014, 4, 17780-17786.

SMARCOAT

SMAR
COAT



University of Aveiro
Portugal



Helmholtz-Zentrum Geesthacht
Germany



University of Latvia
Latvia



Smallmatek
Portugal



Synpo
Czech Republic



Belarusian State University
Belarus



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Fundação para a Ciência e a Tecnologia
Ministério da Ciência, Tecnologia e Inovação



AGÊNCIA NACIONAL
DE INOVAÇÃO



HORIZONTE
2020

SMARCOAT



DEVELOPMENT OF SMART NANO AND MICROCAPSULATED SENSING COATINGS FOR IMPROVING OF MATERIAL DURABILITY/PERFORMANCE

OVERVIEW DETAILS NEWS PARTNERS PUBLICATIONS LINKS

SMARCOAT is a Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE) project involving 4 academic institutions and 2 companies from 5 different countries.

Aim

Develop an innovative approach to impart sensing functionality and detect substrate degradation.

Target

The degradation processes targeted will be corrosion of metallic substrates and mechanical damage by impact on fibre reinforced plastics and composites, used as structural components in the vehicle industry worldwide.

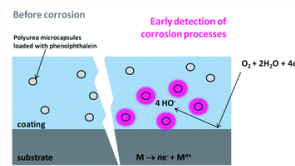
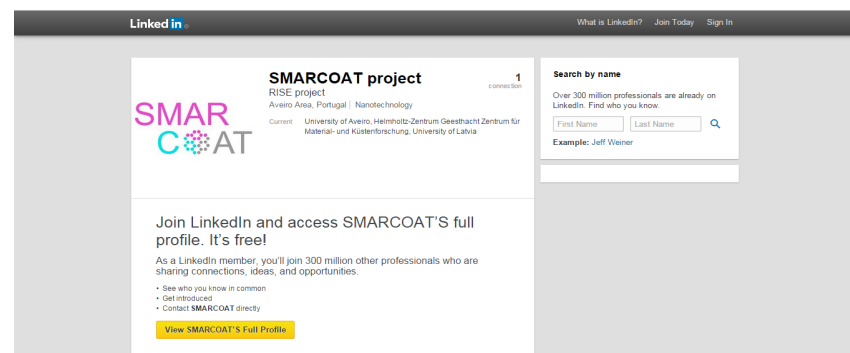


Figure 1. Detection of corrosion processes using polymeric capsules with pH indicator.

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<http://smarcoatrise.wix.com/smarcoat>



European
Commission

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