Name: Urša Tiringer

Position: Postdoctoral researcher (started 1st of October 2018) - LEaDing Fellows Postdocs Programme, under the Marie Skłodowska-Curie grant agreement No 707404

Tel: +31 (0)15 278xxxx
E-mail: U.Tiringer-1@tudelft.nl
Website:
https://www.tudelft.nl/3me/afdelingen/materials-science-and-engineering/research/corrosion-technology-and-electrochemistry/people/ursa-tiringer/

Research topics:
1. aluminium alloys
2. pre-conditions
3. corrosion
4. sol-gel coatings
5. lithium
6. cerium

Hybrid sol-gel coatings as a replacement for chromate conversion coatings for corrosion protection of aluminium alloys

Research activities:

- Study (XPS, SIMS, AFM) the effect of different pre-conditions, acidic, alkaline and neutral, on the adhesion between AA7075 substrate and silicon based hybrid sol-gel coating.
- Study of the inhibition effect of two inhibitors on copper in collaboration with Hasselt.

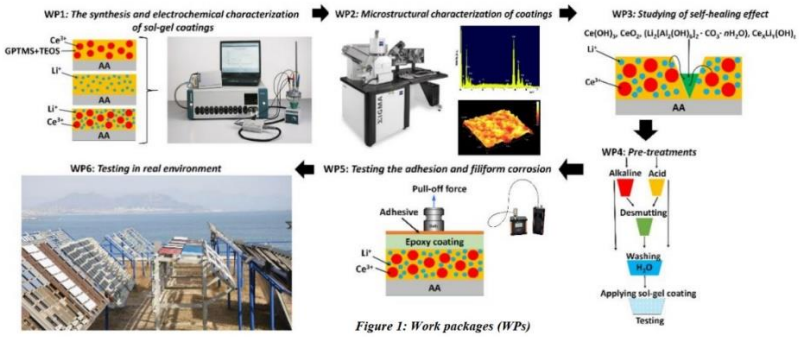

Figure 1: Work packages (WPs)

Figure 1: Work packages of the postdoctoral application (LEaDing Fellows Postdocs Programme)

Teaching activities: not yet

Other activities:

- Awarded the poster price at the EUROCORR 2018

Participation at:

- workshop COIN-DESC (University of Hasselt, Belgium),
- workshop MAMI (Jozef Stefan Institute, Slovenia)

Key publications 2018:

- U. Tiringer, Y. Castro, A Durán, I. Milošev, "Self-healing effect of Ce(NO3)3 in hybrid sol-gel coatings based on GPTMS, TEOS and SiO2 nanoparticles applied on aluminium alloy 7075-T6." J. Electrochem. Soc., Vol. 165, pp. C213-C225, 2018
- U.Tiringer, B. Music, G. Sekularac, et. al, "The effect of cerium ions on the curing, polymerisation and condensation of hybrid sol-gel coatings."J. Non-Cryst. solids, 2018, accepted.