

Announcement of Joint Session on

"Corrosion protection by ZnAIMg coatings in atmospheric conditions"

During past 20 years, zinc protective coatings alloyed with aluminium and magnesium progressed from secret company research centres towards mainstream industrial production and numerous applications in building, home appliance and automotive sectors. It is due to improved corrosion stability and protection of steel substrate in defects in a number of relevant atmospheric exposure conditions.

Several large university and industry research teams carry out laboratory and field studies with the aim to get deeper understanding into the mechanism of corrosion protection by ZnAlMg coatings in practically relevant atmospheric environments. Simultaneously, steel makers are looking for possibilities how to enlarge further the application potential of ZnAlMg coated products through improving their mechanical and corrosion protection properties by micro-alloying, microstructure modification, specific surface treatment, etc.

The session will provide a platform for exchange of knowledge, information and ideas between academia, steel industry and end users on the following topics relevant for ZnAlMg coating applications:

- Protection mechanism under thin electrolytes, particularly in defects.
- Corrosion properties in specific practically relevant conditions such as car body hem flanges.
- Novel techniques and setups for studies of ZnAlMg corrosion properties with focus on in situ real time measurements.
- Adaptation of models developed for traditional coatings for novel alloy coatings.
- Further development of the coatings in view of microstructure modification and alloying.
- Role of microstructure in corrosion, processing and mechanical properties.
- Long-term performance in different atmospheric environments.
- Case studies of replacement of traditional anticorrosion measures by ZnAlMg coatings.
- Industry needs in view of understanding and further product development.

Please submit your abstract online via <u>www.eurocorr.org</u> before 16th of January 2018.

We are looking forward to your contribution to and participation in EUROCORR 2018 "Applied Science with constant Awareness" September, 9-13 2018, Krakow, Poland.

WP 14: "Coatings"

WP 17: "Corrosion in Automotive"TF "Atmospheric Corrosion"

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Expected duration: ½ to 1 day

Audience: 50 attendees