



Session *Atmospheric corrosion*

Atmospheric corrosion is controlled by complex electrochemical and physical processes taking place in a thin film on a metal surface with dynamically changing composition and properties. A number of mainly *in situ* analytical techniques helped to improve our understanding of these processes dramatically. Still, the complexity of real systems exposed under varying conditions in view of both external factors such as the relative humidity, temperature and concentration of air pollutants and internal factors such as composition and physicochemical properties of precipitated corrosion products and interplay between metal micro elements make any transfer of the scientific knowledge into practical means of corrosion prevention challenging.

The session organized by the EFC Task Force *Atmospheric Corrosion* will bring together academic research groups with deep fundamental knowledge and modelling capabilities and industry end-users with their practical needs in terms of efficient anticorrosion measures applicable in atmospheric exposure conditions, user friendly modelling tools and long-term predictive models in order to develop solutions helping to reduce costs of corrosion protection of structures and objects exposed to atmosphere.

Focus of the session in 2019 will be on **predictive models for atmospheric corrosion**. Since several years, the field of corrosion modelling has been growing rapidly, improving our understanding into fundamental principles of atmospheric corrosion. The rapid development translated into improved modelling tools, which start to find their way into practice. However, the field suffers by fragmentation and insufficient exchange between involved actors. Representatives of leading international research groups will be invited to present their latest results.

Further, the session will provide a platform for exchange of knowledge, information and ideas between scientists, researchers and industry on the following fundamental and practical topics:

- Improvement of the understanding into corrosion processes in thin electrolytes formed under atmospheric conditions.
- Best practices of field and laboratory testing.
- Development of corrosion monitoring techniques applicable in atmosphere.
- Corrosion in new environments, e.g. severe marine industrial atmospheres and micro climates.
- Protection of novel materials including weathering, stainless and coated carbon steels and aluminium and magnesium alloys
- Practical experience in corrosion protection of structures and objects exposed to outdoor and indoor atmospheres.
- Standardization activities.

Please submit your abstract online via www.eurocorr.org before January 16, 2019.

I am looking forward to your contribution and participation in EUROCORR 2019 “New times, new materials, new corrosion challenges” on September 9–13, 2019, in Seville, Spain.

Tomáš Prošek
Chair TF Atmospheric Corrosion

Expected duration: 1 day

Expected audience: 50–80 attendees