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Corrosion Barrier Coatings

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Message from the Guest Editors

Application of protective coatings is the most common and cost effective method of corrosion protection for a wide range of engineering structures, from cars to aircrafts, from chemical factories to household equipment. The main role of coating in corrosion protection is to provide a dense barrier against corrosive species. However, defects are inevitable during exploitation of coated structures leading to local disruption of the barrier function. The corrosion processes develop faster after failure of the protective barrier. Therefore, an active "self-healing" of defects in coatings is necessary in order to provide long-term protection effect. Additionally the protective coatings can confer other important functions such as desired aesthetic appearance, improved mechanical properties, and self-cleaning just to mention a few.

The Special Issue is welcoming submission of high quality manuscripts covering a wide range of the protective coatings from metallic layers to polymer based paints as well as a wide range of the applications from transport industry to bio-medical area.



