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Film Composition and Characteristics on Non-ferrous Corroded Metals and Alloys

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Message from the Guest Editor

The corrosion behavior of materials in corrosive media depends critically on the nature of the passive film and corrosion products formed during the corrosion process. In this Special Edition, the emphasis will be on these passive film and corrosion products which form during the corrosion process in aqueous media. Mild steel and stainless steels are popular materials in a number of industries and applications, and their corrosion behavior is often reported. However, there are a wide variety of other non-ferrous metals and alloys, which find application in numerous products and processes. The focus in this Special Edition will be on these different non-ferrous alloys and metals, e.g., titanium, magnesium, and aluminum alloys, copper, brass, and bronze alloys, cermet and metal matrix composites, high-entropy alloys, and any material not containing iron as a major element and the nature and composition of passive film and corrosion products formed on them during any aqueous corrosion process. Information obtained by any surface analysis technique, or combination thereof, which can provide such information and is utilized in the study, can be described.



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Special Issue



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Message from the Editor-in-Chief

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