CORROSION BEHAVIOUR OF Al AND Al ALLOYS CONTAINING Zn, Sn AND Cu IN SEAWATER
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ABSTRACT
The corrosion behaviour of aluminium (Al) alloys in seawater medium was investigated using potentiodynamic technique, complemented by Scanning Electron Microscopy (SEM) and EDAX. SEM was carried out to characterize the corroded surface and to observe the extent of corrosion attack on the Al alloys tested in seawater. EDAX analysis was used to identify elements present on the specimen surface. The results indicate that zinc (Zn), stanum (Sn) and copper (Cu) as alloying elements enhance corrosion behaviour of the aluminium in seawater by shifting the potential to a more negative value. In the presence of those elements, the Al alloys becomes more active, having potential of more than –1.0 VSCE and showed active corrosion behaviour.

REFERENCES