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TECHNOLOGIES AND MATERIALS FOR RENEWABLE ENERGY, ENVIRONMENT AND SUSTAINABILITY: TMREES21Gr

28–30 May 2021 Athens, Greece RESEARCH ARTICLE| AUGUST 17 2022

Corrosion phenomena and the occurrences; A comment

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Corrosion refers to the deterioration of metallic materials resulting from the reactions between the components and their environe. However, corrosion occurs every day in the human world, both in industrial operations and domestically. This happens in different ways, making it well categorized into various types. This paper has concisely reported the basic phenomenon of corrosion, its environmental effect, and the various types like a crevice, pitting, erosion, and others. The Electrochemical behavior of corrosion was also reported as reactions that include oxidation and reduction reactions; oxidation reactions increase the valence number of materials by removing particles from the material, making them positively charged. In other ways, technological advancement has provided several attempts to understand this catastrophe, providing consistent mitigating measures and control toward attaining less cost. This overview studies the electrochemical corrosion phenomena and the prospect of materials selection in curtailing the ranging challenges.

Topics <u>Metallic materials</u>, <u>Corrosion</u>, <u>Electrochemistry</u>, <u>Redox reactions</u>

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