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In this issue

Research Article

Open Access Research Article PTZAID:JCEES-10-187

Inhibitive Effect of *Mangifera Indica* Extract on Mild Steel in Hydrochloric Acid Solution

Published On: September 27, 2024 | Pages: 067 - 072

Author(s): Olisakwe HC*, Osazuwa OK, Chukwuneke JL and Ezeanyanwu CS

This research investigated the corrosion inhibition potential of Mangifera Indica Peel Extract (MIPE) for mild steel in a 1 M HCl solution. The study explored the effects of extract concentration, solution temperature, and immersion time on the inhibition potential of MIPE using weight loss measurements at extract concentrations of 0, 1.0, 1.5, and 2.0 g/L, temperatur ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000087

Open Access Research Article PTZAID:JCEES-10-186

Experimental Study on the Effect of Sewage Sludge Waste in Bricks

Published On: August 29, 2024 | Pages: 063 - 066

Author(s): Ananth Purushothaman*

In India like developing countries lot of industrial and domestic wastewater is produced in vast amounts so the treatment is a must at the treatment time producing a high amount of sewage sludge [1]. ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000086

Open Access Research Article PTZAID:JCEES-10-183

Enhancing Mechanical Properties of Aluminium-Based Biocomposites through the Addition of Hybrid Reinforcing Particulates

Published On: July 23, 2024 | Pages: 050 - 053

Author(s): Chukwuneke JL*, Olisakwe HC and Nnakwo KC

This study looks into the improvement of mechanical properties in Al-7Mg-2Si-0.1Nb-based biocomposites by incorporating hybrid additions of Irvingia Wombolu Shell Particulates (IWSP) and Mangifera indica shell particulates (MISP). The biocomposites were created using the stir-casting technique. Tensile, hardness, and impact strength were used to determine the mechanic ...

Abstract View | Full Article View | DOI: 10.17352/2455-488X.000083

Review Article

Open Access Review Article PTZAID:JCEES-10-188

Water Quality Modeling of Wastewater Discharges for Prediction of Sediment Transport and Deposition in Surface Water

Published On: October 05, 2024 | Pages: 073 - 078

Author(s): JI Ubah*, LC Orakwe, ICE Umeghalu, KN Ogbu and EC Chukwuma

Sediment deposition in surface water bodies can have a range of significant impacts, affecting everything from the aquatic ecosystem to water quality and infrastructure. It can affect the availability of food sources for aquatic organisms; and change the physical structure of habitats, such as riverbeds and lake bottoms. It can equally smother aquatic plants and anima ...

Abstract View | Full Article View | DOI: 10.17352/2455-488X.000088

Open Access Review Article PTZAID:JCEES-10-182

The prospects of zero energy building as an alternative to the conventional building system in Bangladesh (A review)

Published On: July 02, 2024 | Pages: 039 - 049

Author(s): Mehedhi Hasan, AMM Shamsul Alam*, Mohammad Alamgir Hossain and AMM Nurul Alam

Energy consumption in commercial and residential buildings worldwide accounts for about one-third of the world's energy and one-quarter of greenhouse gas emissions. If current trends continue, by 2025, buildings worldwide will be the largest consumers of global energy, using as much power as the transportation and industrial sectors combined. Recent studies have found ...

Abstract View | Full Article View | DOI: 10.17352/2455-488X.000082

Short Communication

Open Access Short Communication PTZAID:JCEES-10-185

Digital and Circular Economy Models

Published On: August 08, 2024 | Pages: 061 - 062

Author(s): Giovanni Perillo*

The Digital is playing an increasingly crucial role in facilitating the transition towards circular economy models. Digital technologies, in fact, offer innovative solutions to optimize the use of resources, extend the life cycle of products and close material loops. According to a report by Accenture, the adoption of digital technologies could increase resource produ ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000085

Literature Review

Open Access Literature Review PTZAID:JCEES-10-184

Accurate Analysis of Stand-up Time Rock Collapse When Inlet Tunnel Excavation is Carried out in there are Cracked and Broken Rock Formations and a Poorly Silty-clay Soil Profile

Published On: July 31, 2024 | Pages: 054 - 060

Author(s): Munirwansyah*, Reza P Munirwan and Surya Dharma

The condition of the rock formation and the poor stability of the type of soil mass (problematic soil) in the tunnel excavation route greatly influence the achievement of the collapse (stand-up time) that will occur. The thickness of the overburden pressure above the tunnel opening is often difficult to meet, so in the inlet zone as well as in the out-let zone, slope ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000084