

From the Editor

Finally, this journal can be published. Some growing fast in technology development also occurs in the mining sector. The use of satellite imagery and GIS is common for various mining applications. Using such an application showed that the small changes in this area costs effectively due to the coverage of sensory images, which is quite broad. The study's results related to using satellite imagery and GIS showed that the total area of coal mine openings increased from 2% of the total area of the IUP become 2.53% in 2020. However, its allegation of environmental changes due to mining activities will be strengthened by a ground check survey that cannot be conducted.

Blasting geometry and blasting material filling are closely related to the rock mass characteristics and geological conditions in obtaining ideal fragmentation. Blastability Index Analyses are the alternative geometry experiment conducted to overcome the problem of rock fragmentation results in the increase of the speed of excavation equipment according to the productivity of Komatsu PC2000 plan at PT. BUMA Jobsite BINSUA. The actual rock values obtained from the blasting location and alternative geometry recommendations using the R.L.Ash theory were combined with the vertical energy distribution theory. Such a prediction of blasting fragmentation analysis using Kuz-ram theory obtained a good result.

Nickel ore is found in two types' sulfide and laterite. Two methods of processing nickel laterite are hydrometallurgy and pyrometallurgy. The former produces nickel sulfate and nickel oxide with high purity (99% by weight) as raw materials for magnets, sensors, and batteries, but this process still needs improvements for the environmentally friendly reagent. The latter applies a high heat of up to 1800°C. It requires a lot of energy and needs improvement to decrease carbon usage and produces nickel pig iron and ferronickel as raw materials for stainless steel and steel alloys.

Technological developments for making lightweight materials are growing and aims to reduce the total weight of the material without reducing its mechanical strength. The number of pores, material density, and physical resistance are factors that influence the manufacture of lightweight materials. In this study, the basalt rock from East Lampung, Indonesia and the lime glass were used as ceramic glass material. Variations in its composition were carried out by mass comparison between the basalt and the lime glass, namely Sample A (100:0), Sample B (70:30), Sample C (50:50), and Sample D (30:70) with 50%wt. CaCO_3 added to each sample and heated up to 1200 °C.

As strategic materials, rare earth elements are have critical roles in meeting the needs of raw material for producing modern industrial products, but most of the REE minerals is available in the form of associated minerals. One of them is coal. In terms of obtaining an overview regarding the possibility of coal to be a source of REEs, a research was carried out by beneficiating the bottom ash of the coal using a shaking table and a magnetic separator and was followed by extracting the REEs using the alkaline fusion and leaching them using the nitric acid. The results showed that the bottom ash of gasified coal from the Palimanan pilot plant contained cerium, lanthanum, samarium, neodymium, praseodymium, europium, gadolinium, dysprosium, and yttrium, with a total content of 77.85 ppm.

Some obstacles occur during preparing for this issue, such as the pandemic and the bustle of the RVs. Those result in the delay to issue the journal. We are sorry for this inconvenience.

Enjoy the reading.