

From the Editor

The main focus of the February 2007 issue is on the technical aspects of engineering mineral and coal technology. If these aspects are to be realised, all problems of the mineral and coal technology can easily be handled by related industries. This reflects that the sector of mineral and coal in this country has a promising future in facing the globalisation era, particularly for the next generation. Numerical modelling study and slope stability analysis determine the optimum pit slope design. This study has successfully been applied to optimise the open pit coal mine at Binuang-South Kalimantan.

Fly ash could be utilised as alumina and silica source material. It could be treated by processes of demagnetisation, sinterisation, grinding, mixing with crushed bricks and fired cement to create acid based on castable refractory.

Over 60% of Indonesia's coal resources is classified as low rank coal (lignite and subbituminous). Most of the coals occur close to the surface to make it easy and cheap to exploit. The coals may lead to consider technology transforming coal into clean fuels. Coal liquefaction is a suite of technology that can convert the low rank coal into clean liquid fuel, which can be used for transportation.

Stability of upgraded brown coal water mixture was studied based on coal sedimentation time history. The result indicates that the mixture produced by the addition of dispersing additive of NSF 0.3 wt% with stabilising additive of S-194 or CMC 0.01 wt% has a good fluidity with the apparent viscosity.

The indigenous microbial population was found to be present at high level. This indicates that the site matrix did not appear to be inhibitory and relatively favourable to microbial growth. Accordingly, it can be suggested that natural attenuation of metal bioremoval would occur under present site condition.

It is expected that all topics could attract researchers to develop all the technological aspects in creating products that can be useful for mankind.

The Editor