

From the Editor

Papers referring to coal issues particularly low-rank coal are still dominant in this June 2007 issue, especially for the technical aspect. The authors of the papers are aware that most of the Indonesian coals are of low rank. Various attempts have been carried out to upgrade and utilise optimally these coals in order to substitute the role of oil fuel that its reserve is decreasing year by year. These are conducted to support the government policy on energy in which the coals must substitute the oil energy. The other papers focus on technical aspects of mining environment and geophysical investigation.

Petrographic analysis on the Lebak coals indicates that higher vitrinite reflectance of Palaeogene coals, compared to Neogene ones, is a result of higher regional coalification level in the basin, associated with greater cover and local effect of igneous intrusion. The Palaeogene coals have better quality than the Neogene ones. All the coals rich in vitrinite are suitable for direct combustion.

Low-rank coals from Adaro (subbituminous); Mulia and Gunung Bayan (lignite) were analysed to produce synthesis gas using fluidised bed gasification reactor. The composition of gas products were analysed using a gas chromatograph. The results show there is a good correlation between gasifying agent, coal used, quality and quantity of the synthesis gas.

Low-rank coal can be upgraded to higher-rank one, both for export and domestic use, mainly for domestic industries. Upgraded Brown Coal (UBC) process is one of the best upgrading processes that can be applied. Moreover, the low cost production of the coal would be the more attractive for its commercialisation.

Study on monitoring system application to detect soil/rock movement at mine slope was carried out in the Binungan Mine Operation-PT. Berau Coal. The system used equipments consisting of radio modem, data logger and potential transducer. The results indicate a good value of linearity with value of r-square of 0.964-0.981.

Prevention and control of acid drainage is a major issue for mine operators at sites where sulphide minerals occur. Overburden treatment technology must be identified and implemented to minimise the production of acid mine drainage.

Existence of water-bearing permeable rock surrounding gold mine in the Tasikmalaya Regency was detected using a Schlumberger configuration. The results show the rocks that is previously not yet known consisting of sandy tuff and breccias tuff.

From all the papers, it could be seen that the issues in coal and mineral development are often faced to various issues that need accurate and rapid solution. These papers have resulted in inputs of the issues on the mining development nowadays.