

From the Editor

Mining issues in this current journal include the technological and economical aspects of coal and mineral. The Indonesian coals well distributed in Sumatera and Kalimantan, are mostly dominated by low-rank coals such as lignite and subbituminous that have huge resources and reserves. In order to upgrade these coals, their characteristics must be recognised prior to development. The coals are dominantly used as direct fuel at coal power station, particularly close to the mining. Besides being used as the direct fuel, the coal is also upgraded to increase the calorific value. Therefore, it can optimally and safely be utilised as clean coal. Analysis of the economic aspect is also carried out to encourage the utilisation of the coal. This aspect is important to promote development of the coal to assure the investors of coal mining who wish to invest in the coal mining sector in Indonesia. Industrial minerals, like coal, are also well distributed in Indonesia. The use of them is not optimally yet, particularly for ceramic products. Unfortunately, most of the minerals do not fulfil the requirement of specification. This is challenges for researchers to upgrade to fulfil the specification, so that they can be used directly by related industries.

Study on organic petrology of coal is very important to indicate its type and rank. Geological setting influences those characteristics in terms of the sedimentological aspect. They were deposited in fluvial to deltaic environments. Megascopically, the coals are dominated by bright-banded and banded lithotypes. Microscopically, vitrinite and liptinite are the dominant macerals in the coals. There is significant relationship between those observations. The ranks of the coals range from brown coal to high volatile bituminous. Most of the coals are suitable for feed stocks in combustion. *Suralaya Coal Power Station* is the largest coal power plant in Indonesia. Recently, it uses low rank coal (LRC) because the price of medium and high rank coals is too costly. This is in accordance with the government in encouraging using LRC as the main source of energy in the national energy mixed policy. With the advanced technology such upgraded brown coal process; LRC can be used optimally, especially for the power plant. *The increase of oil price* forces industries to alter fuel from oil into a cheaper one. Coal is a promising energy alternative in Indonesia. Saving the cost, altering the fuel of oil into coal in industries may be accomplished by altering the oil burner with coal burner. The coal combustor should have nearly the same characteristic as the oil one, so that the performance of the kiln or other equipments served by the combustor does change significantly. *Industrial minerals like kaolin, ball clay, quartz and zircon* can be utilised as ceramic raw materials. The other ones like bauxite and ilmenite have not been utilised yet for ceramic commodities. So, to empower all industrial types as ceramic raw materials, it is necessary to conduct a comprehensive study on those minerals. It is expected that they can optimally be utilised for white or coloured ceramic bodies, glaze, refractory and other ceramic products. *The loading of gold and copper from a pregnant gold-thiosulphate leach solution* onto ion exchange resin and the subsequent elution of these metals have been investigate. The result indicates that gold can be removed from thiosulphate solutions rapidly and loaded on resins to very high concentrations.

The progress and development of the improving technology carried out by the researchers is highly expected to improve the collaboration between R&D institutions and industries, particularly in self fulfilling the commodities in which some of them are imported from overseas, especially from China, Japan and India. Thus, this can reduce dependence of the commodities.

The Editor