

International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry

VIRTUAL EVENT

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Potential of coal fly ash in building materials

There are many sustainable solutions for fly ash (as NORM- Natural Occurring Radioactive Materials) valorisation from thermal power plants. The latest literature reports that fly ash can be successfully used in cement, concrete, bricks, aggregates, glass-ceramics, zeolites, absorbents, geo-polymers, but its potential utilization due to the new technologies nowadays are wider. For instance, fly ash can be used as source of carbon for synthesis nanomaterials (carbon nano tubes). Also, it can be a source of rare earth elements obtained by recovery of fly ash.

In accordance to the characterization of fly ash (originating from the thermal power plant REK Bitola, Republic of North Macedonia) from material (chemical, physical and mineralogical) and radiological aspect realized in the frame of EIT Raw material project: Al-rich residues for mineral binders in ESEE region –RIS ALiCE, its potential utilization for low-CO₂ cement clinker production will be discussed and potential sustainable solutions will be presented.

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