

Special Issue

Greener Recovery and Separation Processes for REMs and PGMs in Various Matrices

Message from the Guest Editors

Rare earth elements (REEs) and platinum group metals (PGMs) occur naturally in the earth's crust and are generally scattered in small concentration levels. According to IUPAC, REEs includes two metals of group 17 transition metals (Sc and Y) and the 15 lanthanide elements (La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Th, Tm, Yb, and Lu). These metals are commonly dispersed or bonded with various minerals of the earth and their biggest market (80-90% REEs ores) is China. On the other hand, PGMs consists of Au, Ru, Rh, Pd, Os, Ir and Pt transition metals, which can be found in their purest elemental form. South Africa has the largest reserves of PGMs world-wide.

This issue welcomes all the novel developments that describe recovery and separation of REEs and/or PGMs from various matrices using greener solvents (ionic liquids and deep eutectic solvents) and bio-adsorbents.

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About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

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