

# Characterisation and Beneficiation of Complex Ores for Sustainable Use of Mineral Resources: Refractory Gold Ore Beneficiation as an Example

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There has been much attention paid to the utilization of complex ores due to decreasing the accessibility of high grade and easily extractable ores. In order to maintain the sustainable use of mineral resources, the effective beneficiation of complex ores is urgently required with the strong assist from mineralogical characterisation. In this paper, currently available characterisation and beneficiation methods of complex ores are reviewed and summarised to discuss the further development required for the sustainable utilisation of mineral resources for our society. Also, refractory gold ore beneficiation was discussed as an example.

**Key Words** : Complex ore, Sustainable utilisation, Mineral resources, Refractory gold ore