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Application of Microbial Metallurgy Process in Metal Extraction

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Deadline for manuscript submissions: closed (30 April 2024)

Message from the Guest Editors

Dear Colleagues,

Biometallurgy is a technology that extracts valuable metals from ores through the use of microorganisms. This technology has been successfully applied in metal extraction in a dozen of metals, e.g., Cu, Au, U, Zn, Ag, Ni, Co, Sn, Sb, and become one of the most important industrial methods of processing low-grade complex refractory ores. The environments of the minerals bioleaching are usually extremely acid and full of various toxic metal ions in very high concentrations; thus, the microorganisms that survive in these environments are considered a miracle of life and possess many peculiar abilities and properties. The microorganisms and these genes and proteins that they harbor are also precious resources for various applications' developments, e.g., cell biosensors, Taq DNA polymerase enzyme.

We invite you to contribute to this Special Issue dedicated to biometallurgy and all its relevant aspects, e.g., minerals bioleaching, microorganisms, community structure and function, genes and proteins, microbe-mineral interface, solution reactions, metals extraction, mechanism and techniques, are in consideration.









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Message from the Editor-in-Chief

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