

Special Issue

Advances in Metallurgical Processing and Involved Separation Techniques

Message from the Guest Editor

- The insertion of metals into society through increasingly complex electronic equipment puts even greater pressure on extractive processes from primary sources. At the same time, the decrease in metal content in ores results in increased generation of mining waste, which can also be used as a secondary source of other critical metals.
- Metallurgical processes are important to supply critical metals. However, as residues become more complex, further research is necessary to develop new recycling approaches towards the circular economy and achieve the Sustainable Development Goals from the United Nations.
- This Special Issue aims to address the most recent developments in recycling processes to obtain critical and valuable metals from secondary sources by pyro- and hydrometallurgical techniques, which include pyrolysis, roasting, smelting, calcination, leaching (inorganic and organic acids and alkali), ion exchange separation (resins and solvent extraction), precipitation, ionic liquids, deep eutectic solvents, supercritical fluids, nanohydrometallurgy, and biohydrometallurgy. Moreover, research articles will focus on techniques/processes to achieve sustainable development goals.

Guest Editor

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