



Special Issue Reprint

# **Recovery and Recycling of Valuable Metals**

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Metals have always played a significant role in human life, and the current global growth and prosperity are directly dependent on these materials. With the rapidly growing global demand for metals, their extraction from natural minerals (as their primary sources) has been enhanced, causing a significant reduction in the grade and quality of the ores in ore deposits and leading to the production of huge amounts of waste, which requires management. In light of this, new proposals to develop more advanced metal recovery technologies from minerals are needed. Additionally, the huge quantity of waste generated through all steps of metal production is known to be a source of environmental pollution, while its valorization can create value via recycling metals or even though use in the production of other valuable materials. Such waste valorization is also in line with the United Nations' Sustainable Development Goals (SDGs), as well as the implementation of the Paris Agreement. In this regard, the recycling of end-user products in order to reproduce valuable metals can also create significant value and reduce mining activities, and thus, their harmful consequences worldwide. Therefore, research and development in the state-of-the-art technologies for the recovery and recycling of metals are absolutely necessary. The aim of this Special Issue was to collect a range of articles on different aspects of valuable metal recovery and recycling from primary and secondary sources, as well as to decipher all new methods, processes, and knowledge in valuable metal production. We hope that this open access Special Issue will provide a great opportunity to demonstrate the work of researchers working in this area all around the world and help to provide new ideas for researchers who are working in the areas of hydrometallurgy, mineral processing, and waste recycling and



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