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**Special issue on hydrometallurgical processes for the integrated management of primary and secondary resources: Foreword**

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## Foreword

### GDR Prométhée – French Research Network on *Hydrometallurgical Processes for Primary and Secondary Resources*

# Special issue on hydrometallurgical processes for the integrated management of primary and secondary resources: Foreword

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This special issue is the initiative of the Prométhée GDR, a national research group dedicated to the study of hydrometallurgical processes for the integrated management of primary and secondary resources. This GDR was created in January 2016 and renewed in 2021, and brings together around 150 research actors from 27 academic laboratories, as well as CEA, IFPEN and BRGM teams. It contributes to structure French research community on hydrometallurgical processes, for a better management of non-energy mineral resources, from mining to recycling. The CNRS, via its two institutes “Chemistry” and “Engineering”, is funding this GDR.

The community was invited to submit part of their work for this special issue of the journal *Comptes Rendus de l'Académie des Sciences*. Following a standard review process, 13 of these articles have been published, among which four review articles and nine research papers. They cover and combine a wide range of scientific fields, from chemical engineering, separation chemistry, electrochemistry, biometallurgy, physical chemistry or mechanochemistry, and address a various range of metal elements, such as noble metals, transition metals, lithium, rare earths, uranium and actinides. More specifically, this special issue starts with a presentation of a specific classification process for electronic wastes [1]. Then four articles are dedicated to leaching and bioleaching processes [2–5], three

articles deal with both leaching and precipitation operations [6–8], two focus on precipitation [9,10], two consider chemical aspects of solvent extraction [11,12] and a last paper is dedicated to electrometallurgy of noble metals in deep eutectic solvents [13].

We would like to thank all authors for their implication in this Special Issue, as well as the >30 reviewers who provided many valuable insights on these papers.

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