

EUROMAT 2017/ Symposia Structure/Area H

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| H.2 | Title: Sustainable Production of (Critical) Materials | | |
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| | Summary | | |
| <p>Metals and materials are key enablers for any technology used in the modern society. Regardless of the category to which these metals belong (Base, Ferrous, Non-Ferrous, Noble, Precious, Critical, technology etc.), they have been incorporated in an increasing number of applications that improve our daily lives, thanks to their unique properties. Metals and metallic products are found in numerous high-technology and high-demand applications such as transport, building, packaging, engineering, renewable energy technologies, electronics, etc. Their consumption in our society is increasing almost exponentially pushing their production higher and higher. Taking into account the greater societal awareness on environmental issues and the stricter environmental legislation almost all over the world, there is an increased pressure on the technology developers and stakeholders to boost technological innovations towards sustainable metals production from primary as well as secondary resources.</p> <p>Therefore, this symposium is dedicated on, both relatively mature sustainable materials processing technologies that can be transferred to the existing industry as well as on radical innovative sustainable technologies that could shape the future of the materials processing industrial sector. The following main topics are addressed:</p> <ul style="list-style-type: none"> • Extraction of metals (critical and non-critical) from primary and secondary resources via Hydro-, Pyro-, Electro-, Bio- and Iono-metallurgical processing, • Valorization of residues towards zero waste processing in mining and metallurgical industry, • Opportunities for reuse, remanufacturing and recycling of metals and materials <p>Selected papers from this symposium will be published after review in the Journal of Sustainable Metallurgy (http://www.springer.com/materials/special+types/journal/40831) which is published by Springer and is dedicated to presenting metallurgical processes and related research aimed at improving the sustainability of metal-producing industries, with a particular emphasis on materials recovery, reuse, and recycling.</p> | | | |