MATERIALS SYNTHESIS AND PROCESSING


The technological and societal advancements require the use of advanced materials and the development of special alloys. Usually critical and strategic raw materials including metals, minerals, and natural materials are required. Strategic critical raw materials have economic importance, potential supply risk, complex production requirements and a fast growth in demand. Therefore, alternative sources are exploited, often called urban mining, to satisfy the need of critical metals, to reduce the risk of supply interference, facilitate industrial symbiosis and increase resource efficiency. The symposium seeks to highlight the exploitation of secondary sources for materials production and the utilization of those streams into production lines while meeting process and products requirements. Research focusing on understanding the fundamental mechanisms as well as the engineering aspects for the integration of secondary sources are encouraged. Special focus will be given on advanced extractive metallurgy methodologies, including sorting and separation. Articles focusing on life cycle analysis, materials flow and supply chain resilience analysis are encouraged.

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SYMPOSIUM SPONSORS
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