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Sommario/riassunto	<p>There are several major megatrends having an impact on pyrometallurgical metal processing. The steadily growing demand for all metals is strengthened by the emergence of electrical vehicles (EV), which brings a high need for battery metals, but additionally, a significant increase in copper consumption. Even if only moderate forecasts for the number of the EVs become true, production of the base metals must increase by tens of percentages, or even more than double. At the same time, pyrometallurgical processes have to produce fewer side products, such as slag, and maintain the quality level of the primary product, although raw material mixtures are increasingly complex and new elements are entering the processes in secondary raw materials. Therefore, it is imperative to continue the development of pyrometallurgical processes more efficiently and productively, while still improving their selectivity regarding slagging the unwanted material and recovering the desired elements. This Special Issue is for current advances in the pyrometallurgical processing of metals, including all aspects, namely, the basic unit processes and operations in a smelter, metallurgical engineering, furnace integrity, cooling systems, modelling, slag and offgas handling, to name a few. A collection of 13 papers deal with ferrous and ferroalloy development, and the processing of different raw materials for metal production.</p>