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Rare Earth Oxides and Their Applications

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Message from the Guest Editor

Most of the rare earth-containing materials with industrial applications are either oxides, or they are obtained from oxides. Regarding the bulk and mature industry applications of rare earth oxides, their use in catalysts formulations (such as in three way automotive catalysis), in glass-related industries (glass making, decolouring or colouring, glass polishing and other related applications), and permanent magnets manufacturing account for almost 70% of rare earth oxides usage. Other important industrial applications concern the metallurgy industry (used as additives in Fe or Al metal alloys), ceramics (specially in the case of Y), lighting-related applications (in the form of phosphors), as battery alloy components, or in solid oxide fuel cells, amongst others. Additionally, but not less important, there are lower scale applications, such as biomedical uses of nanoparticulated systems containing rare earth oxides for cancer treatment or as tumoral detection markers, or as sunscreens cosmetics for skin protection.

The aim of this Special Issue is to cover the above-mentioned applications. It is my pleasure to invite you to submit a manuscript to this Special Issue.



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Special issue



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Editor-in-Chief

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Message from the Editor-in-Chief

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