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Material Science and Engineering with Advanced Research

Third Issue in Raw Materials, Permanent Magnets, Biomaterials and Graphene

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Material Science & Engineering with Advanced Research Journal (MSERJ) is an emerging international Peer-Reviewed, Open Access journal which targets at providing recent research breakthroughs in the field of Material Science & Engineering Technology.

The MSERJ focuses on all classes of materials (metals, polymers, ceramics, composites, biomaterials, nano sized materials, etc.) and their structures (functional solids, soft matter, multiphase materials, coatings, etc.). A range of different nanomaterials are also covered such as carbon nanospheres, grapheme 2D materials, carbon nanotubes, nanoparticles, nanocomposites, etc.

In our third issue we have published information regarding the EU2020 strategy on raw materials that are connected to future materials policy in respect to energy and environmental applications. Rare earths are raw materials that have been used widely in permanent magnets industry. Biomaterials are in extreme development over the last decade while grapheme research has opened new directions in materials for advanced technology in energy, environment and bio. A short summary of each paper is presented in the next to introduce the readers of the journal our next issue.

In Gkanas *et al.* [1] presented a short review concerning the EU2020 Strategy and in particular to its sustainable growth objective, as well as to the EU Raw Materials Initiative, both of which aim to support sustainable growth in the EU. They analyzed current research, development and innovation policies in this area, which aim to substitute CRM with alternative materials or other solutions.

Gjoka *et al.* [2] reported their progress in the field of synthesis and characterization of a series of intermetallic compounds of the type $RFe_{4.48}Si_{1.52}$ (R =Y, Gd, Ho), and $DyFe_{6-x}Si_x$ in order to evaluate its structural and magnetic properties as a novel permanent magnet. They found different know phases in variable compositions.

Morouço *et al.* [3] applied Direct Digital Manufacturing (DDM) for biomedical applications, due to the capability of this technology to generate almost any geometry being able to mimic the native tissue despite their high complexity in 3D.

Goswami *et al.* [4] studied the ferromagnetic order in Graphene on Transition Metal Dichalcogenides such as, MoS_2/$MoSe_2$/WS_2/WSe_2 where they applied a mathematical approximation including Hamiltonians in order to calculate the transverse anomalous Hall conductivity of their system.

Finally, we would like to extend our thanks to the authors for their valuable contributions.

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