CALL FOR PAPERS

Journal of Graphene Technology

Topical Collection on Graphene Composites

Guest Editor:

Professor Ian Kinloch, Univ. of Manchester and National Graphene Institute

- Submission deadline: October 31, 2019
- Submit at: www.editorialmanager.com/GTeC
- Select article type “2019 Graphene Composites”
- Author instructions and additional journal details available: https://www.springer.com/materials/nanotechnology/journal/41127

The journal of Graphene Technology would like to announce the publication of a Special Issue in the area of Graphene Composites for 2019. Graphene has been the focus of significant research activities and numerous technological applications due to its exceptional mechanical, electrical and thermal properties. Presently a viable way to take advantage of these extraordinary properties is to incorporate graphene and related materials (GRMs) into composites as either fillers or reinforcing sheets. The resulting composites offer enhanced performance over traditional materials and this enables the development of advanced multifunctional materials, systems and parts. Current research work has shown that GRMs can be integrated into metals, ceramics and polymer matrices across a vast range of industrial applications in aerospace, automotive, electronics, renewable energy, consumer goods and biomedical sectors.

Topics covered include (but are not limited to):

- Production of GRM master batches (MBs) for the large scale production of GRM enhanced thermoplastics.
- Processing of GRM composite materials.
- Analysis, modeling and optimization of GRM modified composite materials and structures.
- GRM enhanced composite properties (mechanical, thermal, electric, etc.)
- Damage tolerance and damping of GRM enhanced composites.
- Interface properties of GRM enhanced composites
- Hybrid composites, including multifunctional GRM enhanced fibre reinforced polymers (FRPs).
- GRM enhanced elastomer composites (e.g. flexible electronics, sealants)
- GRM enhanced metal nano-structures (e.g. electronic devices, energy storage and management, heat management etc.)
- GRM functionalized foams.
- GRM enhanced ceramic composites.
- GRM enhanced composite materials for additive manufacturing.