

Korean Graphene Research Activities and Roadmap

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Recently, Korean government has approved a plan for commercializing graphene technologies, including graphene-based touch panels, organic light-emitting diodes (OLEDs), electro-chromic smart windows, secondary batteries for electronic vehicles, high-voltage high-power supercapacitors, ultra-light and strong composites, high-performance gas barrier films, electro-magnetic interference shielding, and environmentally friendly anti-oxidation steel plates. These items have been carefully selected considering economic efficiency and technological feasibility. In addition, Korea is also planning a “Korean Graphene Hub” project that is focusing on the fundamental sciences of graphene and related 2D materials, separately. In this talk, the brief history, recent status, and prospect of Korea’s graphene projects will be introduced, and discuss how we can harmonize the world-wide graphene projects based on international collaboration rather than competition.