Communication of Graphene for a More Competitive Industry

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Abstract

Graphene and its incredible properties at the nanoscale imply a change in the paradigm established by the laws of classical physics, and raise new impressive applications in many fields[1]. Currently these materials are being studied in scientific communities, but most companies and individuals do not yet know of their existence and / or potential usability[2]. In this regard, designer and company are the keys to transmit scientific knowledge to people through the application of its products.

This work focuses on the study of the channels and methods which have been used, are being used and will be used for the communication of graphene between scientific communities, businesses and individuals; understanding this communication as the transmission of knowledge of such materials, the possible ways of implementation, and all aspects related to its usability.
Due to the fact that the UK is the home of graphene[3], the USA is the country with most products on the market containing graphene[4-5], and Spain is one of the leading pioneers in producing graphene[6], these three countries have been analyzed as a representation of the Western world. The analysis conducted studied the communication of the graphene family in these three countries. In addition, the current situation at the international level has been studied based on products on the market, functional prototypes, patents and investment in research. This analysis highlights a potential paradigm shift that graphene could represent in a technological and global context.

Over the last years, both research in nanomaterials and the creation of centers dedicated to nanotechnology have grown exponentially. In addition, an increasing number of scientific publications related to this sector are published every year[7]. Similarly, dissemination channels and newspapers are transmitting this new knowledge to the overall public. This transmission of knowledge from scientific communities to society at large is continuously gaining the interest and attention of companies from multiple sectors in the market[5].

In this context, applications are the most direct way of communication between science and people. The usability of the product itself is the easiest way for the public to understand the properties and characteristics of graphene. As said before, there is a lack of communication, and this fact is probably due to the distance and differences between the information that comes from journalists and the one that comes from scientists. Newspapers are publishing news related to graphene while scientists are still carrying out their experiments to discover more about this material and its potential applications.

From this study, a relation between science and individuals regarding graphene will be established, and strategies to add value to this relation will be announced.

References

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