Graphene in the European Union Future and Emerging Technologies Flagships Programme: Status and Future Plans.

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Abstract:

The presentation reviews the current status of the EU Future and Emerging Technologies Flagships programme and outlines the model for the implementation of the Flagships in the H2020 programme, using Framework Partnership Agreements (FPAs).

FET Flagships are large-scale long-term research initiatives which address challenges of major scientific, economic and societal importance. Their concept has been developed over the past four years within the EU's Future and Emerging Technologies (FET) research programme, which is part of the ICT Technologies programme. The FET Flagships reflect the fact that digital technologies are now embedded in all other areas of science.

Two FET Flagships, "Graphene and Related 2D Materials" and the "Human Brain Project" were launched in October 2013, following a Call for Proposals within the FP7 research programme, and will follow a long-term (10-year) scientific road-map. In contrast to other large-scale EU research initiatives such as public-private partnerships (PPPs), the Flagships are science-driven from the outset and will build on novel scientific ideas and breakthroughs. Their continuation is implemented within the H2020 research programme, which started in January 2014 and will run until 2020.

In the H2020 programme there is a stronger emphasis on innovation and on the economic and societal exploitation of research results than in previous research programmes,. This emphasis on innovation will apply equally to the Flagships, which will take novel ideas and scientific discoveries from proof-of-concept through to maturity and industrial exploitation.

The implementation of the Flagships in H2020 will make use of a type of contract called a Framework Partnership Agreement (FPA). The FPA provides long-term continuity for the duration of H2020 and provides a framework in which the each Flagship consortium agrees to follow a strategic research agenda. In each Flagship the research work of this core consortium will be funded in a sequence of projects, covering the seven years of H2020. The contracts of this sequence of core projects are in the form of Specific Grant Agreements (SGAs), for which the project consortium is the same as in the FPA.