

International standardisation for graphene and related 2D materials

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Abstract

From the past 15 years several international expert groups (Technical Committees) have been working on the development of standards for nanotechnology and nanomaterials. Some 168 standard documents were developed [1] by organisations such as ISO TC229, IEC TC113, CEN TC352 and ASTM E56 up to now with over 130 new or updated documents in development. Coherent and reliable approach to new technologies, measurement techniques and novel materials provide a reference for industry as well as regulatory and policy oversight. This update will focus on developments in Graphene and 2D materials standards from terminology to measurements methods and material specifications. Standards provide a sustainable path to growing market needs in graphene and advanced materials in general.

REFERENCES

- [1] Jean-Marc Aublant, Charles A. Clifford, Emeric Frejafon, Toshiyuki Fujimoto, Vincent A. Hackley, Jan Herrmann, Angela R. Hight Walker, Debra L. Kaiser, Denis K. Koltsov*, David J. Michael, Akira Ono, Gert Roebben, Gregory J. Smallwood and Naoyuki Taketoshi, ACS Nano 2020, 14, 11, 14225-14257

FIGURES

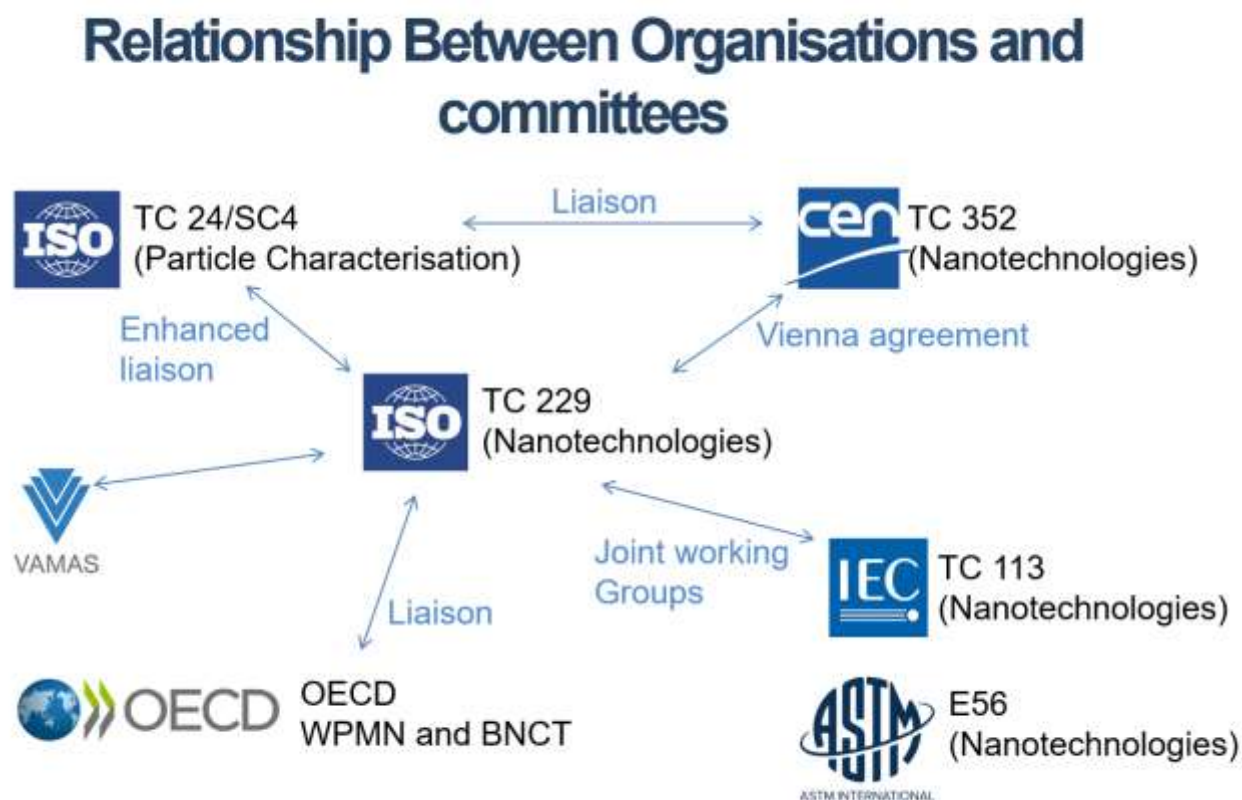


Figure 1: Relationship between key standardisation committees for nanomaterials and Graphene