**Underpinning standards development for advanced materials:**

**An introduction to VAMAS**

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Standardisation plays an important role in ensuring that the full potential of nanotechnology is realised and that it is safely integrated into society. Documentary standards help create a smooth transition from the laboratory to the marketplace, promote progress along the nanotechnology value chain –from nanoscale materials that form the building blocks for components and devices to the integration of these devices into functional systems– and facilitate global trade. Pre-normative research is essential to ensure that these standards are based on well-established, validated methodology. International initiatives such as VAMAS, the Versailles Project on Advanced Materials and Standards, can provide an effective framework for such research efforts in preparation for subsequent standardisation, in this particular case for advanced materials. Here, we present an overview of the work carried out within VAMAS and highlight opportunities for stakeholder involvement.

VAMAS was established in 1982 and is currently comprises members from 16 global economies, including Australia. The main objective of VAMAS is to promote world trade by innovation and adoption of advanced materials through international collaborations that provide the technical basis for harmonisation of measurement methods, leading to best practices and standards [1]. The work conducted within VAMAS goes on to form the basis of documentary standards describing consensus-based, best-practice measurement methods through international standards development organisations such as ISO and IEC, or supports the development of reference materials and reference methods. VAMAS is organised into activities within Technical Work Areas (TWAs) that address emerging measurement needs in the advanced materials domain. Newly launched TWAs include synthetic biomaterials, graphene and related 2D materials, and Raman spectroscopy and microscopy.

Australia continues its active role in VAMAS, both through participation of Australian laboratories in VAMAS-run comparisons and through membership of the VAMAS Steering Committee. The success of international efforts such as VAMAS is dependent on high-quality and diverse participation from a range of global players in the advanced materials and nanotechnology fields to ensure maximum relevance and quality of the data produced, and its fitness-for-purpose in meeting the needs of the international community it aims to serve. Come along to learn more about how you can contribute to this international effort!

**References**

1. VAMAS webpage. [www.vamas.org](http://www.vamas.org)