



VAMAS



Versailles Project on Advanced Materials and Standards

Promoting world trade in products made from high technology materials

Canada . France . Germany . Italy . Japan . UK . USA . EC . Brazil . Mexico . Chinese Taipei . South Africa . Australia . Korea . India . China

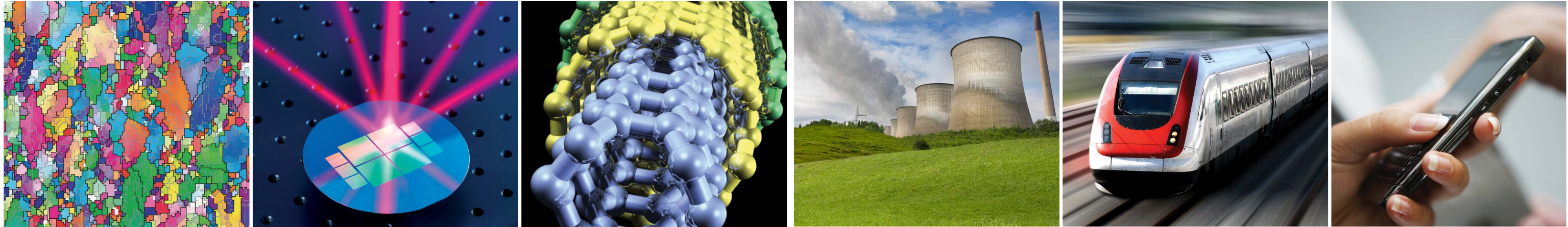
1982

1983 | 2007

2008 | 2013

Materials enable...

...trade and quality of life



What is VAMAS

The Versailles Project on Advanced Materials and Standards (VAMAS) was established following an economic summit in 1982 held at Versailles by the Heads of State of the G7 group of nations and representatives from the Commission of the European Communities. The membership has expanded over the last few years.

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.

Scope

The scope of VAMAS research encompasses the processing, characterization and performance of advanced materials, with the goal of a harmonized technical basis for international standards.

Participation

The Memorandum of Understanding to participate in VAMAS has been signed by Australia, Brazil, Canada, China, Chinese Taipei, France, Germany, India, Italy, Japan, Mexico, Republic of Korea, South Africa, UK, USA and the European Commission. Researchers not from signatories may also take part in specific research activities.

The benefits of VAMAS

VAMAS has contributed to the development of national and international standards through

- Pre-standards work in rapidly developing technical areas
- Establishing the basis of new standards technical committees
- Transfer of results to standards bodies leading directly to international standards
- Contribution to the development of reference materials
- Development of test methods and procedures
- Increased proficiency of laboratories, including industrial laboratories
- Agreement of nomenclature
- High quality data generation via Interlaboratory comparison exercises
- Precision data statements
- Provision of reliable material properties

Steering Committee

The Steering Committee (SC) manages the activities of VAMAS. It reviews the progress of each Technical Work Area (TWA), approves new projects, initiates new areas of technical activity, agrees policy and establishes procedures. Typically, the SC members are from government, metrology institutes, research laboratories or standards bodies, with up to three representatives from each of the signatories of the Memorandum of Understanding. The Chair and Secretariat changes every three years.

For the current Secretariat contact details and SC representatives list, see www.vamas.org/representatives.html

Technical Work Areas

Technical Work Areas (TWA) are responsible for planning and carrying out the VAMAS projects. Forty two TWAs have been established to date, of which 17 are currently active. The work of each TWA is led by an international Chair appointed by the Steering Committee. The TWA Chair is assisted by an appointed member of the Steering Committee who acts as the Coordinator. Each TWA reviews annually the progress of projects and develops future proposals. TWAs often meet at international conferences in their technical areas. Progress is monitored by the Steering Committee annually via the Coordinators.

VAMAS Connections

To ease the development of standards and to ensure the rapid take-up of the work carried out, links have been established with relevant bodies.

Memoranda of Understanding have been signed with the following:

• ISO and IEC

Enables joint publications based upon the work of VAMAS to accelerate the development of standards in advanced materials.

• Bureau International des Poids et Mesures (BIPM)

Collaborates on identification of key metrological traceability issues affecting the comparability and accuracy of the measurement of materials properties (i.e. materials metrology).

• World Material Research Institute Forum (WMRIF)

Assigns standards issues to VAMAS for resolution.

TWA participants are frequently members and project leaders of appropriate standards committees, which ensure the relevance of VAMAS activities to standards and end-users needs.

The work undertaken has been instrumental in the setting up of Technical Committees and has contributed directly to numerous standards.

Ideas for new TWA activities are also welcome. Applications to establish a new TWA are considered by the Steering Committee and evaluated against the following criteria.

- Relevance of the work to advance materials technology
- Importance of the work in terms of promoting new technology, growth and employment;
- Significance of the work in terms of standards development
- Non-duplication of other work being conducted elsewhere
- Take-up of the output of the work undertaken

TWAs are closed when no further work is identified.

Current Interlaboratory Trials

See: www.vamas.org/twa

Potential new participants and others interested in the output of VAMAS are always welcome to contact the TWA Chair for further information.

Publications and Standards

There are approximately 500 published papers and contributions to conference proceedings covering the work of VAMAS, including general articles on its role in pre-standards research in advanced materials. In addition, individual articles are published in scientific and technical journals.

Funding

Each participating organisation contributes its research effort by funding its own activities, but gains value through collaboration and benchmarking on an international basis resulting in optimised and widely accepted test methods and standards.

Contact us

For more details of the work of VAMAS including descriptions of the activities of each TWA, please visit the VAMAS website (www.vamas.org).

Please contact the Secretariat by email (info@vamas.org) to obtain further information on publications and standards, to suggest new technical areas or to find out about participation in VAMAS activities.

Active Technical Work Areas

TWA 2	Surface Chemical Analysis
TWA 5	Polymer Composites
TWA 16	Superconducting Materials
TWA 22	Mechanical Properties of Thin Films and Coatings
TWA 24	Performance Related Properties of Electroceramics
TWA 29	Nanomechanics applied to Scanning Probe Microscopy
TWA 31	Creep, Crack and Fatigue Growth in Weldments
TWA 32	Modulus Measurements
TWA 33	Polymer Nanocomposites
TWA 34	Nanoparticle Populations
TWA 36	Organic Electronics
TWA 37	Quantitative Microstructural Analysis
TWA 38	Thermoelectric Materials
TWA 39	Solid Sorbents
TWA 40	Synthetic Biomaterials
TWA 41	Graphene and Related 2D Materials
TWA 42	Raman Spectroscopy and Microscopy

