

Committee:	National Committee for Materials Science and Engineering
Period covered:	1 July 2016 – 30 June 2019
Chair:	Professor Chennupati Jagadish FAA
Version and date:	Final – 11 August 2016

Purpose	<ol style="list-style-type: none"> 1. To connect the Academy to materials scientists and engineers in Australia; 2. To link the Academy to Australian scientific societies and networks in order to work together to promote the development of the discipline; 3. To link Australian science in the disciplines to world science, in particular through the membership of appropriate international organisations; 4. To ensure that Australia has a voice and a role in the global development of materials science; 5. To provide strategic science policy advice, to the Academy, as input to Academy science policy statements, and (with the approval of the Executive Committee of Council) to the Australian Government and Australian organisations; 7. To develop and encourage initiatives for early-mid career researchers (EMCRs) in materials science and engineering, especially those with a focus on Australia-wide engagement and networking; 8. To play a role in promoting materials science education, through engagement with educational and research institutions with a major interest in MS&E; encouraging events with a focus on research students and early career researchers; encouragement of outreach activities of the materials science community; and other initiatives; 9. To undertake the above activities with a view to producing, from time to time, position papers for materials science in Australia, and ultimately a decadal plan or similar relevant document in the foreseeable future; 10. Through engagement with industry, all sides of government, the Australian research community, other decision makers and the general public if appropriate, to promote the discipline of materials science and engineering and implement recommendations of position papers or a decadal plan (if and when undertaken).
Description and objectives	<p>The National Committee for Materials Science and Engineering (hereafter referred to as NCMSE) is a committee of the Council of the Australian Academy of Science. The broad aims of the committee are to foster interdisciplinary materials science and engineering in Australia, to link the Academy to Australian materials scientists and engineers, including relevant national networks, institutions and scientific societies, and to serve as a link between Australian and overseas materials scientists, primarily through the International Union of Materials Research Societies (IUMRS).</p>

	<p>The NCMSE believes that networking and engagement with the materials science community is vital for this highly interdisciplinary scientific endeavour. Through strong links to the Australian Nanotechnology Network (ANN) and the Australian Materials Research Society (AMRS), which acts as an umbrella organisation with links to many Australian scientific societies, the NCMSE will connect with and encourage materials scientists and institutions to promote discipline-wide communication, with a particular focus on EMCRs in materials science and engineering, and involving the Academy for Technological Sciences and Engineering when appropriate.</p>
<p>Coverage</p>	<p>Advanced materials, structural materials, electronic materials, photonic materials, magnetic materials, functional materials, nano-materials, bio-materials, soft materials, porous materials, composites; synthesis, growth, processing, fabrication, characterisation and analysis of materials; theoretical and computational materials science; engineering applications of materials science research.</p>
<p>Linked international organisation</p>	<p>International Union of Materials Research Societies (currently subscribed to by the Australian Materials Research Society).</p>
<p>Key connected organisations</p>	<p>Links to other National Committees: Chemistry, Physics, Crystallography, Mechanical and Engineering Sciences, Biomedical Sciences.</p> <p>Australian Societies and Organisations: Strong links to the Australian Nanotechnology Network and the Australian Materials Research Society, an umbrella organisation for many other organisations such as the Australian Microscopy and Microanalysis Society; Materials Australia; Australian Institute of Physics; the Royal Australian Chemical Institute; the Australian Ceramic Society; the Optical Society of Australia; the Australasian Vacuum Society; the Australian X-Ray Analytical Association; the Society of Crystallographers in Australia and New Zealand; as well as the Australian National Fabrication Facility; the Australian Microscopy and Microanalysis Research Facility; the National Computational Infrastructure; the Australian Nuclear Science and Technology Organisation; the Australian Synchrotron; the Defence Science and Technology Organisation; and the Commonwealth Scientific and Industrial Research Organisation.</p> <p>International Organisations: International Union of Materials Research Societies.</p>
<p>Key outcomes</p>	<ol style="list-style-type: none"> 1. Approved committee structure and membership (annual); 2. Develop and encourage initiatives for EMCRs, especially those with a focus on Australia-wide engagement and networking, as well as international interaction and networking activities; 3. Creation of position papers, as appropriate, and a decadal plan or similar relevant document in materials science; 4. Engagement with Australian materials research scientists by directly communicating relevant materials information and contributing news

	<p>items to Academy and society publications; seeking opportunities to discuss NCMSE activities at general meetings of professional societies;</p> <ol style="list-style-type: none"> 5. Direct engagement with relevant Australian networks, societies and organisations; 6. Engagement with relevant national committees on issues of common interest; 7. Engagement with IUMRS and other international organisations, as well as recommending Australian delegates to IUMRS General Assemblies; 8. Obtaining financial and other resources to assist in the delivery of NCMSE activities, including contributions to the Australian subscriptions to International Organisations.
Indicative budget	<ol style="list-style-type: none"> 1. \$3000 per annum for meetings provided by AAS
Approved by / date	<p>Sec A & B, 11 August 2016</p>