

Committee:	National Committee for Physics
Period covered:	2 April 2020 – 31 March 2023
Chair:	Professor Halina Rubinsztein-Dunlop FAA
Version and date:	FINAL May 2020

Purpose	<ol style="list-style-type: none"> 1. To connect the Academy to science and scientists in Australia 2. To link the Academy to Australian scientific societies in order to work together to promote the development of the discipline 3. To link Australian scientific 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 scientific disciplines 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 6. To finalise Review of Physics Decadal Plan 2012-2021 and promote it to the community, industry, government and other decision makers 7. To prepare grounds for next Decadal Plan and seek funding for information-gathering, and formation of the plan 8. To develop physics education as the pathway to a physics-literate workforce and community 9. To build awareness in government and the community of physics as a key enabler for our society and economy 10. Biennially, in consultation with the NC Chemistry, advise the Council of the Australian Academy of Science on the award of the Frew Fellowship.
Description and objectives	<p>The NC Physics is a committee of the Council of the Australian Academy of Science. The broad aims of the committee are to foster physics in Australia, to link the Academy to Australian physicists and relevant scientific societies, and to serve as a link between Australian and overseas physicists, primarily through the International Union for Pure and Applied Physics (IUPAP) and the International Commission for Optics (ICO).</p> <p>The Council of the Australian Academy of Science biennially seeks the advice of the NC Physics, in consultation with the NC Chemistry, on the award of the Geoffrey Frew Fellowship. Fellowships are awarded to distinguished overseas scientists to participate in the Australian Spectroscopy Conferences and to visit scientific centres in Australia.</p> <p>The NC Physics delivered the <i>Physics Decadal Plan 2012–2021: Building on excellence in physics</i> on 6 December 2012, which presents the Australian physics community’s strategic vision for the 10 years from 2012 to 2021. The Australian Academy of Science, the Australian Institute of Physics, the Australian Research Council and the physics community combined resources to create this plan for the future of physics. From 2012, the focus of the NC Physics will be to drive the</p>

	<p>promotion and implementation the plan in consultation with the Academy. The NC Physics will lead a mid-term review of the Physics Decadal Plan.</p>
<p>Coverage</p>	<p>The full range of Physics, experimental, theoretical, mathematical and applied Physics, including in arbitrary order:</p> <p>research on fundamental constants, statistical physics, cosmic rays, low temperature physics, the structure and dynamics of condensed matter, semiconductors, magnetism, particles and fields, nuclear physics, atomic and molecular physics, plasma physics, acoustics, spectroscopy, optics, photonics, quantum physics and quantum information, mathematical physics, hydrodynamics, astrophysics, computational physics, general relativity and gravitation, biological and medical physics; and: Physics education, Physics-based applications in industry.</p>
<p>Key connected organisations</p>	<p><u>Australian Societies and Organisations:</u> Australian Institute of Physics, Australian Optical Society, Australian Acoustical Society, Australasian College of Physical Scientists in Medicine, Australian Institute of Energy, Australian Scientific Industry Association, Australian and New Zealand Association for Mathematical Physics.</p> <p><u>International Organisations:</u> International Union of Pure and Applied Physics (IUPAP), International Commission for Optics (ICO), International Commission for Acoustics, International Organisation for Medical Physics</p> <p><u>Other National Committees:</u> Chemistry, Astronomy, Mathematics, Materials Science, Crystallography</p>
<p>Key outcomes</p>	<ol style="list-style-type: none"> 1. Approved committee structure and membership (annual); 2. Engagement with Australian physicists by contributing news items to society publications, and seeking opportunities to discuss NC activities at general meetings of the societies; 3. Engagement with relevant Australian societies and organisations, by having the nominee of the President of the Australian Institute of Physics on the NC, and inviting representatives of other relevant societies as observers to NC meetings, and seeking opportunities to provide a regular statement on NC activities to council meeting of the AIP, and other organisations; 4. Engagement with relevant national committees on issues of common interest; 5. Engagement with IUPAP and other international organisations, including nomination of members of IUPAP commissions, and of delegates at IUPAP General Assemblies, and consultation with Australian members of Commissions, Working Groups, Committees and Councils; 6. Identification of the Geoffrey Frew Fellowship nominee in consultation
<p>Indicative budget</p>	<ol style="list-style-type: none"> 1. \$5000 per annum for meetings provided by the Academy (2019-20); 2. Up to \$2500 provided by the Academy to support attendance at the general assembly meetings of IUPAP
<p>Contact</p>	<p>National Committees for Science Office: nc@science.org.au, 02 2601 9400</p>

