



2016 NSW Premier's Prizes for Science & Engineering Category Definitions

- 1. Excellence in Mathematics, Earth Sciences, Chemistry and Physics:** This prize will be awarded to a researcher who has demonstrated an outstanding role and impact in one of these fields, and whose research has made a significant contribution to addressing a real-world challenge.
- 2. Excellence in Biological Sciences (Ecology, environmental, agricultural and organismal):** This prize will be awarded to a researcher in the Biological Sciences – in relation to ecological and environmental science, and aspects of the behaviour, physiology, evolution, form and function of plants and animals – who has demonstrated an outstanding role and impact in one of these fields, and whose research has made a significant contribution to addressing a real-world challenge.
- 3. Excellence in Medical Biological Sciences (Cell and molecular, medical, veterinary and genetics):** This prize will be awarded to a researcher in the Medical Biological Sciences – in relation to human and animal health, biotechnology, and basic cellular and molecular understanding of biological processes – who has demonstrated an outstanding role and impact in one of these fields, and whose research has made a significant contribution to addressing a real-world challenge.
- 4. Excellence in Engineering and Information and Communications Technology:** This prize will be awarded to a researcher who has demonstrated exceptional impact in their field of engineering or ICT and big data analytics, and a made a significant contribution to the community or state through their research or professional projects.
- 5. Energy Innovation in NSW:** This prize will be awarded to an individual who has demonstrated a significant impact in advances in renewable energy and energy efficiency, particularly in New South Wales. Renewable energy is defined as naturally replenished energy created from resources such as wind, sunlight, geothermal heating, rain and tides.
- 6. NSW Early Career Researcher of the Year:** This prize will be awarded to an individual who is 35 years or younger (as at the closing date of nominations), or who has been awarded their PhD in their last five years, and who is conducting outstanding and novel research in science or engineering.
- 7. Leadership in Innovation in NSW:** This award will be presented to an individual demonstrating excellence in leadership in the application of novel ideas and techniques to address challenges, solve problems, and generate new knowledge for the benefit of New South Wales.
- 8. Innovation in NSW Public Sector Science and Engineering:** This award will be presented to an individual from a NSW public sector agency who has contributed to innovative research or to finding solutions to challenges facing New South Wales, especially in transport and logistics, water, resources and energy, agriculture and other priority areas.
- 9. Innovation in Science and Mathematics Teaching in NSW:** This prize will be awarded to a primary or secondary school teacher who has motivated and inspired students to become involved in student-centred learning, and whose work impacts on the science, technology, engineering or mathematics participation and performance of students in their school.