

## 2019 NSW Premier's Prizes for Science & Engineering Category Definitions

- 1. Excellence in Mathematics, Earth Sciences, Chemistry or 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 (Ecological, 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 or 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 who has made a significant contribution to the community or state through their research or professional projects.
- 5. NSW Early Career Researcher of the Year (Biological Sciences): This prize will be awarded to an individual who is 35 years or younger (at the closing date of nominations) or who has been awarded their PhD in the last five years, who is conducting outstanding and novel research in the biological sciences, ranging from ecology to molecular and medical science.
- 6. NSW Early Career Researcher of the Year (Physical Sciences): This prize will be awarded to an individual who is 35 years or younger (at the closing date of nominations), or who has been awarded their PhD in the last five years, who is conducting outstanding and novel research in the physical sciences, including mathematics and 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 or 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.