



Australian Government
Australian Research Council

2011 Australian
Laureate Fellows



PROFESSOR MAHANANDA DASGUPTA

*Recipient of 2011 Georgina Sweet
Australian Laureate Fellowship*

Frontiers of reaction dynamics for new generation accelerator science

Current Organisation	The Australian National University
Administering Organisation	The Australian National University
Primary research field	Nuclear Physics
National Research Priority	Frontier Technologies for Building and Transforming Australian Industries



Professor Mahananda (Nanda) Dasgupta is an experimental physicist at the Heavy Ion Accelerator Facility in the Department of Nuclear Physics of the Australian National University (ANU). She is an international leader in accelerator-based nuclear fusion and fission. Her research has resulted in a fundamental change in the current understanding of these processes. She is the recipient of the inaugural 2011 Georgina Sweet Australian Laureate Fellowship in recognition of her role in science and technology, particularly nuclear science. This provides additional funding for mentoring and recognition of excellence for women in these disciplines.

Professor Dasgupta's nuclear physics project combines innovative concepts with the development of new Australian capabilities to understand the quantum interactions of stable and unstable exotic nuclei, underpinning opportunities with next generation accelerators. As well as advancing our fundamental understanding of fusion, the formation of elements in the universe, and applications to materials science, her research will provide a unique perspective on the transition from quantum to classical behaviour - a key challenge in future nanoscale technologies.

In her ambassadorial role as the Georgina Sweet Australian Laureate Fellowship recipient, Professor Dasgupta will increase the profile of Women in Science through outreach activities, and work towards advancing early career researchers as well as facilitate leadership pathways for senior women researchers.

Professor Dasgupta completed her PhD in 1992 at the Tata Institute of Fundamental Research in Mumbai, India. She was awarded an ARC Queen Elizabeth II Fellowship in 1998, and in 2006 was awarded the prestigious Pawsey medal by the Australian Academy of Science for outstanding research in Physics in Australia by a scientist under 40 years of age. Professor Dasgupta was elected a Fellow of the Australian Academy of Science (AAS) in 2011.

Professor Dasgupta was the 2004 Australian Institute of Physics (AIP) "Women in Physics" lecturer, undertaking a nation-wide lecture tour. She is a committee member of the Women in Physics Group, the Nuclear and Particle Physics Group of the AIP, and the AAS National Committee for Physics. Professor Dasgupta is passionate about supporting young researchers, Australian science teachers, and championing Science amongst school and college students and members of the public.

Media contacts

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