

Dr Graeme Melville was a nuclear physics/medical researcher at St George Hospital in Sydney, Australia. Previously he was an astrophysics researcher at the University of Wollongong and has published a number of scientific papers on astrophysics and nuclear physics and has also acted as a reviewer. He has lectured at a number of tertiary institutions and taught at high schools. He has presented at national and international conferences on nuclear medicine and other areas of physics. He was the recipient of the 2005 'Physics in Industry Day' award and 2007 'Research Futures Forum' prize.

Dr Melville has a MSc from the University of Wollongong in Astrophysics and a PhD from the University of Western Sydney in Nuclear Physics.

He also founded the organization 'Make Australia the Clever Country' which aims to promote and increase funding for scientific research, and has been on radio and TV to promote science. Dr Melville was Secretary of the NSW branch of the Australian Institute of Physics (NSWAIP) for 10 years and helped organize the AIP national Conference in 2002. He is a past Chairman (NSWAIP) and 'Editor in Chief' of the international physics journal "Atomic Molecular and Optical Physics" (AMOP).

Dr Melville was science policy advisor to the Australian Labor Party in 1998, a political candidate for the Federal senate and was a consultant for NASA in their planetary exploration program. He received a commendation from NASA for his planetary astronomy work involving the Magellan Venus Project in 1994. He was also a professional tennis player.

His more recent research at St George Hospital in Sydney involves conducting experiments and formulating theoretical models on producing Ac-225 by bombarding Ra-226 with bremsstrahlung gamma ray photons and neutrons. Ac-225 was first produced artificially by the ITU in Germany using a cyclotron and by Dr Graeme Melville at St George Hospital in Sydney using a linac in 2000.

This radionuclide decays to Bi-213, which can then be used for 'Targeted Alpha Therapy' (TAT) of cancer. Targeted Radionuclide Therapy is a new kind of cancer treatment.