

Professor Tim White

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Professor Tim White is a Director in the President's Office Research Strategy and Coordination Unit responsible for Science, Engineering and Medicine at the Nanyang Technological University, Singapore. He is also a Professor in the School of Materials Science & Engineering and Deputy Director (Graduate Students) of the Energy Research Institute ERI@N. Prior to joining NTU in 2005, he acquired over 30 years of research experience at national laboratories in Australia and Singapore in materials science and engineering, minerals processing, nuclear waste treatment and environmental management. These appointments included group leader at The Australian Atomic Energy Commission and Multiplex Professor of Environmental Technology developing ceramic methods for the treatment of toxic metal wastes at brown-field sites in Australia.

He served as the Head of the Department for Materials Science (2006-2009) and Director of the Facility for Analysis, Characterization, Testing and Simulation (FACTS) (2005-2009) at NTU. Tim was Secretary of the Materials Research Society of Singapore (2003-2007), Director of the Centre for Advanced Microscopy at the Australian National University (2009-2012) and President of The Australian Microscopy and Microanalysis Society (2010-2013). Formally trained in solid state chemistry his research has focused on unravelling nonstoichiometry and functionality in complex oxides (catalysts, electrolytes, and hazardous and nuclear waste forms), through advanced analytical methods to investigate condensed matter. Other research in Singapore includes: Team leader (1999-2001) at the A*STAR Environmental Technology Institute validating the performance of membrane technology for the recovery and recycling of automotive oil; Director (2001-2004) at the Institute for Environmental Science and Engineering (IESE) responsible for developing a program of advanced research for the development of new ecomaterials for environmental protection. International research partners include the National Research Council of Canada, Fraunhofer UMSICHT of Germany and Johnson Matthey of the UK. His recent research is concerned with the discovery of thermoelectric materials and the properties of hybrid perovskites as photovoltaic materials. He is also a pioneer of massive open inline courses (MOOCs) and has for several years delivered one of the few such courses in the world that awards full academic credit.