

DATO' SERI IR DR ZAINI UJANG: DSc

Mr Vice-Chancellor and President,

Zaini Ujang is the Secretary General, Ministry of Energy, Green Technology and Water, Malaysia.

Zaini Ujang is a passionate believer in environmental sustainability and a prolific writer, and opinion former. He has become that rare thing, a “thought leader” who has enjoyed the professional success that allows him to put those thoughts into action.

Zaini Ujang has enjoyed a meteoric rise since he completed his PhD in Newcastle in 1996. By 2008 he was, at 43, the youngest Vice-Chancellor of Universiti Teknologi Malaysia, Malaysia’s oldest university. His energetic work as VC lead to his promotion to become Secretary-General of the Malaysian Ministry of Higher Education, where he oversaw the creation of the *2015-2025 Education Development Plan (Higher Education)*, the Malaysia Higher Education Blueprint, an ambitious document that has set the policy landscape for Malaysian universities in the coming decade.

Before becoming Vice-Chancellor he was a very active and energetic researcher in the International Water Association, becoming, by election, Vice President at just 38. He is now an IWA fellow.

He has now become, since 2016, Secretary General for the Ministry of Energy, Green Technology and Water, where he has put forward and overseen the development and roll out of an ambitious master plan for a bold Green Technology Master Plan (2017-2030) to transform Malaysia into a low carbon and resource efficient economy and on a path for the long term

and sustainable achievement of the sustainable development goals.

If these plans come to fruition Malaysia will lead the region, and in some aspects the world, in sustainable development.

His academic career began in 1983-88 when he undertook a Bachelor of Chemical Engineering (Hons) at Universiti Teknologi Malaysia. Following that, he was a trainee engineer in Labuan and then Kuala Lumpur, before returning to UTM as Assistant Lecturer. In 1990-91 his first association with Newcastle began, with him coming to the UK to commence a Master of Science (Environmental Engineering), with a dissertation entitled "Treatment of High-Ammonia Leachate by Rotating Biological Contactors", supervised by Professor M. B. Pescod, Newcastle University. After this, in 1991-93, he returned to Malaysia as Lecturer and Head of Laboratory at UTM in the Department of Environmental Engineering. However, the lure of Newcastle was high, and in 1994 he came back to the UK to complete his Doctor of Philosophy in Environmental Engineering, on the "Treatment and Reclamation of Heavy Metals in Electroplating Wastes by Reverse Osmosis Membranes" supervised by Professor G. K. Anderson.

In 1996, he returned to Malaysia as Associate Professor at UTM, and, not yet satisfied by his academic credentials, studied for a Master of Management (Human Resource Management) at Universiti Teknologi Malaysia. Becoming Director of the UTM Institute of Environmental & Water Resource Management in 2001, Dr Zaini was promoted to full professor in 2002, Dean of the Faculty in 2006, Deputy Vice-Chancellor in 2007, and Vice-Chancellor in 2008.

His thirst for improvement and knowledge continued, and in 2009 he studied

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an Advanced Management Program at Harvard Business School in the USA.

His technical expertise in water and wastewater is wide, encompassing membrane technology, biological wastewater treatment, hazardous waste management, river rehabilitation and modeling, sustainability, industrial ecology, and sustainability policy, strategy and innovation.

Datuk Dr Zaini Ujang is well-known throughout Malaysia as a professional environmental engineer, academic leader, innovator, essayist and environmental thinker. He was the first recipient of the most prestigious Merdeka Award for Outstanding Scholastic Achievement in 2009. The *New Straits Times* daily described him as a “Malaysian Water Icon” in 2004. BERNAMA, the Malaysian national news agency, in an exclusive interview in 2006, introduced him as an “environmental ideologue”. This was in recognition of his outstanding contribution to research, teaching and advocacy works related to the environment, especially on waste and wastewater management, policy formulation and technology development.

As an academic, he has published more than 250 technical papers (more than 50 in refereed international journals), 30 books, and several chapters, monographs and technical reports on environmental engineering, and more than 1,000 articles on environment, innovation and higher education.

Datuk Zaini is also instrumental in outsourcing research and innovation funds, from both local and international agencies. Besides the Malaysian Ministry of Science, Technology and Innovation (MOSTI), he has strong research affiliations with the Netherlands Tropical Research Foundation (WOTRO), the European Commission, the Swedish International Development Corporation (SIDA), the Japan Society for the Promotion of

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Science (JSPS), the Rockefeller Foundation and leading universities in the United Kingdom, Denmark, Sweden, the Netherlands, Italy, Japan, Australia, Saudi Arabia, Qatar, Indonesia, South Korea, Switzerland and the United States.

He is a Fellow of the Academy of Science Malaysia, Senior Advisor to the Prince Khalid bin Sultan, Chair on Water Research, King Saud University, Chairman of the Environmental Quality Council, Malaysia and Fellow of the Institute of Chemical Engineers, United Kingdom. He is also a Visiting Research Fellow at Massachusetts Institute of Technology, Visiting Professor at Imperial College London (UK), Lund University in Sweden, and Tsukuba University in Japan.

Datuk Zaini is also an avid reader, a motivator, prolific writer and essayist. He has been a regular weekly columnist in the Malay daily papers. He is actively involved in environmental education and public awareness programmes through NGOs, public lectures and writing on environmental and sustainability issues.

Professor Zaini is keen on, reading, book collection and horse riding and cycling, spending his time in the evenings riding across the serene Skudai landscape. He is husband to Datin Dr Zainah Moktar, a medical doctor turned health advisor and author of books on healthy living; and father to four children.

To summarise, Zaini Ujang is an unusual thing: a visionary and an administrator. His books, papers, interviews and YouTube videos tell of idealism for the environment and for education but his Curriculum Vitae shows an astute and effective professional.

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Zaini Ujang changes the landscape of each and every institution he joins, from his early days in the Technical University of Malaysia to his current position as the Secretary General Ministry of Energy, Green Technology and Water. As a Vice-Chancellor he played a significant role in transforming UTM into a research and graduate-focused university, proven with UTM currently having the highest number of postgraduate students in the region. UTM has moved inexorably up the World QS rankings, and now stands at 228.

Professor Ujang has always been a prominent supporter of Newcastle University in the UK and in Malaysia and maintains contact with the University through both the staff and the Vice-Chancellor's office.

Mr Vice-Chancellor and President, in recognition of his exceptional achievements and his embodiment of the institutional vision of Newcastle University – that of Excellence with Impact, I present to you, Dato' Seri Ir Dr Zaini Ujang for the award of Doctor of Science, *honoris causa*.

*Citation by Professor Roger Barton,
Provost & CEO, NUMed Malaysia*

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