

## Honorary Doctorate Citation

---



Dr Dean Patterson

### CHANCELLOR

Chancellor, I have the honour to present to you Dr Dean Patterson, who Council has decided should be awarded the degree of Doctor of Science, *honoris causa*.

Dr Paterson was born in Adelaide. In 1973 he graduated with a PhD in Electrical Engineering from the University of Adelaide, where he also holds Bachelor and Masters degrees in Engineering.

In his early post-doctoral career, Dr Patterson worked as a research scientist with the Weapons Research Establishment (now the Defence Science and Technology Organisation DSTO) and as a lecturer in electrical and electronic engineering at the South Australian Institute of Technology.

Although clearly a talented engineer, Dr Patterson has also had a lifelong love of and talent for music. He was active in the formation of the state Opera Company of South Australia and either performed in or directed every production of the Company between 1970 and 1975. For almost 10 years from 1975, Dr Patterson was the Musical Director of the Corinthian Singers of Adelaide and in 1978 made a major career shift from engineering to a full time position as Senior Vocal Teacher in the Music Branch of the South Australian Department of Education, with a brief to develop choral and vocal music throughout the state. In 1979, he was awarded a Churchill Fellowship to study chamber choral music and the scientific study of voice production in the USA, Canada and Europe.

Dr Patterson returned to a career in engineering in 1984 at the predecessor institution to this University, the Darwin Institute of Technology, as Senior Lecturer and Head of Department of Electrical Engineering. In addition to Dr Patterson's teaching and research commitments and achievements, he was project leader for the team who put together the Institute's entry, the solar car *Desert Rose*, in the first World Solar Challenge between Darwin and Adelaide in 1987. The team also entered four subsequent World Solar Challenges, where improvements to their solar vehicle saw significant performance gains, and them coming fourth in the 1999 Challenge. These improvements, comprising an axial flux motor in wheel drive resulted in the team receiving the *GM Technical Innovation Award* in 1993.

In 1992 Dr Patterson was appointed as the foundation Director of the, then, Northern Territory University Centre for Energy Studies and was, in the same year, awarded the Institution of Engineers Australia *Professional Engineer of the Year* and *NT Professional Engineer of the Year*.

---

In 1995 Dr Patterson was appointed Associate Dean of the School of Electrical Engineering and from 1996 to 2000 was Associate Dean Research and Postgraduate Studies for the Faculty of Technology at Northern Territory University.

Dr Patterson was also a long standing member of the University Council as staff representative, spanning his appointment at the Darwin Institute of Technology and then through the challenging period when the Institute was merged with the University College of the Northern Territory to form the Northern Territory University.

During his time in Darwin from 1984 to 2000, Dr Patterson also made a significant contribution through his expertise in music, forming and leading the Darwin Chorale, which delighted Darwin audiences with very professional performances over many years and is still in existence today.

Dr Patterson has, throughout his career as an engineer, had a strong connection to the Institution of Engineers Australia and the Institute of Electrical and Electronics Engineers, holding important roles and being an elected Fellow of both. He has also had strong international research connections and experience and from 2001 to 2004 was Research Professor at the University of South Carolina, Columbia, USA working on the US Navy Electric Ship Program.

Dr Patterson was Founding Director of the Northern Territory University's first spin off company, *In Motion Technologies*, which commercialised the high performance axial flux permanent magnet brushless machine technology, now owned by US company Regal Beloit Corporation, a leading manufacturer of electric motors serving markets throughout the world. Dr Patterson holds a part time position as Asia Pacific Chief Scientist at Regal Beloit and continues to be active in research and innovation in the fields of electrical and electronics engineering.

Dr Patterson has shown an outstanding commitment to and talent for research and education in the field of electrical and electronics engineering over the course of his career that has had a very significant positive impact on the profession and on industry. His significant contribution to music, particularly vocal and choral music in many parts of Australia and around the world, is also recognised here.

CHANCELLOR

In recognition of his outstanding contribution to the development of the tertiary education in the Northern Territory in the fields of electrical and electronics engineering the Charles Darwin University Council awards Dr Dean Patterson the degree of Doctor of Science, *honoris causa*.