

Upcoming Forum

Transport: Breakthrough technologies

Date: Thursday 14 August 2014

Time: 5:30 - 7pm

Where: Beca Auditorium, 21 Pitt St, Auckland Central

What: Free public evening seminar featuring a presentation by Professor

Grant Covic followed by discussion.

RSVP to <u>sarah@thesustainabilitysociety.org.nz</u> by Monday 11 August

This is the stuff that New Zealand innovation is made of. Imagine electric vehicles that you never have to plug in because they charge by stopping over a pad in the ground. This possibility is the result of break-through research that has also generated the most successful deal for any New Zealand University or Crown Research Institute start-up company.



Join us to hear from Professor Grant Covic who, alongside his colleague, is one of the world leaders pioneering the development of inductive power transfer (IPT) technology.

Grant will discuss the history and future of their work to develop innovative systems where IPT is used to power electric vehicle systems.

Winner of the 2013 Prime Minister's Science Prize and co-founder of HaloIPT, Grant will talk about ways in which they worked to address both the 'here and now' issues of today alongside maintaining a focus on blue sky research with the potential to unlock significant shifts in how we live.

Grant graduated with a BE (Hons) in Electrical and Electronic Engineering at the University of Auckland (UoA) in 1986. He then began his research career as a master's postgraduate which was later converted to a PhD in power electronics. At completion he took up a UoA full time lectureship. He was appointed a senior lecturer in 2000, an associate professor in 2007 and to professor in 2013. In the mid 90's he began working with Prof. John Boys to develop the technology of inductive (contact-less) power transfer (IPT) and in the early 2000's they began jointly leading a team focused on AGV applications for traditional markets, and redeveloping EV charging solutions.

Today Grant's research and consulting interests are focused on industrial solutions using IPT. Over the past 15 years he has published more than 100 international refereed papers in this field, worked with over 40 postgraduates and filed over 30 patents, all of which are licensed to various global companies in specialised application fields.

In 2010 he co-founded (with John) a new global start-up company "HaloIPT" focusing on electric vehicle (EV) wireless charging infrastructure and was joint head of research from formation until it was sold. During this time HaloIPT received the Clean Equity Monaco award for excellence in the field of environmental engineering and two NZ Clean Innovation Awards in the Emerging Innovator and Design and Engineering categories. Grant and John have been awarded the New Zealand Prime Science Ministers Award, the Vice Chancellors Commercialisation Medal and the KiwiNet Research Commercialisation Awards for research which has seen outstanding commercial success.

Presently Grant heads inductive power research at the UoA and co-leads the interoperability sub-team within the SAE J2954 wireless charging standard for EVs.