



Highlights

The *What's Your Problem New Zealand?* competition, offering \$1m in IRL R&D services, attracted 105 entries and was won by **Resene Paints**

Profit after tax for 2008/09 was **\$0.7m**

Revenue growth for the 2008/09 year was +5%

IRL has secured a contract to provide services to **Ovine Automation Ltd**, an initiative instigated by IRL to automate the meat processing industry

IRL has formed a research partnership to broaden the uptake of **high temperature superconductor (HTS)** technology by industry and to produce products demonstrating the advantages in size and efficiency of the technology

Commercial income was **\$14.8m**

IRL researchers are now working with around half the *What's Your Problem New Zealand?* entrants to help their ideas become reality

IRL SCIENCE AND ENGINEERING MAKING AN IMPACT



ENL's WASSP Multibeam sonar

– the prototype hardware design of the WASSP sonar, used by commercial fishing vessels, marine surveyors and scientific researchers, came from IRL. A key part – the transducer that transmits and receives back the signal below the sea surface – also came out of IRL's labs.



International Dynamometers' Dynapack vehicle tuning system

– the Dynapack system revolutionised vehicle tuning by doing away with the need for the tyres to be running on rollers – an approach that took hours – to one where the dynamometer is bolted directly to the wheel hubs and is capable of measuring actual performance within minutes. The original ideas and prototypes were developed by IRL and were then further developed, manufactured and commercialised by International Dynamometers Ltd.

IRL, in a partnership with FOMANA, is to provide its **natural products chemistry expertise** to add value to Māori interests in the primary sector

HTS pioneer scientist **Jeff Tallon** was made a Companion of the Order of New Zealand in the 2009 Queen's Birthday Honours List

Two IRL scientists were recognised with industry awards – **Tim Kemmitt** for his work on photovoltaic cells for solar power generation and **Andreas Luxenburger** for his contribution to biotechnology in New Zealand

Two of the three major NZAS medals awarded in 2008 went to IRL scientists

An R&D collaboration agreement signed between **IRL and ITRI of Taiwan** is contributing to the commercialisation of two IRL assistive devices technologies

The RSNZ Cooper Medal for research with potentially substantial economic benefit to New Zealand was won by IRL's HTS Roebel Cable team

MoleMap
by Dermatologists

GALLAGHER

NZ TRANSPORT AGENCY
WAKA KOTAHI

Molemap melanoma detection

– IRL imaging research helped Molemap New Zealand develop its high-quality camera system to aid the early detection of potentially fatal melanoma cancers.

Gallagher SmartScale weighing systems

– IRL developed a signal processing algorithm for a portable electronic weigh scale that allows quick (less than 3 seconds) and accurate (to within 1%) calculation of an animal's weight irrespective of animal movement.

Vehicle number plates

– IRL know-how contributed to ensuring New Zealand's vehicle number plates are easier to read and harder to tamper with.