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# 2010 Academy Annual Report

*The 2010 Academy Annual Report details the accomplishments of the Academy of the Royal Society of New Zealand throughout the year.*

## Chair's foreword

In January 2010 the final act of "embracing the Humanities" within the Royal Society took place with the signing of an MOU between Te Whaingā Aronui The Council for the Humanities and Te Apārangi the Royal Society of New Zealand. President Dr Garth Carnaby described this as landmark decision for both organisations. "For the first time there will be an organisation in New Zealand that promotes excellence in research and scholarship across all the disciplines and areas of knowledge." The CV's of the existing fellows of the Council for the Humanities were reviewed by the Academy Executive and these people were admitted to the Fellowship by a special resolution at the Fellow's AGM.

The Academy has continued to provide "information pieces" and forward-looking contributions on present and emerging debates that were introduced in 2009. In 2010, 2 information statements were prepared. *Sea Level Rise: Emerging Issues* recounted the significant changes in the scientific understanding of this issue since the 2007 Assessment Report by the IPCC. *The Darfield Earthquake: The Value of Long-term Research* was produced to document the research conducted in New Zealand over many years on how to construct and strengthen buildings to improve performance during large earthquakes. The application of this science and engineering undoubtedly played a big role in limiting the damage and injury caused by the 2010 Christchurch earthquake.

As reported last year, there have been major changes in the organisation of the Royal Society over the past several years. Following a governance review, the role of the members of the Academy Executive were more clearly defined. The 3 disciplinary Vice-Presidents are now supported by an Advisory Committee with members chosen from the Constituent Organisations for each discipline. In addition, the committee structure has been revised. The general philosophy adopted is that most of these committees will be established to deal with specific technical or scientific issues, although those that relate to long-standing issues (e.g. Climate)

or ongoing international commitments (Antarctica, IGBP) will be more long term. The new structure will continue to evolve in 2011.

It has been a privilege to Chair the Academy through this year and I have greatly appreciated the support of the President Garth Carnaby, and my fellow members of the Academy Executive. The professionalism advice and enthusiasm of the Chief Executive Di McCarthy and Academy Manager Mrs Gill Sutherland and her assistant Mrs Judy Lyons have been greatly appreciated and have been vital to the work of the Academy.

Keith Hunter  
*Chair, Academy of the Royal Society of New Zealand*

# 2010 Academy Annual Report

## Academy Executive Committee

### *Until 30 June 2010*

Chair: Professor David Thorns ONZM FRSNZ

Members:

- Dr Garth Carnaby MNZM FRSNZ
- Dr Stephen Goldson FRSNZ
- Professor Keith Hunter FRSNZ
- Professor Ken Strongman FRSNZ

### *After 30 June 2010*

Chair: Professor Keith Hunter FRSNZ

Members:

- Dr Garth Carnaby MNZM FRSNZ
- Professor Michael Corballis ONZM FRSNZ
- Dr Stephen Goldson FRSNZ
- Professor Richard Le Heron FRSNZ
- Professor Ken Strongman FRSNZ

## Fellowship And Honorary Fellowship

There were 376 Fellows and 56 Honorary Fellows as at 31 December 2010.

## Deaths

It was noted with regret that

- **Professor Peter Lorimer** FRSNZ, former Professor of Mathematics at the University of Auckland;

- **Dr Merv Probine** CB FRSNZ, former Chairman of the State Services Committee;
- **Dr Ross Beever** FRSNZ, former Senior Scientist at Landcare;
- **Emeritus Professor Clifford Irvine** FRSNZ, formerly Professor in Veterinary Science at Lincoln University;
- **Dr Eric Godley** OBE FRSNZ, former Director of Botany Division of DSIR, and Scientist at Landcare;
- **Sir Graham Liggins** KB CBE FRS FRSNZ, formerly of the Dept of Obstetrics & Gynaecology, University of Auckland, and
- **Sir Ian Axford** FRS Hon FRSNZ, formerly of the Max Planck Institute

passed away during 2010. Their Obituaries are being lodged on the Royal Society website as they are received and edited.

## Public Honours

### *New Years Honours 2010*

#### **Knight Companion of the New Zealand Order of Merit (KNZM)**

- **Professor Mason Durie** CNZM FRSNZ of Feilding, for services to Maori health, in particular public health services

#### **Member of the New Zealand Order of Merit (MNZM)**

- **Dr Roderick Bieleski** FRSNZ of North Shore City, for services to horticultural science
- **Dr Ian Ferguson** FRSNZ of Waitakere, for services to horticultural science
- **Professor Peter Hunter** FRS FRSNZ of Auckland, for services to science

#### **New Zealand Antarctic Medal (NZAM)**

- **Professor Peter Barrett** FRSNZ, of Wellington, for services to Antarctic science.

## National Appointments and Awards

## *Prime Minister's Science Prize*

**Professor Jeff Tallon** FRSNZ and **Dr Bob Buckley** FRSNZ, both from Industrial Research Ltd, won the Inaugural Prime Minister's Science Prize in February for superconductor research and commercialisation.

## *IPENZ Honorary Fellow*

**Professor Sir Paul Callaghan** GNZM FRS FRSNZ and **Professor Peter Hunter** FRS FRSNZ became Honorary Fellow of the Institution of Professional Engineers of NZ (IPENZ) this year.

## *Honorary DSc*

Massey University bestowed **Professor Sir Paul Callaghan** GNZM FRS FRSNZ an Honorary DSc in July and Victoria University of Wellington conferred an Honorary Doctorate on him at its December graduation.

## *Deputy Vice-Chancellors appointed at University of Otago and Massey University*

**Professor Vernon Squire** FRSNZ took up his position of Deputy Vice-Chancellor (Academic & International) at the University of Otago in February. **Professor Keith Hunter** FRSNZ, Vice-President (Physical Sciences, Mathematics, Technology and Engineering) on the Royal Society Council and current Chair of the Academy Executive Committee, took up the position of Pro Vice-Chancellor Science at the University of Otago in February.

## *Assistant Vice-Chancellor (Research) at University of Canterbury*

From 1 May **Professor Steve Weaver** FRSNZ has been Assistant Vice-Chancellor (Research) at University of Canterbury and he was appointed by Minister Wayne Mapp to the Board of GNS Science effective from 1 July.

## *2010 Dan Walls Medal*

**Professor David Parry** CNZM FRSNZ was awarded the 2010 Dan Walls Medal which was presented at the Royal Society's Honours Dinner in Christchurch in November. This medal is presented annually to the physicist working in New Zealand for at least the past 10 years and who is deemed to have made the greatest impact both nationally and internationally in his/her field of research.

## *Fellow of the Queensland Academy of Arts and Sciences 2010*

**Professor David Lambert** FRSNZ, Professor of Evolutionary Biology at Griffith University, was elected as Fellow of the Queensland Academy of Arts and Sciences 2010 and awarded the Queensland-Smithsonian Fellowship 2010.

## *Massey University Research Medals*

**Professor Ian Evans** FRSNZ was awarded the Massey University Research Medal—Supervision for 2010, and **Professor Geoff Jameson** FRSNZ was awarded the Massey University Research Medal—Individual for 2010.

## *University of Otago Distinguished Research Medal*

The Director of the acclaimed Christchurch Health and Development Study (CHDS), **Professor David Fergusson** FRSNZ was the 2010 recipient of the University of Otago's highest research honour, the Distinguished Research Medal.

## *Moderator of PBRF Quality Evaluation*

**Professor Marston Conder** FRSNZ was appointed by the Tertiary Education Commission as one of the three Moderators for the 2012 PBRF Quality Evaluation.

## *Emeritus Professor status*

**Professor Ian Pool** FRSNZ was made an Emeritus Professor of the University of Waikato in 2010.

## *Life Member of the Population Association*

**Professor Dick Bedford** QSO FRSNZ was made a Life Member of the Population Association of New Zealand at their AGM on 28 July.

## *Board Member of Fulbright NZ Alumni Association*

**Professor Graham Wake** DSc FRSNZ is a Member of the Board of Fulbright NZ Alumni Association, 2009-10 and Regional Coordinator for the Auckland Region.

## *Distinguished Alumnus*

**Professor Richard Sibson** FRS FRSNZ was appointed Distinguished Alumnus, University of Auckland.

## *Distinguished achievement in medical research*

**Professor Graham Le Gros** FRSNZ Director of the Malaghan Institute received a specially struck medal for distinguished achievement in medical research at the Wellington Medical Research Foundation's 50th anniversary celebration on 16 September.

## International Awards and Appointments

### *Günther Laukien Prize for Magnetic Resonance*

**Professor Sir Paul Callaghan** GNZM FRS FRSNZ was awarded the Günther Laukien Prize for Magnetic Resonance this year for his seminal contributions to the study of polymeric and heterogeneous materials by advanced NMR exchange, diffusion and relaxation techniques, and for his innovative q-space-diffusion-related developments that were relevant in the context of the development of diffusion-tensor imaging.

### *Fellow of the International Society for Horticultural Science*

**Professor Ian Warrington** FRSNZ was made a Fellow of the International Society for Horticultural Science at the 28th International Horticultural Congress held in Lisbon, Portugal which was held 22-27 August 2010. Professor Warrington is the first New Zealander to receive such recognition in the society's 60-year history and one of only six scientists worldwide to hold the Fellowship which recognises an outstanding contribution to horticultural science worldwide.

### *Distinguished International Member of the Institute of Noise Control Engineering*

**Professor Jeremy Astley** FRSNZ, Professor in Computational Aeroacoustics, Institute of Sound and Vibration Research, University of Southampton was conferred a Distinguished International Member of the Institute of Noise Control Engineering (INCE) of the United States of America in April. The status of INCE Distinguished International Member is conferred by the INCE Board of Directors upon eminent acousticians who reside outside the U.S.A. This distinguished, honorary status is conferred upon individuals who have personally made extraordinarily

significant contributions to the theory and/or practice of noise control engineering.

### ***IEEE Alexander Graham Bell Medal Selection Committee***

**Professor Des Taylor** FRSNZ, Electrical and Computer Engineering Department, University of Canterbury, was elected Chair of the IEEE Alexander Graham Bell Medal Selection Committee for 2011 and 2012. This Committee is responsible for selecting the recipient of this medal, which is one of the IEEE's most prestigious medals. The award consists of a gold medal and US\$10,000.

### ***Wollaston Medal winner***

**Professor Richard Sibson** FRS FRSNZ was awarded the Wollaston Medal of the Geological Society of London, the Society's highest honour. He was also elected Fellow of the Society of Economic Geologists in 2010.

### ***Leach Medal***

In February 2010, **Professor Ted Baker** CNZM FRSNZ was awarded the Leach Medal. The Leach Medal is awarded each year by the Organising Committee of the Lorne Conference on Protein Structure and Function (Australia) for an outstanding international contribution to the understanding of protein structure and function. The winner presents the keynote lecture (the Leach Lecture).

### ***Industry Manuals for Airlines***

**Professor Philippa Gander** FRSNZ was invited by the International Air Transport Association, representing more than 230 airlines worldwide, to write industry manuals to enable airlines to implement Fatigue Risk Management Systems that meet the requirements of the new international regulatory framework developed by the International Civil Aviation Organisation.

### ***Honorary Member of the Thailand Heart Association***

**Honorary Professor Harvey White** FRSNZ was made an Honorary Member of the Thailand Heart Association.



## *Priscilla Kincaid-Smith Orator*

**Professor Ian Reid** FRSNZ was the 2010 Priscilla Kincaid-Smith Orator, Royal Australasian College of Physicians and he also received the Frederic C Bartter Award from the American Society for Bone and Mineral Research.

## *Fellowship of Society of Industrial and Applied Mathematics*

**Professor John Butcher** FRSNZ was made a Fellow of the Society of Industrial and Applied Mathematics. He is the only Fellow of this Society located in New Zealand.

## *Royal Society of Chemistry Natural Products Award*

**Professor Margaret Brimble** MNZM FRSNZ was awarded the Royal Society of Chemistry Natural Products Award for outstanding contributions to the synthesis of natural products, analogues and derivatives thereof. She was presented with the medal at a special symposium at Trinity College Dublin in November and delivered the Simonsen lecture at several universities in the United Kingdom also in November.

## *New position at University of Queensland Centre for Clinical Research*

**Professor Murray Mitchell** FRSNZ took up a new job as Director of the University of Queensland Centre for Clinical Research in February.

## *2010 Spine Society of Australia Basic Science Prize*

**Professor Neil Broom** FRSNZ was awarded the 2010 Spine Society of Australia Basic Science Prize (monetary value A\$10,000) for a paper authored with S. Veres and P. Robertson. He was also awarded the 2010 Biomechanics Prize in Spinal Research by the International Society for the Study of the Lumbar Spine (monetary value US\$15,000) for a paper authored with S. Veres and P. Robertson.

## *Fellow of Institute of Electrical and Electronic Engineers*

This year **Professor Nik Kasabov** FRSNZ was made a Fellow of IEEE (the Institute of Electrical and Electronic Engineers), President of INNS

(International Neural Network Society, [www.inns.org](http://www.inns.org)), and Honorary Guest Professor of Shanghai Jiao Tong University.

## *Humboldt Research Award*

**Professor Zoran Salcic** FRSNZ and **Professor Peter Schwerdtfeger** FRSNZ earned prestigious Humboldt Research Awards from Germany, for their fundamental contributions respectively to the fields of computer systems engineering and theoretical chemistry. Awarded by the Alexander von Humboldt Foundation, the award is reserved for academics whose fundamental discoveries, new theories, or insights have had a significant impact on their own discipline, and who are expected to continue producing cutting-edge academic achievements in future. Zoran is the first New Zealander to receive the award from an engineering discipline.

## *Chile's National Prize for Science*

**Professor Mary Arroyo** Hon FRSNZ was awarded Chile's very prestigious National Prize for Science. This Prize is awarded only sporadically to the country's very best scientists.

## *Visiting Fellowships*

**Professor Sally Brooker** FRSNZ was offered and accepted the 2011 Royal Society of Chemistry Australasian Lectureship. The lectureship is funded through grants to the Australian and New Zealand Local Sections of the RSC.

**Professor Henrietta Mondry** FRSNZ FNZAH was awarded a Distinguished Fellowship at the Institute of Advanced Study, University of Durham from October to December 2010. She took part in an interdisciplinary group working on the project "Futures".

**Professor Graham Wake** DSc FRSNZ was an Invited Speaker at the Mathematical Modelling Workshop, National Institute of Education, Singapore from 1 to 4 June 2010. He was also an invited speaker at the Industrial Mathematics Initiative, Korea Advanced Institute of Science and Technology, Daejeon, South Korea from 4 to 7 June 2010. This meeting was the closing meeting to mark the conclusion of the 8-year programme of the Visiting Foreign Professors of Applied Mathematics at KAIST. Professor Wake was the Team leader of this International Team of six international contributors. He was also appointed External Adviser and Examiner of the Mathematics with Computer Graphics program at the Universiti Malaysia in Kota Kinabalu, Sabah 2010.

## Royal Society Awards

The following Medals and Awards for 2010 were announced in September and have been awarded at a relevant local event.

The **2010 Sir Charles Hercus Medal** for scientific or technological work of great merit in clinical sciences and technologies and public health was awarded to **Professor Alistair Gunn** FRSNZ, The University of Auckland. Professor Gunn is one of the world's leading clinician-scientists in perinatal physiology and neuroscience. His elegant studies in animal models revealed that hypothermia could be used therapeutically to improve outcomes for newborn babies experiencing asphyxia at birth. In partnership with others a device is now marketed worldwide, using the concepts he developed, which have been shown to significantly improve infant survival without disability after brain injury at birth. In addition Professor Gunn continues to lead a scientifically productive research programme and is a practising Pediatrician.

The **2010 Charles Fleming Award** for Environmental Achievement was awarded to **Emeritus Professor Sir Alan Francis Mark** FRSNZ, Emeritus Professor of Botany, University of Otago. Emeritus Professor Sir Alan Mark is New Zealand's leading environmental scientist and conservationist. During his long research career he, together with students and colleagues he has mentored and inspired, has explored and illuminated the ecology of southern ecosystems, in particular tussock grasslands, wetlands and alpine communities, in a stream of highly influential publications. His outstanding leadership in the conservation movement, his determination, skill and fearlessness in conservation battles, and his long service as an advisor to Government, has resulted in the retention of natural biodiversity and environmental values over extensive areas that would have been otherwise despoiled.

The **2010 Cooper Medal** was awarded to **Marcus King**, Industrial Research Limited, Christchurch, for his innovative development of a low-cost, high performance computer-based system for upper-limb rehabilitation for people suffering neurological injury or disease. A suite of computer games of gradually increasing complexity and degree of physical movement provides feedback to the patient on progress, and the fun aspect of the exercises provides motivation over the long times needed for rehabilitation.

**Mrs Dominea Rathwell** from the Dept of Chemistry, The University of Auckland, was awarded the **2010 Hatherton Award** for her paper entitled "*An Efficient Formal Synthesis of the Human Telomerase Inhibitor (±)- $\gamma$ -Rubromycin*" which was published in *Angewandte Chemie* in October 2009. This paper reports the successful efficient total synthesis of

a complex chemical compound, gamma-rubromycin, which is known to display significant biological activity in diseases such as cancer.

The **2010 Hamilton Memorial Prize** was awarded to **Dr David Baddeley**, a Post Doctoral Fellow of the Dept of Physiology, University of Auckland. Dr Baddeley specialises in highly detailed optical techniques used in biology to image objects as small as single molecules. Indeed, he is a pioneer in this field. Not only did he construct Auckland's and probably New Zealand's first super resolution, imaging optical microscope, but developed the associated software. He then applied the technique to a key research question relating to calcium signalling systems involved with cardiac excitation and contraction. This work was published in the highly regarded science journal, Proceedings of the National Academy of Sciences of the United States of America.

At the Royal Society's 2010 Honours Dinner in Christchurch on 10 November, the Society announced and awarded the winners of the following medals: Rutherford Medal; Pickering Medal; Thomson Medal; Dame Joan Metge Medal; Jones Medal; T. K. Sidey Medal; Hector Medal; and Hutton Medal.

The country's highest science and technology honour, the Rutherford Medal, was awarded to internationally renowned molecular biologist **Professor Warren Tate** FRSNZ from the University of Otago for his outstanding achievements in molecular biology and molecular neuroscience. Together with the medal awarded by the Royal Society of New Zealand, he also received \$100,000 from the Government.

The top award for achievement in technology, the **Pickering Medal** and \$15,000, was awarded to **Professor Frank Griffin** from the University of Otago for his contribution to work in developing diagnostics tests for detecting two major bacterial diseases of New Zealand deer, and a vaccine for the prevention of Yersiniosis in deer. These products and services are estimated to have saved the deer industry between \$80-90 million worth of production that would otherwise have been lost to these diseases.

The **Thomson Medal** and \$15,000 was awarded to **Mr Shaun Coffey** CRSNZ, Chief Executive of Industrial Research Limited, for his outstanding leadership in the management of science, and development and application of science and technology to generate wealth for New Zealand.

The **Hutton Medal** for plant sciences was awarded to **Dr David Galloway** FRSNZ from Landcare Research in Dunedin for his significant contributions to understanding the New Zealand environment, particularly through his botanical work on New Zealand lichens.

The **Hector Medal** for physical sciences was awarded to **Dr Grant Williams** of Industrial Research in Lower Hutt for his internationally recognised work on the chemical and electronic structure of materials, especially high temperature superconductors. His work has led to a better understanding of the fundamental physics and the development of materials for magnetic sensors, radiation detection and imaging, and optical communication.

The first recipient of a new award established this year, the **Jones Medal**, was **Professor Emeritus John Butcher** FRSNZ of The University of Auckland. The medal recognises lifetime achievement in mathematics and was awarded to Professor Butcher for his exceptional work on numerical methods for solving differential equations and leadership in developing mathematical sciences in New Zealand. The new medal was presented by the person the medal is named after, New Zealander Professor Sir Vaughan Jones.

The **T.K. Sidey Medal** for electromagnetic radiation research was awarded to **Grant Caldwell** of GNS Science in Lower Hutt for his pioneering studies of the Earth's volcanic and fault line regions using magneto-telluric techniques that survey the Earth's structure to depths of more than 30 km.

The **Dame Joan Metge Medal** for social sciences was awarded to two recipients: **Professor Richard Bedford** FRSNZ of AUT University and the University of Waikato, and to **Professor Richie Poulton** FRSNZ of the Dunedin School of Medicine at the University of Otago. Professor Bedford has been an influential figure in the development of social sciences over a long period, and has made major contributions to new knowledge in the field of migration, particularly in the Asia-Pacific region. Professor Poulton is well known for his work as director of the University of Otago longitudinal study which is following the health and development of more than 1000 babies born in Dunedin in 1972/3 providing substantial contributions to new knowledge.

## Academy Representation on Royal Society of New Zealand Council

The Academy Executive Committee representatives on the Royal Society of New Zealand Council until 30 June 2010 were the Chair, **Professor David Thorns** ONZM FRSNZ (VP Social Sciences); **Professor Keith Hunter** FRSNZ (VP Physical Sciences, Mathematics, Engineering and Technology); **Professor Ken Strongman** FRSNZ (VP International); **Dr Garth Carnaby** MNZM FRSNZ (RSNZ President); and **Dr Stephen Goldson** FRSNZ (VP Biological and Life Sciences).

From 1 July 2010, **Professor Keith Hunter** FRSNZ (Chair); **Professor Ken Strongman** FRSNZ (VP International); **Dr Garth Carnaby** FRSNZ (RSNZ President); **Dr Stephen Goldson** FRSNZ (VP Biological and Life Sciences); **Professor Michael Corballis** ONZM FRSNZ (VP Education, Public Awareness and Outreach); and **Professor Richard Le Heron** FRSNZ (VP Social Sciences and Humanities) were the Academy Executive Committee representatives on Council.

## Academy Activities

### *Fellowship*

The confirmed panels in 2010 were:

- Animal and Plant Sciences;
- Applied and Technological Sciences;
- Biochemical and Molecular Biological Sciences;
- Chemical and Physical Sciences;
- Earth Sciences;
- Ecological and Environmental Sciences;
- Engineering;
- Human and Behavioural Sciences;
- Humanities;
- Mathematical and Information Sciences;
- Medical and Health Sciences;
- President's Panel;
- Social Sciences.

In 2010, the President's Panel considered nominations which did not fit into any of the traditional panels, and this year the Panel also looked at nominations of nominees 45 years and under. The Panel consisted of **Professor Keith Hunter**; **Professor David Thorns**; and **Professor Philip Boyd**. This Panel considered 11 nominations, and referred 1 nominee to the Fellowship Selection Committee.

In 2010 there were 74 nominations for Fellowship, including 12 women scientists, 20 from CRIs, and 22 new nominations.

The breakdown of nominations considered (Honorary Fellowship in brackets) in 2010 was:

- Animal and Plant Sciences 12
- Applied & Technological Sciences 6
- Biochemical and Molecular Biological Sciences 6 (2)
- Chemical and Physical Sciences 6
- Earth Sciences 6 (2)
- Ecological and Environmental Sciences 4 (1)
- Engineering 3
- Human and Behavioural Sciences 7
- Humanities 3
- Mathematical and Information Sciences 6
- Medical and Health Sciences 4
- President's Panel 11
- Social Sciences 10

Nominations for Fellowship remain eligible for election for five years.

Eleven panels met by teleconference call and recommended candidates, in priority order, in both traditional and applied areas of science. For the first time this year there was a Panel assessing nominations in the Humanities and they also met by teleconference. The Applied and Technological Sciences Panel agreed on their top candidates without a conference call. As well as providing a supporting statement on behalf of each highly recommended candidate, each panel was asked to supply the names of independent referees for each candidate as a quality control measure. The independent referee was sent the candidate's curriculum vitae, publications list, background information about the Academy and the criteria for election to Fellowship, and asked to provide an evaluation of the quality of the scientific career, the excellence of research and international reputation.

The Fellowship Selection Committee, which was an expanded Council of 23 to ensure that all areas of science, technology and the humanities are appropriately represented, received the following information on each candidate highly recommended by the 12 discipline-based Panels and the President's Panel (a total of 34 highly recommended):

- nomination form;
- curriculum vitae;
- publication list;
- references from referees noted in nomination;
- panel supporting statement outlining the reason why the candidate is highly recommended;
- independent reference(s);

as well as a copy of the minutes of the Fellowship Selection Panel teleconference meetings where such meetings were held.

At the 2010 Fellows' Annual General Meeting, 10 new Fellows in science, technology and the humanities were elected:

The new Fellows are:

- **Professor Estate Khmaladze** FRSNZ, School of Mathematics, Statistics and Operations Research, Victoria University of Wellington
- **Associate Professor Andre Nies** FRSNZ, Department of Computer Science, The University of Auckland
- **Professor David Lowe** FRSNZ, Department of Earth and Ocean Sciences, University of Waikato
- **Professor Barry Scott** FRSNZ, Institute of Molecular Biosciences, Massey University
- **Professor Peter Derrick** FRSNZ, Institute of Fundamental Sciences, Massey University
- **Dr Wendy Nelson** FRSNZ, National Institute of Water and Atmospheric Research (NIWA)
- **Professor William Manhire** FRSNZ, International Institute of Modern Letters, Victoria University of Wellington
- **Professor Michael Clout** FRSNZ, Centre for Biodiversity and Biosecurity, The University of Auckland



- **Professor John Hosking** FRSNZ, Department of Computer Science, The University of Auckland
- **Professor Geoff Chase** FRSNZ, Department of Mechanical Engineering, University of Canterbury
- **Dr Steven Fischer** FRSNZ, Institute of Polynesian Languages, Auckland
- **Professor Richie Poulton** FRSNZ, Dunedin School of Medicine, University of Otago

## *Honorary Fellowship*

In 2010 there were five nominations for Honorary Fellowship of the Royal Society of New Zealand and three were highly recommended to the Fellowship Selection Committee.

One Honorary Fellow was elected by the Academy Executive Committee on recommendation from the Fellowship Selection Committee and the new Honorary Fellow was announced at the Fellows' Annual General Meeting.

The new Honorary Fellow is **Professor John Gamble** Hon FRSNZ, Department of Geology, University College, Cork in Ireland.

## *Donations*

The Royal Society has a designated Endowment Fund, into which non-specific donations to the Academy are placed. The Academy Executive Committee gratefully acknowledges the donations made by Fellows and Honorary Fellows to the Academy's activities.

## *Functions*

Fellowship certificates were presented during the year at functions in Auckland, Wellington, and Dunedin earlier in the year.

## *Fellows' Contribution to Society Activity*

Many Fellows continue to actively contribute to Royal Society of New Zealand's activities through:

- Fellowship Selection Panels and Fellowship Selection Committee;
- Selection Committees for Academy Medals/Awards;

- James Cook Research Fellowship Assessment Panels and Selection Committee;
- Marsden Assessment Panels and Council;
- Membership of standing and ad hoc RSNZ committees;
- Preparation of scientific reports;
- Review of scientific, technological and science education reports published by the Society;
- Membership, via the Society, of government and non-government advisory committees;
- Provision of expert advice sought informally.

The Society is grateful to all who contribute to these activities; collectively they provide a major input to the work of the Society and the advice given to Government and other agencies.

### *Chairs' Activities*

In addition to the activities mentioned earlier in this report, **Professor David Thorns** (Chair of the Academy Executive Committee until 30 June 2010) and **Professor Keith Hunter** (Chair of the current Academy Executive Committee from 1 July 2010) were active in the following activities:

- assessing nominations for Fellowship as part of the President's Panel;
- reviewing nominations for Fellowship as part of the Fellowship Selection Committee;
- selecting and recommending James Cook Research Fellowships;
- reviewing James Cook Research Fellows' annual and final reports;
- providing feedback to Gill Sutherland on various issues;
- representing the Academy on the Site Development Working Group.