

the ROYAL SOCIETY of NEW ZEALAND

Our Strategic Plan, 2004-2008



Who we are

We are passionate about science and technology, and about the issues surrounding it. The Royal Society of New Zealand is the independent, informed and trans-disciplinary voice for New Zealand science, mathematics, social science and technology (S&T) research and practice, established under its own Act of Parliament.

The Royal Society is not a government agency. Our strength lies in our membership. We represent the applied, biological, earth, engineering, information, medical, physical and social sciences, mathematics, and technology in New Zealand and to the world. The Society's activities are supported by over 1500 members, 359 Fellows, 18 Companions, 52 constituent organizations, 9 branches, 10 affiliate organizations, and a staff of 40 in Wellington, with an operating budget of \$5 million.

We promote, invest in, and celebrate excellence in people and ideas in S&T and put them to work as an example and inspiration to New Zealanders. For example, In 2003, as well as our own resources, we invested some \$55 million of public funds on behalf of the Government into developing New Zealand's knowledge base.

The Society's Act of 1997 requires us to:

Contribute to New Zealand society by:	Support New Zealand's S&T community by:
<ul style="list-style-type: none">• Promoting public awareness, knowledge, and understanding of S&T• Advancing S&T education• Providing expert advice on important public issues to the government and the community	<ul style="list-style-type: none">• Encouraging, promoting, and recognising excellence in S&T• Providing support and a conduit for the professional needs and development of scientists and technologists• Establishing and administering for all members a code of professional standards and ethics in S&T

Who are our stakeholders?

We support:

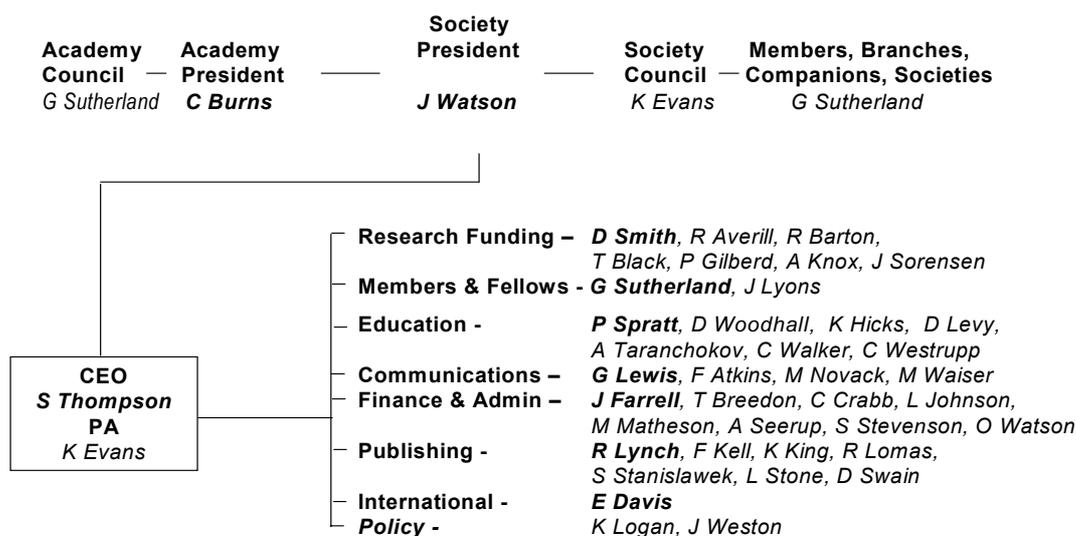
- Our members and the New Zealand science and technology community
- The work of government in its support of science and technology
- Students, teachers and parents
- The media and the public
- Industry and the users of science and technology

Some of the things we do now:

Public Awareness:	Using and rewarding Excellence
<ul style="list-style-type: none"> Royal Society National S&T promotions eg. DNA50; the Transit of Venus Bringing “great speakers” to NZ Create opportunities for scientists to dialogue with the public Masterclass! Science tours by leading UK and US scientists 	<ul style="list-style-type: none"> NZ Awards for excellence, including the Rutherford Medal, in 12 S&T categories NZ Marsden Fund - \$33 million per year for outstanding research NZ James Cook Fellowships – one of the country’s highest S&T honours
Education:	Professional support for the S&T community:
<ul style="list-style-type: none"> NZ Teacher Fellowships BP Challenge Genesis Energy’s “Realise the Dream” Royal Society Education resources Royal Society Creativity in S&T (CREST) awards for school projects Royal Society Young Achievers network Travel grants Overseas study opportunities NZ National Waterways project 	<ul style="list-style-type: none"> NZ Links to 32 international S&T organisations Bringing eminent international scientists to New Zealand Seven learned journals and other scientific publications NZ International Conference Grants Royal Society Communicators Courses Support for our constituent organisations Royal Society conference travel grants
Expert Advice:	Standards and Ethics:
<p><i>For example:</i></p> <ul style="list-style-type: none"> Human Capabilities in science Investment in large assets 	<ul style="list-style-type: none"> Royal Society code of Professional Standards and Ethics

See www.rsnz.org for full information about the Royal Society of New Zealand

Royal Society Staff



How we will support our members and New Zealand's science and technology community

We will:

1. Make connections between, and marshal the depth, breadth and expertise of our members and constituent organisations to act as leadership models in using S&T knowledge in a balanced, impartial manner, and raise the esteem of S&T researchers
2. overcome barriers that prevent participation in our programmes from under-represented communities, develop user-friendly communications, and jointly monitor progress
3. engage with Māori scientists and others to understand issues that currently divide different knowledge systems, and work towards a mutually inclusive view of S&T in New Zealand
4. develop evidence on and help to promote scientific and technological careers and conditions of S&T workers, to strengthen research capability in New Zealand
5. develop international linkages and encourage international exchanges
6. promote excellence in all research, from basic to applied, celebrate New Zealand research successes; provide awards, scholarships and fellowships for S&T research and practice among young people, communities, and our established scientists and technologists
7. encourage nominations of Fellows and Companions from under-represented groups, and encourage their contributions to the Society's activities
8. broaden the scope of, and access to, the seven learned journals published by the Society for the research community

The Royal Society of New Zealand exists by and for our members, and by our Act, to:

- promote a culture that supports science and technology
- provide professional support to scientists and technologists
- provide a conduit for expert advice on important public issues to the public and government
- promote a code of professional standards and ethics.

In brief, we work to build an imaginative, creative and knowledgeable society where the contribution of S&T is highly valued.

The Society recognises the Treaty of Waitangi and that Māori are the Tangata Whenua of New Zealand. Today, Māori are under-represented in the research sector, but our population will have an increasing proportion of Māori, thus we will encourage more Māori involvement in science and technology.

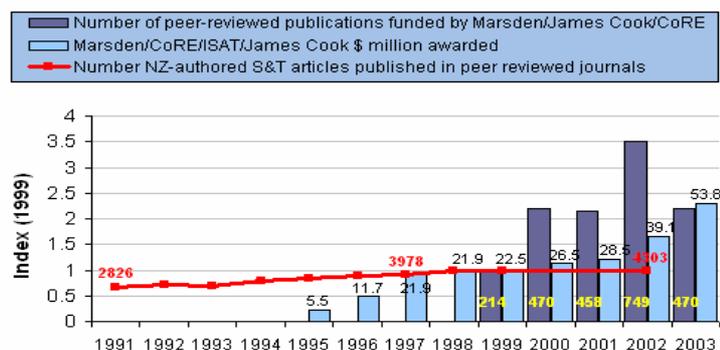
Note: These graphs show Royal Society progress in a particular activity in comparison with a general indicator of New Zealand's progress

Excellence in Research is indexed to 1999 = 1 in order to show on the same scale the relative rates of advance of the dark blue bars (publications funded via RSNZ), the light blue bars (an "early indicator" of how much research we are funding), and the red line (an indicator of general New Zealand progress in publications).

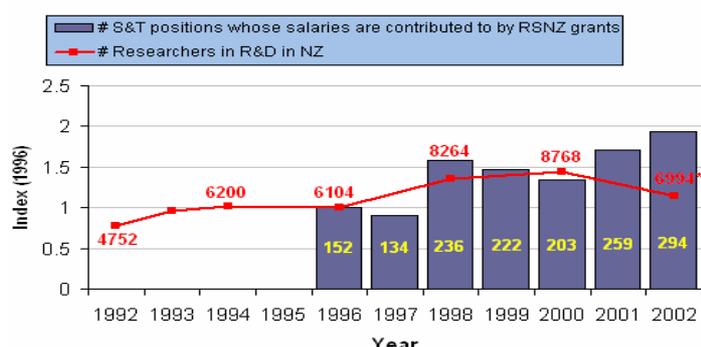
The *Excellent People* graph is indexed to 1996 = 1. The blue bars once again indicate RSNZ progress and the red line indicates New Zealand progress in research activity.

In all graphs, actual values are placed along the line or in a bar. The index year may change according to data availability.

Excellence in Research



Excellent people



* not comparable to earlier figures due to change in survey design

How we will contribute to the work of government

We will:

1. develop a highly professional relationship with government, raising the profile of S&T and its contribution to the knowledge society
2. engage with politicians and ministries and raise issues for debate, eg. research funding and capability, S&T education, environmental and social issues
3. use our Fellows, members, experts and constituent organisations to provide the facts and rapid, balanced, impartial advice on important issues
4. demonstrate the outcomes of S&T in New Zealand, particularly by assessing the value to the community of the Marsden Fund
5. provide evidence and advice to improve science and technology education, and human capabilities in the New Zealand S&T system
6. increase awareness of our services and programmes, deliver our contracts on time, and to the highest standards possible

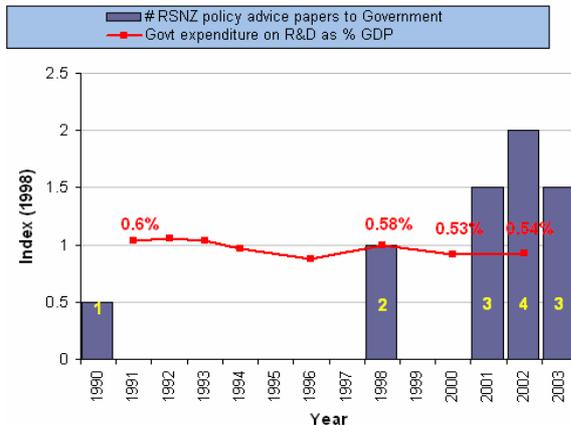
The Society has established its own policy analysis and evaluation units, and works with stakeholders to achieve environmental, economic and social goals for New Zealand.

We work hard to support the government's environmental and social goals and its "Growth and Innovation Framework".

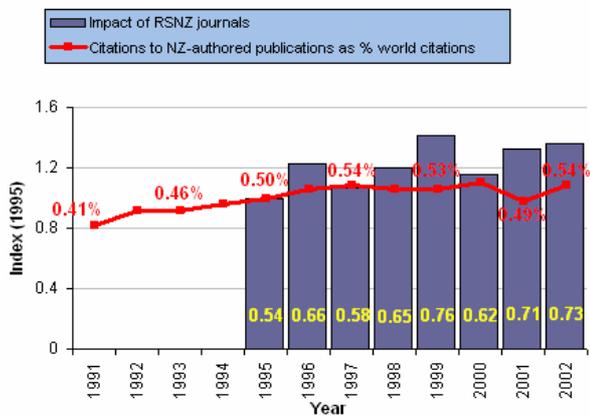
We provide services to government through administering the Marsden Fund, educational programmes, publishing, and public awareness contracts, and through provision of policy advice.

Our members expect us to channel evidence-based policy advice to politicians and ministries, and contribute to politicians' knowledge of S&T issues.

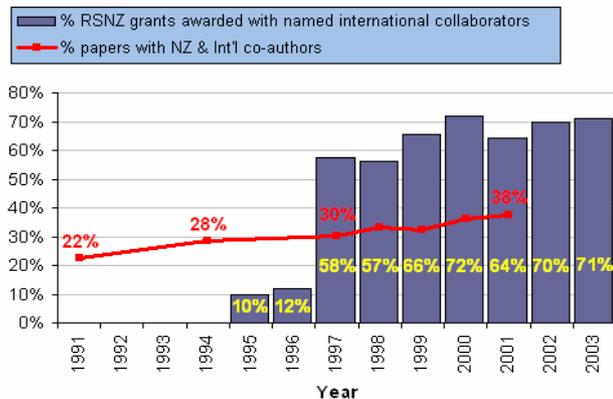
Government Awareness



Publishing



International linkages



Each graph above is indexed to a base year = 1. The dark blue bars indicate RSNZ progress and the red line indicates New Zealand progress in the activity. In all graphs, actual values are placed along the line or in a bar.

The graph at right shows the percentage of RSNZ-funded work involving international contacts (dark blue bars) versus New Zealand publications involving international contacts.

How we will support students, teachers and parents

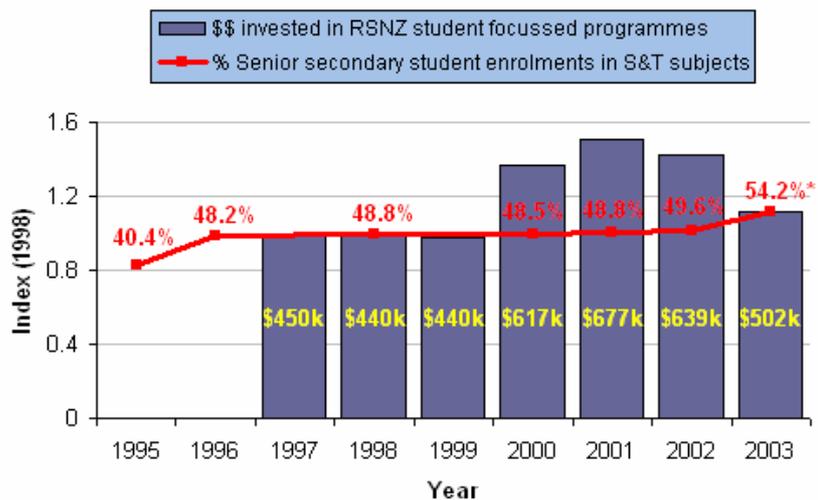
We will:

1. help educators to keep abreast of current S&T practice and help them to develop their knowledge and skills to inspire young people about future S&T
2. celebrate excellence in research and technological practice by school students, and inspirational role models in the S&T education community
3. promote interest in nationwide S&T programmes and events to students, teachers and parents
4. encourage growing and under-represented groups to participate in Royal Society education programmes
5. support young achievers as they progress to tertiary education by building networks and raising awareness of S&T careers
6. publish S&T-related resources for teachers, parents and students, and promote the use of information and communications technology

We aim to inspire young people in sciences, social sciences, mathematics and technology and enable teachers to teach these subject areas in authentic and inspiring contexts.

Our programmes, such as CREST, science fairs and camps, provide support and inspiration for all learners to develop their knowledge, skills and attitudes.

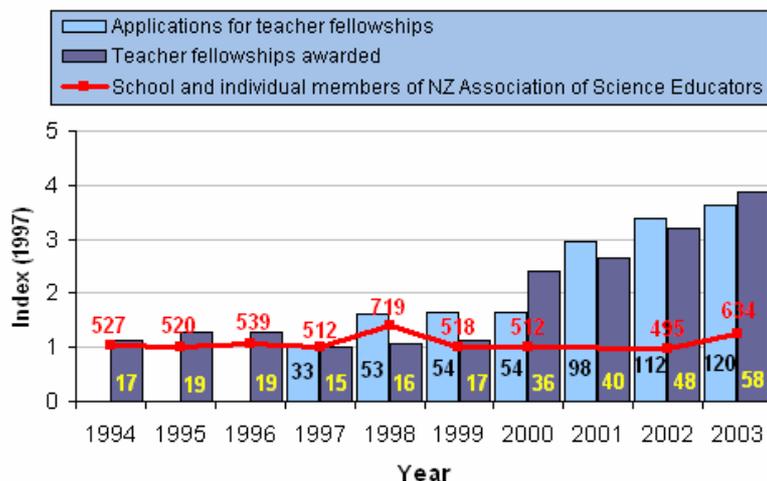
Education - School students



* not strictly comparable to earlier figures due to introduction of NCEA

Each graph is indexed to a base year=1. The dark blue bars indicate RSNZ progress and the red line indicates New Zealand progress in the activity. In all graphs, actual values are placed along the line or in a bar.

Education - Teachers



Where a light blue bar is present, it represents an "early indicator" of activity.

How we will support the media and the public

We will:

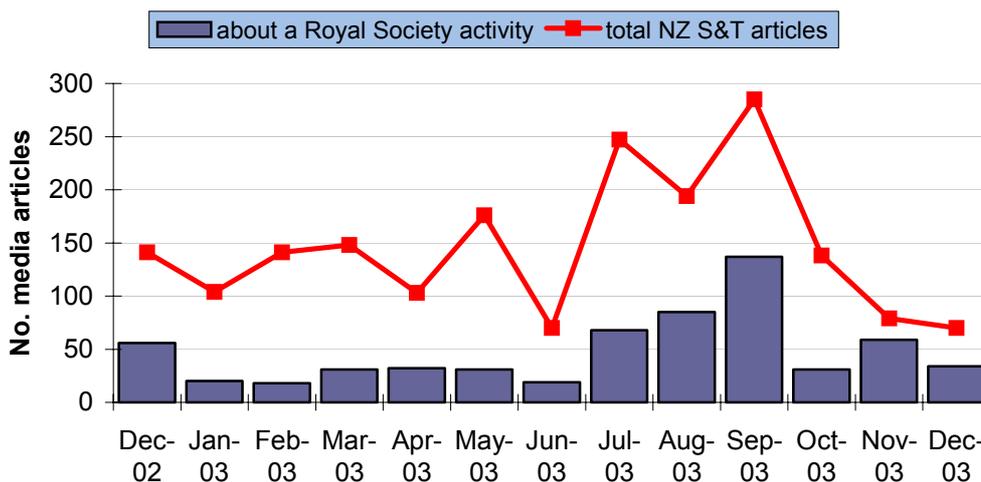
1. promote and support community efforts that make people enthusiastic about the sciences and technology; we will aim these at all of New Zealand, particularly those that usually miss out, eg. Tangata Whenua, ethnic minorities, elderly and youth
2. teach science communication skills to researchers and promote dialogue with the public to understand and assist understanding of S&T and important issues
3. publicly celebrate S&T excellence in our innovations, our youth, our professional scientists and technologists, and our Fellows; including an annual Science Honours event for prestigious S&T awards
4. Excite public interest in S&T by presenting science more often in the public arena through media interviews, talks and special events
5. Collaborate closely for efficiencies with other agencies active in the field, eg. universities, UNESCO, British Council, and several New Zealand agencies
6. develop strong links with media to: promote awareness of S&T issues, assist with accurate reporting of scientific issues, develop a more S&T literate media, and publicise S&T events

The Society's main challenge is to promote an informed and critical awareness of science and technology in New Zealand.

The most widespread exposure of S&T issues occurs through the media, including newsprint, radio, television and other publications, and through events for the general public, including talks by local and international scientists.

The Society publishes some of this material online and through brochures, books and newsletters.

Media Awareness



The red line above shows actual number of articles about science or technology published in the New Zealand press during 2003. The dark blue bars show articles sourced from a Royal Society activity.

How we will work with industry and the users of science and technology

We will:

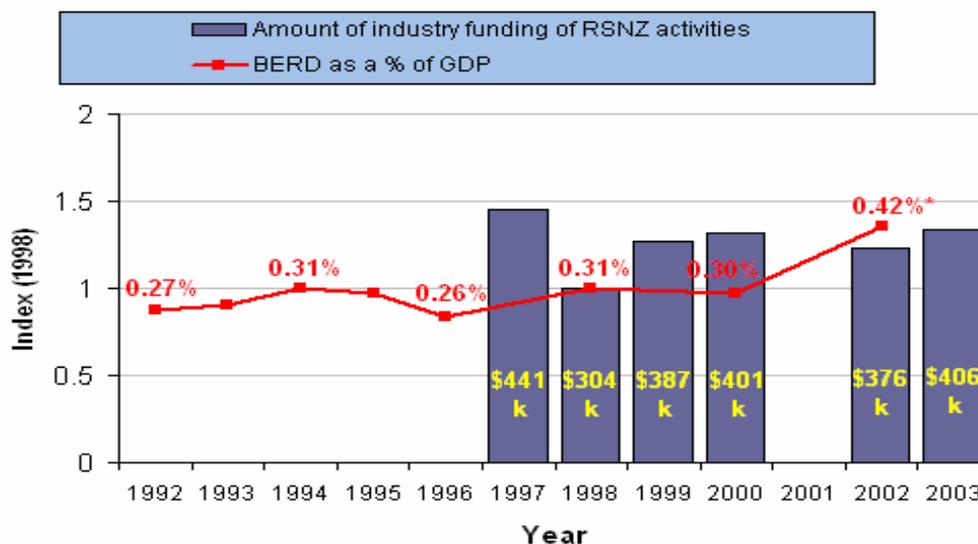
1. learn how business sets its own priorities for research and how New Zealand's science system can best interact with business
2. promote closer science - end-user links, complement current schemes such as Technology New Zealand, and monitor progress
3. Work with agencies such as New Zealand Trade and Enterprise to develop new leaders able to generate wealth from science and technology
4. improve scientists' and technologists' skills to engage with end-user needs
5. help people, skills and ideas to move between research and industry
6. encourage private research investment and promote incentives for effective investment
7. encourage industry support for S&T education and create linkages and interaction between industries and teachers, students and schools.

New Zealand's economy has low business investment in R&D and comprises mainly low-tech industries.

The Royal Society covers the entire spectrum of science and innovation. To promote the change to a high-tech, high-value industry base, we are working for a mutual understanding between science and industry.

We will advocate the benefits of research and development to the private sector. We will encourage industry to make their needs understood by applied researchers.

Business Awareness



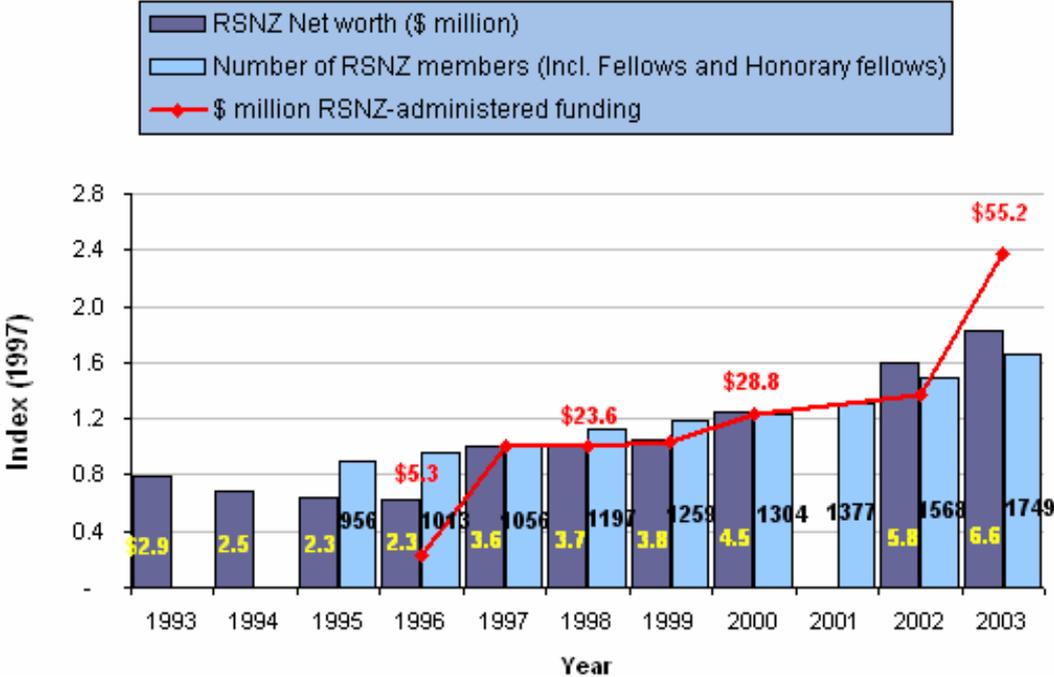
* not comparable to earlier figures due to change in survey design

BERD = Business Expenditure on R&D

Our organisation

To advance our strategic plan, we must grow and change ourselves – in our skills, our capabilities, and ways of working. Our corporate development informs and focuses our actions and provides the infrastructure support for an effective and efficient organisation. We will provide good working conditions, a healthy and safe environment for our staff, and effective systems for our members. We will develop our web site into an essential tool for all of our stakeholders.

Royal Society - Organisation



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