

CONFERENCE OPENING SESSION: MONDAY 12 MAY 1980

Dr I.M. Parton, Chairman of the New Zealand Geomechanics Society
invited the Minister of Works and Development, the Honourable W.L. Young
to open the Conference

The Honourable W.L. Young

I appreciate the invitation to be with you today and to have the honour of opening your conference - the third in the series of Australasian Geomechanics Conferences and the first to be held in New Zealand. It gives me great pleasure to welcome the many visitors from Australia, and further afield, to this country.

Technology is playing an ever growing part in the further development of the complex way of life man has evolved. Geomechanics is an applied science concerned with the development and shaping of the surface of the earth for the benefit of man. Your skills are vital in such important areas as the building of roads, railways, airports, tunnels, dams and the foundations of major structures. You also help ensure the stability of natural and man-made slopes. Therefore it is obvious how well geomechanics relates to my Works and Development portfolio and why the Government has seen the wisdom of providing some financial support for your Conference.

The linking of soil mechanics, rock mechanics and engineering geology has been of special benefit in the development of our self-renewing and non-polluting hydro resources involving multiple use of power and irrigation. Hydro power is still our major source of electricity despite the building in recent years of geothermal, coal, gas and oil-fired generation stations as other sources of electric power. The linking of irrigation facilities to hydro power development makes better use of the water resource and is of great benefit to farmers stimulating the primary production on which our country depends so much.

Coal mining was a declining industry in this country until rocketing oil prices changed

the picture dramatically, leading to a revival of interest in our vast coal reserves. These reserves will be mined in due course using the latest mining techniques and heavy demands will be made on your expertise to aid the mining engineer in his challenging task.

Not only is New Zealand a geologically complex country, it is also a mountainous one and in such conditions tunnels often provide the most effective solution to transport problems. I understand one of your conference technical tours will be visiting some tunnels in progress in the Wellington area.

Though, for the most part these are small tunnels, they will give our overseas visitors some idea of what tunnelling conditions are like in New Zealand. Recent tunnels of some significance in this country are the Moawhango and Rangipo tunnels associated with hydro power development, and the Kaimai and Poro-o-tarao railway tunnels.

The Government is well aware that your skills are an integral part of the technology necessary to solve the problems posed in carrying out New Zealand's major developments. It also sees clearly how important it is for any highly skilled group to keep abreast of developments within the country and the world at large and how essential conferences such as this are to maintaining expertise. The wealth and complexity of the subjects you have for discussion and exchange of views leaves me no doubt that this will be a very profitable occasion for you.

It is now my pleasure to declare this conference open.

Dr Parton then invited Professor M. Fukuoka
President of the International Society for Soil Mechanics
and Foundation Engineering, to speak

Professor M. Fukuoka

Honourable Minister, Mr Chairman, Ladies
and Gentlemen:

It is indeed an honour and great pleasure
for me to address this Conference on behalf
of the International Society for Soil
Mechanics and Foundation Engineering.

First, I would like to express my warm
gratitude and thanks to the Organising
Committee of this Conference and to its
Chairman, Dr John Webster, for the
invitation to speak to you. My thanks also
to Dr Ian Parton, Chairman of the New
Zealand Geomechanics Society, and to those
other members who have made me so welcome.
This conference is sponsored by the NZ
Geomechanics Society, NZ Institution of
Engineers, and Australian Geomechanics
Society.

I understand that the New Zealand and
Australian Geomechanics Societies have a
close relationship with ISSMFE, ISRM and
IAEG so I am very pleased to have this
opportunity to come and join the Conference.
There are many societies and associations
which cover subject areas close to ours.
For example, IAEE, IABSE, ICOLD, PIARC, IRF
etc. I am a member of some of those
societies, and I have long thought that the
promotion of science and technology can be
accomplished by the close cooperation of
all of them. Among the activities of our
society, there are international conferences,
regional conferences, and national confer-
ences. There are also symposia in which
special subjects are selected for discussion,
such as soil dynamics, penetration testing,
soil sampling etc. When the size of a
conference is too large, the atmosphere is
more that of a festival than an occasion
of learning. When its size is too small,
we cannot take a broad international view.
When the first ICSMFE was held at Harvard
University in 1936, Professor Terzaghi
pointed out that the main purpose of the
conference was the exchange of technical
information and case records. This is true
even now. If we want to exchange informa-
tion effectively, a certain number of
people should attend the conference from
other countries. The members of this
conference are chiefly composed of New
Zealanders and Australians, but many
participants and papers have come from out-
side the Australasian Region. The number
of specialised scientists and engineers is
not very large here, due to the relatively
small population in this region, but the

level of learning is so high that many
participants have been attracted from out-
side the region. The size of the conference
seems to be adequate so that problems may
be discussed effectively. There can be
little doubt that the conference will be a
great success from all points of view. The
subjects of the conference which have been
selected by the organisers, are not only
interesting for members in this region but
also for those from outside. Generally
speaking, soils and rocks are similar the
world over, but they are quite different
in detail from place to place. The methods
of treatment of those materials for
construction works vary in relation to
culture, life style, economical and
political conditions, and so on. Therefore
it is very difficult to apply experience
acquired at one place directly to another
place. But the experience abstracted or
generalised can be applied to other places
very effectively. Much effort should be
expended to increase the value of confer-
ences in this manner.

Now, I would like to refer to the coopera-
tion of our three sister societies on this
particular occasion. We have the
coordinating committee under the chairman-
ship of Professor De Beer of Belgium.
There are three committees at the moment:

- i) Literature Classification
- ii) Symbols, Units and Definitions
- iii) Site Investigation and/or Sampling

I intend to increase the number of the
technical committees for the purpose of
activating mutual cooperation among our
members. ISRM and IAEG might have similar
ideas. We should proceed with our
activities without too much fear of over-
lapping. The coordinating committee will
help prevent this. Looking into the
subjects proposed, we find many subjects
which have been discussed at past confer-
ences. There are also many subjects which
are to be discussed at the forthcoming
international conference in Stockholm.
This is strong evidence that those subjects
are worth continuous discussion by those
interested. Many of these subjects would
be better handled by technical committees.

To everyone present, I would like to
express my cordial good wishes on behalf
of the International Society. Thank you
for your kind attention.