

FIRST CONGRESS SINCE 1935

Scientists Will Gather Next Week in Wellington

FIVE HUNDRED New Zealand scientists will meet in Wellington on May 20, and over four days they will listen to the reading of more than 250 scientific papers. But although one address will be on Nuclear Physics, with Particular Reference to Experimental Methods—and some recent experiments in that field have stirred more than scientific circles—anyone who expects the sensational is likely to be disappointed.

In essence, next week's congress will simply provide research workers in a wide variety of fields with the opportunity to compare notes and talk shop. The man in the street will not likely be affected directly by anything done there, but out of that exchange of information which the congress facilitates will come, in the fullness of time, new knowledge, new techniques, new devices which are likely to concern us all.

This gathering of physicists, chemists, geologists, geographers, architects, engineers, forestry specialists, geneticists, and so on, will make up the sixth Congress of the Royal Society of New Zealand. This year there will be only one overseas visitor—an Australian woman speech therapist. All section meetings will be held at Victoria University College, and all major gatherings in the lecture-hall at the Dominion Museum.

As an introduction to the Congress, a talk will be given from the main National stations at 8.45 p.m. on Sunday, May 18, by H. C. McQueen, president of the Wellington branch of the

Royal Society of New Zealand. His subject will be *Science in New Zealand To-day*, and the purpose of the talk will be to relate the work of the assembled scientists to the everyday life of the nation.

First for Twelve Years

Though it has been the custom for the Australian and New Zealand Association for the Advancement of Science to meet every two years (the 1937 Congress was held in Auckland, last year's was in Adelaide, and this year Perth, Western Australia, will be the venue), next week's gathering will be the first Congress of the Royal Society of New Zealand for 12 years.

The superficial observer, comparing the papers for 1947 with those delivered in 1935, would find little among the titles to indicate the lapse of time or the magnitude of the events which have occupied the intervening years. The social sciences have more prominence than they once commanded, and "nuclear physics" means more to the layman to-day than it did even two years ago, but in the main the lines of investigation are the same. That, of course, does not mean an absence of progress, but simply that research is a continuous process. That scientists themselves may have changed in the last few years seems possible when one delves a little deeper into the Congress order-paper.

Forward Looking

In the past, for example, it has been the custom for the presidential address to be given in private to the council of the Society, the text being released later for publication. This year it will be given at a public session, and Dr. W. N. Benson, B.A., D.Sc., F.R.S., of Otago, who gave the second presidential address it will be, has chosen as his subject *Scientists Look Toward the Future*.

Implicit both in the decision to give the address in public, and in the topics selected by the president is science's acknowledgment of its citizenship, and the desire of so many men of science to-day to speak directly to the rest of the community. And in this regard it is interesting to recall this in his first presidential address, Dr. Benson made a strong plea for the application of scientific method to the solution of international problems.

Both in the continuity of work shown in the bulk of the papers, and



DR. W. N. BENSON, F.R.S.
The President will look to the future

in the awareness of social problems arising out of the advance of science noticeable in the subjects for general discussion, can be observed two complementary and important tendencies.

Pure and Applied Science

The classic attitude of the pure scientist, that truth must be pursued regardless of consequences, that the scientist was not concerned either with how his discoveries were used or with argument and opinion ("It is not for me to ask 'Who is right?'" said Lamarck, "but 'What is the truth?'"") is being modified.

On the other hand, there has been in the last 20 or 30 years a change in the "practical" man's attitude to pure research, a change towards a better appreciation of the status of pure science and the pursuit of knowledge for its own sake. This tendency has, perhaps, operated most profitably to the scientist in the United States where private endowment has assisted many workers in fundamental research without placing them under any obligation to produce "practical" results. But the fruits of this understanding of the scientific urge toward discovery for its own sake are to be found on every page of the New Zealand Congress programme.

"The Pleistocene Snow-line and Glacial Control in New Zealand," for example, a paper which will be read to geologists and others interested on the Tuesday afternoon, is not a subject of any immediate practical significance

to New Zealanders generally. The same might be said of "Fossil Spores from New Zealand Coals," another geological topic, or "Maori Adze Sockets," in which the ethnologists will be interested.

These three are typical of scores of subjects in which the work done is not assessable in terms of profit-and-loss and they indicate that scientists in New Zealand at least have some opportunity to engage in pure research, though they may not enjoy the same degree of public assistance here as they do in other and larger countries.

Developments in Radio

On the other hand, a large number of the papers to be read have a direct bearing on the life and work of the general community. The meteorological and physics sections, for example, will see the presentation of a number of papers having a bearing on radio problems, and radio and radar have a subsection to themselves. The papers in the latter category are three in number—"General Principles of Radar Design," "Radar and Radio Methods of Position-fixing and Navigation," and "Radar Display Circuits and Techniques."

The "Canterbury Project" in which investigations are being made into high-frequency radiation and the effects on it of certain atmospheric conditions, will have two papers, one describing the problem facing the investigators and the

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H. C. McQUEEN
He will give an introductory radio talk