THE BEGINNINGS OF THE GEOTHERMAL INSTITUTE

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The formal beginning was probably the invitation from UNDP (New York) in 1975 to set up a geothermal training course in New Zealand. However, much had happened before this. The idea of a training school in geothermal technology had already been suggested in the 1960s, but in New Zealand we had neither the infrastructure nor sufficient personnel for a formal teaching programme.

However, by the mid-1970s the situation had changed. Geothermal energy had been accepted as a viable form of alternative energy and a number of countries were already using or developing this energy source. Geothermal technology was no longer an assemblage of individual disciplines but had taken on its own shape. For several years prior to 1975, the MWD and DSIR were visited by a large number of engineers and scientists from overseas who wanted to learn more about our geothermal expertise. During the same period a number of New Zealand engineers and scientists had been involved as consultants in overseas geothermal projects and it was obvious that there was a steady and growing need for some type of formal geothermal training.

By 1975 the NZ Ministry of Foreign Affairs (MFA) was also receptive to such formal training. New Zealand had started major aid-sponsored geothermal projects in both Indonesia and the Philippines, and MFA were aware that a long term training programme to support their geothermal projects was desirable; MFA was also well aware of geothermal developments in other parts of the world since official requests by UNDP for NZ geothermal consultants and experts were all channelled through MFA.

The catalyst for the geothermal course was the University of Auckland which had some plans to incorporate geothermal topics in the curriculum. There is no doubt in my mind that this was largely due to Manfred Hochstein's move from the DSIR to the Geology Department of the University, together with the strong support of the late Nick Brothers, Professor of Geology at that time. Thus, by the time UNDP made their formal request in 1975, a very receptive basis existed; discussions and additional work were still required to get the project under way, but this took place in an atmosphere of acceptance with no energy having to be expended on persuasion,

A major contribution to the establishment of the geothermal course was Jim Healy's mission in 1976, during which he visited a number of developing countries with ongoing geothermal projects, summarised elsewhere in these Proceedings. Jim's report showed quite conclusively that there was a substantial demand for a geothermal training course.

When the first detailed proposal for the course was circulated in 1977, there was little argument as to its basic concept as laid down in the proposal. All of us who one year later became members of the Board of Studies recognised that, to be effective, the discipline of a properly structured academic course was required. The other major concept was that we should try to give every student an understanding of. geothermal technology as a whole as well as a reasonable degree of specialisation in their own discipline. Finally, it was agreed that the course should be designed to meet the requirements of a University Diploma Course, thus giving the successful graduates an academic qualification. It appears now that the proposal was a reasonably accurate assessment because, after 10 years experience, the basic concept of the course has remained essentially unchanged.

It was clear to all of us in 1977 that the course would take a full academic year and we had to accept that this would cause problems for organisations in developing countries just moving into geothermal development. While this is probably still the case for some countries, many others have now well established organisations which can allow study leave for one or more of their staff without too much disruption to their activities.

One aspect, I remember, which caused concern was the problem of language. Many of us involved in the setting up of the course had worked in overseas geothermal projects and we were well aware of our own communication problems. We could see that this might be worse in a classroom environment. However, it was not until after the 1983 Review Mission, during which a large number of former students had commented on language as being one of their biggest problems, that a partial solution was found. I have no doubt that the 3 months English language training course which started in 1984 prior to the annual geothermal course, and which was introduced as a result of these comments, has solved in part the language problem. I regard the language training now as being an integral part of the geothermal course.

The two geothermal training review missions in 1980 and 1983 in which I took part (both sponsored jointly by MFA and UNDP), were certainly memorable events in my association with the Institute. I found it very rewarding to visit so many of the countries which had sent students to the course and to learn not only from these exfellows, but also from those in a position to make a more objective judgement, just how much the students had benefitted from the course. Sometimes, I wondered whether their very positive assessment was due to innate politeness to a visitor, but my recent experience in Indonesia suggests otherwise. One of the very pleasing things about my recent assignment and my attachment to the NZ Embassy in Jakarta has been to see the contribution which alumni of the Geothermal Institute are making to the development of geothermal energy in Indonesia. Almost all of them are still working in the geothermal industry and geothermal sections of Government departments and some from the earlier courses now occupy senior positions in their organisation. I do not doubt that the same applies to most other countries which have sent students to the course. I believe that this outcome, together with the continuing demand for geothermal training, provides all the justification, if any is needed, for the effort that went into establishing the course.

Looking back over my own career, it is difficult to make a judgement on what contribution any particular aspect has made to the common good. It gives me a lot of satisfaction to know that I was able to make a small contribution to the beginnings of the Institute, but the congratulations must go to Manfred, his team, and the Board of Studies for the way the Institute has developed over the years. I cannot say that this was unexpected because, apart from the very obvious need in those early days, the enthusiasm and effort they all put into it, could not have had any other result.