Address to Graduating Class of Civil Engineering, DalTech, at Banquet on 25 March, 2000, by Dr. G. G. Meyerhof, C.M., P.Eng.

Thank you very much, Patrick, for your overly kind introduction of me. (Cashin)

Also thanks to the organisers of this festive event with the thirst-que quenching reception and a delicious dinner.

This happy atmosphere of civil staff and students of the millenium class is enhanced by the historic banqueting hall of Dalhousie University, in which this banquet takes place.

This special ambiance makes it easy for me to give some encouraging advice in my address to the graduating class of civil engineering of DalTech.

## My Friends,

When I was asked to say a few words to you this evening, I accepted this honour with a mixture of pleasure and trepidation. It gives me great pleasure, because it was about 60 years ago that I stood in your ranks.

As a graduate of this renowned university you can be proud of your success. I should like to congratulate you for it, and wish you the best of luck in your professional future. May I use this opportunity offered to me today to remind you that the knowledge, which you have gained so far, is only the basis on which to build your future. As you advance in your career, you will learn that there is much at we do not know. You should at all times be prepared to increase your knowledge about new developments, not only in your engineering specialty, but also in related fields and human experience. As the poet Shelley has written: "The more we study, the more we discover our ignorance."

The half-life of an engineer is generally considered to be about 5 years. Thus, you should enrol in summer courses or extension courses to keep up-to-date.

Remember that engineering is partly science and partly art. Thus, analytical methods in these subjects can at best only be your guide, to which good judgement and experience based on similar circumstances should be added. This is particularly important for large-scale engineering projects in our complex society. Such so-called megaprojects call for close cooperation between many different specialists and for team work on interdisciplinary basis. Since engineers serve the community, they must justify their proposals to society and strike a balance between technological, environmental, social and economic factors. Thus, the planners also have to consider human factors and make subjective value judgements, which stresses the need for human experience, a.s. I mentioned earlier.

You should, therefore, acquire more knowledge, enlarge your experience and broaden your views by participating in the affairs of your professional societies.

Do enrol in the Canadian Society of Civil Engineers and participate in its conferences. Later you can specialise in one of the branches of civil engineering, such as structural engineering, hydraulic or environmental engineering, geotechnical or transportation engineering. You

should also contribute to the work of your community and take an interest in public affairs. As engineers you must recognize that you are not free to do what you like with the natural and human environment. You have to accept that you are not the master but rather the trustee of the environment. Moreover, you have a responsibility to future generations, and you should evaluate realistically the nature of your work and the likely consequences of it. You ought to try to bring the two cultures - engineering science dealing with facts and art dealing with values - more closely together in your working life.

to improve, even in a small way, the happiness and civilization of mankind. You should carry out your work with love and care and, primarily, with honesty and integrity to justify the confidence placed in you. By perseverence and dedication to what you do, you will get satisfaction from your job, when it is fulfilled according to your best ability and judgement.

Above all, enjoy whatever you are doing. Remember "the possible we do today, while the impossible takes a little longer," Never forget Tech's motto "Eolas Agus Obair," which translates from my poor Gaelic as "Knowledge and Work." Finally, may I say, how privileged I feel to share these thoughts with you on this memorable day.

Thank you.