from 1951 to 1956 we had an average total scientific staff of 438 and an average yearly number of terminations of 40 or about 8 per cent per annum which I think is a reasonable thing considering we are taking in younger people. training them and sending them out.

Of those who accepted employment in the United States—the average—was between 5·8 per annum, but only 3·8 of this number were Canadian citizens. The other two were people who had taken employment with us, coming largely from Britain and then moved to the United States. With regard to Canadians accepting employment in the United States our loss was ·9 of one per cent per annum which means that the effect over a five year period is simply negligible and practically none of those people were senior. So I think as far as the council is concerned we have not lost badly.

On the general problem I have one interesting set of figures which are Ph.D's from McGill. McGill has produced over 500 Ph.D's in chemistry since 1920, which is probably about half or a third of all the Ph.D's produced in Canada in all subjects, and they have followed up their movements to such a degre that they have kept personal contact with them. Over this period 31 per cent of their Ph.D's went to the United States. The worst period was between 1923 and 1939 which was the tail end of the depression and scientifically we were not as highly developed. We were producing Ph.D's at a high rate because the depression really increased the number of degrees by increasing registrations at the time when people could not get jobs. Those figures were very high but there has been a steep decline and in 1954, 27 per cent went; in 1955, 18 per cent and there is no doubt the trend has been downward since the war. I think it is not too bad, but I do not mean it would not be nice if we could keep these people at home.

Another way of looking at it is to take the fate of the various graduates, and we found that of everybody who got a Ph.D. in Canada in 1953, 67 per cent found employment in Canada and 12 per cent in the United States. The other 21 per cent were continuing their studies.

Q. Have you the McGill figure for the years 1933-1939?—A. It runs up to 50 per cent but at that time there was very little Canadian industrial research and a lot of people being turned out and the answer is that there were just no jobs in Canada.

Q. Have you any study of what would happen if the American changed their conscription policy so that these young graduates would not be liable for call-up as soon as they went there? What would the effect be then?—A. That is a difficult question. There is the other one: what would happen if the British changed their approach to National Service? It would cut down the number of immigrants to this country who are British engineers and scientists. At the present time it looks as though our gains through immigration are very much higher than our loss by emigration of engineers and scientists to the United States.

Q. Is that a good thing?—A. I would like to see more Canadians stay at home but at the same time I think what is needed is suitable jobs. I do not think it is all a question of salary by any means, and in many cases I do not think the record is too bad.

Another survey is from McMaster. Of 145 B.Sc's in chemistry in 1940-1954 they found 11 per cent in the United States and the rest in Canada, and of the 11 per cent one came from the United States to get his degree and went back, one was a girl who married an American citizen and four were in the United States studying at universities and would presumably come back. They concluded that only 7 per cent had gone permanently to the United States over the 14 years.