

the task of performing basic research on a very broad scale.

The Fields Institute for Research in Mathematics pointed out this week to the Standing Committee on Industry, Science and Technology, Regional and Northern Development: "The longer-term goals of pure research will not be funded at all if not by government".

Pure, basic and fundamental research is difficult to perform in the industrial sector. The costs are large. The results are always questionable. That is why it is basic research. One never knows for sure that one will find something that is usable or that can be exploited for commercial purposes.

In the context in Canada in which much of our industrial sector must look to the bottom line of profit results in the short-term cycle, be it quarterly if not annually, and in the context in which the cost of capital is enormous for the performance of basic research, or any research at all, we need the help of government and well-funded universities to ensure that fundamental research is being done. It is not enough for us to say that we can get the best research results from other countries and incorporate them in Canada. If we do not have the highly trained and skilled people here in Canada capable of knowing what it is we need, we will not be able to go around the world to shop for the results of other people's research. We need those people.

In Canada, we need a commitment to the development and retention of people. That commitment involves, necessarily, government. It involves the federal government making its commitment in various ways, but including the maintenance of a world-class scientific facility such as the National Research Council. Without that, Canada fails to have the focus of excellence that will be required if we are going to compete in this new global economy that is based so much on science and technological innovation.

Those of us who are concerned about this issue on all sides of the House, I am sure, can only share the feelings of anxiety, concern and despair of the scientists at the National Research Council who have now experienced

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over the last five and a half years a series of cuts and cutbacks that leaves them dispirited and anxious.

I want to remind you, Mr. Speaker, of some of the cuts which have occurred at the National Research Council. In November, 1984, \$60 million was cut from the NRC budget. As a result of that, major divisions or projects were closed or cancelled, including the energy division, the Environment Secretariat, the Manufacturing Technology Institute, the Institute for Electrochemistry and the Cold Regions Research Institute.

On October 1, 1986, we had a Speech from the Throne with a four-point science policy. Within that very month an additional \$29 million was cut from the NRC budget, which cuts included the photochemistry and kinetics section, the very section where the Nobel Prize-winner, John Polanyi, commenced his work; the electromagnetic and mechanical engineering program; the environmental toxicology program; and aeronautics, construction, and physics programs. Two hundred jobs were to be eliminated as a result of those cuts.

• (1030)

Earlier this year we learned that the high energy physics research performed by NRC would be gone by 1995, possibly farmed out to Queen's and Carleton universities. The prairie research station will be cut. The avalanche research group in British Columbia, the only one in North America of its kind, is going to be cut.

Is it any wonder that scientists at the National Research Council are dispirited, anxious and wondering if they have any future at all in that institution? This was the crown jewel of Canada's research establishment.

This is the council which, in 1916, when Canada was a fledgling country, engaged in a world war, which demonstrated Canada's commitment to science by establishing a world class observatory in Victoria, British Columbia, at the farthest extreme of the young Dominion and at great expense. However, it showed two things. It showed that Canada was committed to performing world class science. It also showed that Canada was willing to spend the money necessary to do so, not where it was politically expedient but where the interests of science dictated. If you have ever visited that facility, Mr. Speaker, you marvel at the fact that that giant lens was hauled up the