

The first of two major new programs proposed in our new Five-Year Plan is the Research Professorships program. This program is considered vital to a significant improvement in the university research capacity and, therefore, to national aspirations for a greatly expanded R&D effort during the next five years.

Both the federal government and Canadian industry are increasingly expecting greater research contributions from our universities, recognizing that there are many new and rewarding research challenges that can be pursued best within the university environment. On the other hand, time available for university research in most cases is decreasing because of the pressures of undergraduate enrolments and teaching loads. Furthermore, the critical mass or concentration of human and technical resources so essential in many of the new research fields is usually lacking.

NSERC saw these trends developing in 1979 and proposed a "Research Professorship" program for the first Five-Year Plan. Since funding levels for that plan were not sufficient to support launching of this major new undertaking, the proposal was put on hold and Council placed its emphasis instead on training the next generation of researchers.

During recent years, however, the Council has revived and elaborated on the proposal and has discussed it with the universities and with all provincial governments. As a result, the NSERC Research Professorship program now carries a strong endorsement from across the country. It offers an effective and accepted method of quickly developing centres of research excellence around first-rate individuals. Given the right circumstances, the program should repatriate some of Canada's past exports of research leadership and it might also attract some of the world's top researchers to Canada. The program would be a central component of the Council's overall strategy during the next five years.

Recently, the Council has been able to launch a modest research professorship program called Industrial Research Chairs through cooperative NSERC-industry funding. This experience has demonstrated the strong industry support for such a program as well as the excellent calibre of the candidates available for such positions. In just over 1½ years we have received over 50 industry sponsored proposals for research chairs.

The second of the two major initiatives proposed in the Plan is a significant expansion of the Research Infrastructure program. The output of the university research community is restrained by inadequate technical support staff that is only a fraction of that available in industrial and government laboratories. As a result, the graduate students, the research fellows and the professors themselves end up diluting their potential production by having to do without these essential peripheral services and, therefore, having to act as service technicians, etc. themselves.

An improved equipment and infrastructure situation within our universities is an important element of the overall effort to meet our R&D objectives. Equipment funding, coupled with increased operating grants to fund more