financing of 264 research projects conducted by 136 companies. The IRAP annual budget has grown from \$1 million in 1962 to \$6,800,000 for the 1969-70 fiscal year. During the last eight years a research effort amounting to \$100 million of combined company and government funds has been generated.

## ARTIFICIAL LIMBS

As an example of how industrial research in Canada benefits from NRC's Industrial Research Assistance Program, grants of some \$50,000 have been used to help pay for the Northern Electric Company's development of hydraulically-operated artificial arms. The arms, the first complete hydraulic limbs to be worn by a patient, are the latest product of a co-operative agreement between government, industry and medical agencies to provide the most advanced prosthetic devices for youngsters in Canada, especially those deformed by the pre-natal use of the drug thalidomide.

The arms operate on established hydraulic principles to perform various arm and hand movements. Control of the arms is by electrical and/or mechanical devices suitably located on the patient's body. A battery supplies power to operate a miniature high-speed electric motor-hydraulic pump combination which sends fluid through flexible plastic tubing under high pressure to the various hydraulic actuators. The arms are light, and every attempt has been made to give them a life-like appearance. Modular design aids in fitting the artificial arms to patients of various physical sizes or degrees of amputation. Obvious advantages of hydraulically-operated artificial limbs over previous mechanical and electricalmechanical models are their superior strength, ease of control, smoothness of operation, low noise level, reliability and resistance to damage by dirt particles.

## SOCIAL WELFARE MEETING

C.D. Shepard of Toronto, chairman of the Board of Directors, Gulf Oil Canada Limited, has been named chairman of the 1970 Canadian Conference on Social Welfare, which will be held next June in Toronto. Dr. Charles H. Forsyth, Toronto, secretary of the Board of Evangelism and Social Service, United Church of Canada, has been appointed chairman of the program committee. Conference director is James Robb, director of publications and information, Canadian Welfare Council.

The biennial Canadian Conference on Social Welfare, which has been meeting since 1928, is Canada's largest conference on social issues. It regularly draws some 1,000 Canadians from coast to coast, from business, labor, religious and professional organizations; governmental and non-governmental; social welfare agencies; and ordinary citizens interested in the well-being of Canadians. The conference does not make recommendations but is an open forum for free discussion, and as such it

aims for greater understanding of the problems of human need and for more effective action in coping with it.

## CANADA AND THE UNITED NATIONS

The Prime Minister issued the following statement on United Nations Day, October 24:

Today the United Nations is 24 years of age. In 1970, the organization will mark its twenty-fifth anniversary. This should prompt some reflections on the past and some thoughts about the future of the United Nations.

International organization is a process of trial and error. Occasionally we dwell on the failures of the United Nations, forgetting that the member states alone possess the power to give it the direction, strength and resources it needs. Equally, we have at times an understandable wish to accentuate the positive aspects and hope for quick solutions to extremely complex problems.

A more balanced view is possible, however. The United Nations has survived and grown in maturity. Its Charter and structure have proved surprisingly flexible. The organization, has adapted itself to change in a period of rapid decolonization, greatly expanded membership, and scientific and technological revolution. The work of its functional bodies is now increasingly concentrated on social justice, the promotion of human rights and the paramount problem of economic development.

It seems to me that these preoccupations form a positive response to the crucial problems of our time and to the aspirations of youth in all countries. The problems of youth — our problems — are increasingly reflected in the agendas and debates of United Nations bodies.

As the United Nations has changed, since the postwar period, so has Canada. In the present and in the future, Canada possesses the opportunity and the resolve to participate actively in the work of the United Nations and its Specialized Agencies. In particular, we intend to draw on Canada's resources, its bilingualism, its excellence in modern science and technology and our experience with a federal system of government to communicate with other member states, particularly the developing countries, in order to make a distinctive contribution to selective fields of endeavor. In so doing, we hope not only to attain a richer measure of national self-realization for Canada but to make a substantial contribution to the developing countries and thus help others to realize their own potential.

In conclusion, I wish to assure Secretary-General U Thant, the executive heads of the Specialized Agencies and other organizations, and the members of the international secretariats of the Canadian Government's appreciation for their endeavors and our support for the conception of global co-operation embodied in the work of the United Nations family.