

## Standards

The primary physical standards for Canada are maintained by NRC, which enters into international agreements concerning weights and measures. In addition to regular calibration of industrial standards, considerable research is done on the improvement of the primary standards. Recently NRC made a distinguished contribution towards the adoption of a new standard for the metre, which is now based on wave-lengths of orange light emitted by an isotope of krypton. Advanced developments are being made by NRC physicists in the measurement of time, electrical quantities, heat, light, color, and acceleration due to gravity.

## Technical Information

In 1945, NRC established a Technical Information Service (TIS). The purpose of this office is to bring together problems of industry and the technological facilities of the Council. TIS receives a large volume of enquiries each year, mainly from companies in the secondary and processing industries. In 1961, for example, about 17,000 enquiries were dealt with on a wide variety of problems. Most of the TIS work is with small and medium-sized firms possessing little or no technical staff; but large firms also make frequent use of the service because of the vast amount of material in technical periodicals and other scientific information available through NRC library facilities and the Council's foreign liaison offices. The Information Service itself does not operate research or testing laboratories, but it has at its disposal the technical experience of the NRC laboratories and is well acquainted with the services of other government laboratories and private consultants. Besides its central staff at Ottawa, TIS maintains local representatives across Canada, who work in co-operation with the field staffs of the provincial research councils, now five in number.

The Technical Information Service issues reports on current developments in technology that have wide application in industry, and each year a number of information notes are prepared in order to bring the smaller type of firm up to date on new manufacturing facilities, productivity techniques and scientific innovations.

## Research in Industry

In 1961 NRC appointed an advisory committee on industrial research the aim of which was to bring industrial management into closer contact with the work of NRC and to keep NRC informed of the problems of industry. The committee, composed largely of top management of leading Canadian companies, also considers ways of encouraging greater research activity within industry.

In 1962 NRC established a Committee on Industrial Research Assistance (CIRA) whose membership was composed of senior representatives from government agencies having a direct interest in industrial research. The new committee is to assist NRC in an experimental programme aimed at fostering long-term research in industry. In 1962 an initial fund of \$1 million was provided by the Government to help finance projects undertaken by industrial firms. The cost of projects aided under the plan will be shared more or less equally between NRC and industry. Projects are to be of company choice and the results will remain the property of the respective firms. In allotting the available funds preference will go to longer-term projects that appear to have potential for major industrial advances.

## Patents and Development

In 1947, NRC established Canadian Patents and Development (CP&D), the Crown Corporation that patents NRC developments and inventions and makes them available under license to industry. CP&D also performs this service for other government laboratories and for Canadian universities.