

## NON-PROLIFERATION PACT

The Secretary of State for External Affairs, Mr. Mitchell Sharp, has announced that the Canadian Ambassadors in Washington and Moscow and the Canadian High Commissioner in London deposited on January 8 in these three capitals, instruments of ratification effecting Canadian accession to the Treaty on the Non-Proliferation of Nuclear Weapons.

The Nuclear Non-Proliferation Treaty, which was endorsed last May by the majority of United Nations member states at a special session of the General Assembly, was opened for signature in Washington, London and Moscow on July 1. Canada signed in Washington and London on July 23 and in Moscow on July 27. More than 80 nations have now signed the treaty. Before it comes into effect, 43 states, including the three nuclear powers which have signed must deposit ratifications.

Mr. Sharp, who had announced to the House of Commons last month, Canada's intention to ratify the treaty, expressed the hope that all nations would "recognize the importance of the treaty and accede to it".

As a member of the Eighteen-Nation Disarmament Committee, Canadian representatives played an important role in the negotiations that culminated in agreement on the ratification of the treaty. The Canadian Government has supported the treaty prin-

ciples as essential to progress in reducing international tensions and in curtailing the nuclear arms race. Canada's decision to ratify the NPT was based in part on the belief that there was little prospect of progress toward controlling the dissemination of nuclear weapons or towards general disarmament unless this treaty came into force.

The treaty prohibits nuclear parties from transferring nuclear weapons and other nuclear explosive devices, or control over them, to non-nuclear parties and binds non-nuclear parties not to produce or otherwise acquire control of such weapons and devices. It will result in the application of international safeguards to the peaceful nuclear activities of non-nuclear parties to ensure that source or special fissionable materials intended for peaceful purposes are not diverted clandestinely to military purposes. The right of non-nuclear powers to exploit nuclear energy for peaceful purposes is reaffirmed and the principle that the benefits of peaceful nuclear explosions should be made available to non-nuclear parties is acknowledged.

Canada is satisfied that these are the optimum provisions available at present and that on this basis the Non-Proliferation Treaty should be brought into force at the earliest possible date.

## WAR ON FOOD-POISONING

Two Canadian scientists are leading an international campaign to prevent the spread of diseases through bacteriologically-contaminated foodstuffs.

Dr. F.S. Thatcher, Chief, Division of Microbiology, Food and Drug Directorate, Department of National Health and Welfare, and Dr. D.S. Clark of the Food Technology Section of the National Research Council's Division of Biology are the chairman and secretary of the International Committee on Microbiological Specifications for Foods, a standing committee of the International Association of Microbiological Societies.

The committee - composed of 20 leading microbiologists from government, university and industrial laboratories in 11 countries - has spent four years compiling data on microbiological methods for determining food-poisoning and indicator organisms in factory-processed foods. Meetings have been held in Montreal, Cambridge, Moscow and London.

The University of Toronto Press is publishing the results of their deliberations under the title *Microorganisms in Foods: Their Significance and Methods of Enumeration*.

Dr. Clark said that the purpose of the book, which will prove invaluable to all concerned with the microbiological content of foods, whether in government-control agencies, industry, teaching or research institutions, is to describe in detail test methods judged effective for the various categories of food-poisoning micro-organisms - together with an appraisal of the significance of these organisms in foods. He commented as follows:

"A major part of our work to date has been to select the best methods available for the determination and enumeration of bacteria such as salmonellae and shigellae, which multiply in the intestinal tract causing disease through infection of the host, others such as staphylococci and *Clostridium botulinum*, whose toxins, present in food at the time of consumption, are direct causes of illnesses, and of certain bacteria, although themselves harmless, which indicate the possible presence of pathogens in foods.

"Later, we hope our programme of international interlaboratory-testing will enable us to go one step further and eventually recommend one method for each category of bacteria. It is our hope that these 'tried and proven' methods will be accepted internationally, particularly for food moving in international commerce. This is a prerequisite to the formulation of standards of acceptability for foods both nationally and internationally. A common basis of judgment would avoid many contemporary problems in the safe movement of foods."

### TESTING PROGRAMME

A first step towards this goal has already been taken. Dr. Thatcher has organized a comparative testing programme involving 39 government and university laboratories from many countries. The first test relates to salmonellae but all important categories of food-borne bacteria will eventually be involved. Samples are sent out from the Food and Drug Directorate to these laboratories for testing under specified procedures. Results are to be returned to Ottawa for analysis.