



17. It is for this basic reason that the sponsors of the present document believe it essential for any disarmament agreement to include an effective verification system. A general approach to disarmament negotiations can establish priorities only in the light of this fundamental requirement.

18. The magnitude of the risk that a nuclear conflict would entail has been, and still is, an essential element in the prevention of conflicts. It also explains the importance which is attached to disarmament negotiations in the nuclear field.

19. Successive events since 1945 have shown the consequences, in millions of deaths and in devastation, of the use of conventional weapons. The sponsors are therefore convinced that a gradual and balanced reduction of conventional weapons would have a positive impact on the reduction of tension and hence on the prospects for disarmament in general, and the reduction of nuclear weapons in particular.

20. The study on conventional disarmament carried out by the group of experts set up for this purpose drew attention to a series of other positive aspects which should make progress in this area possible.

21. On the basis of these considerations, the sponsors believe that a general approach to disarmament negotiations on both nuclear and conventional weapons should be based on the following principles:

- (a) The priority objective is the prevention of all conflicts;
- (b) all States should contribute to negotiations aimed at the conclusion of balanced and verifiable disarmament agreements, while bearing in mind the special responsibility of the two major Powers;
- (c) the agreements should provide for concrete measures, and should not be limited to declaratory and rhetorical commitments;
- (d) the agreements should include an effective verification system so as to avoid the risk of suspected or actual violations heightening mistrust between the parties;
- (e) the negotiations on the subject of disarmament should result in a balance at the lowest level of forces and promote stability;
- (f) with a view to preventing all types of conflicts, the negotiations should take

into account the risks not only of nuclear conflicts, but also of those of a conventional nature;

(g) within this framework, conventional disarmament should be considered as an essential element of the global disarmament process;

(h) negotiations in this field should be pursued with the parallel aim of concluding balanced and verifiable agreements

on measures to lessen the risk of surprise attacks and build confidence;  
(i) the Conference on Disarmament, as the single standing multilateral negotiating body, should play a leading role in solving the complex of items that are on its agenda, as well as in drawing up vital agreements such as the one now being negotiated on the subject of chemical weapons."

## **University of Saskatchewan Hosts Symposium on Bhopal Gas Tragedy**

*The following article was prepared by the Arms Control and Disarmament Division of the Department of External Affairs.*

The University of Saskatchewan hosted an international symposium September 25-27 entitled "Highly Toxic Chemicals: Detection and Protection Methods". Participants came from the USA, UK, Sweden and France as well as from Canada. The keynote speaker was Professor J.M. Dave, Dean of the School of Environmental Sciences at Jawaharlal Nehru University in India. Professor Dave and his staff were involved in the immediate scientific investigation as well as in the longer-term inquiry related to the Bhopal gas tragedy in early December 1984.

The Arms Control and Disarmament Division of the Department of External Affairs recognized that there might be lessons to be learned from the Indian investigation of this tragic event which could be relevant to Canada's interest in developing procedures for the investigation of allegations of the use of chemical weapons. Given the scientific focus of the symposium and its relation to verification problems, it was partially funded by the Department's Verification Research Programme.

The tragedy that befell Bhopal had nothing whatsoever to do with the production or use of chemical weapons. It was an industrial accident, albeit one of mammoth scale, in which approximately 2 500 people are reported to have died and many thousands of others required medical treatment. Apparently the release of methyl isocyanate (used for the production of the insecticide Sevin) and, pos-

sibly, certain other chemicals occurred over a period of less than an hour. It is estimated that 150 000 to 200 000 people of a city population of 800 000 were exposed to the gas discharge.

In this context, the problems encountered by the Indian authorities in investigating the gas release and in determining the cause of injury and death were all of particular concern to participants in the symposium. Even in this well-defined situation where officials and scientists had timely access to the site and knowledge of what the plant was producing and of its production process, there is still considerable speculation and controversy over the cause of the immediate (as opposed to longer-term) deaths. If such problems exist in "verifying" an incident in which authorities have timely access with all of the necessary medical and scientific support, this highlights the difficulties involved in verifying allegations of the use of chemical weapons in remote areas where access — timely or otherwise — may not be permitted.

One presentation at the symposium, by Dr. Ron Sutherland of the University of Saskatchewan, drew a parallel between the requirements of investigations of accidental discharges of chemicals and investigations of the alleged use of chemical weapons. He suggested that an ancillary role for a technical secretariat, which might form part of the verification regime of a future chemical weapons convention (currently being negotiated in the Conference on Disarmament), could be to assist national authorities, especially of developing countries, in the event of industrial disasters in the future.