

**Academician Nikolai .A. PLATE`**

**Keynote speech at the reception given by the Organizing**

**Committee of the Conference**

**“International Approaches to Nuclear and Radiological Security”**

**London, September 30, 2002**

**Mr. Chairman,**

**Ladies and Gentlemen**

- It is a great honour to be a speaker at this important International Meeting organized by US Department of Energy John Wood, Jack Caravelli and their colleagues.
- The Conference we attend is an extremely important one. The first day of it has already shown what are the main problems we are faced in the area of Nuclear and Radiological Security and what practical steps should be undertaken in the light of vital challenges the modern world of civilization is meeting when international terrorism is trying to overthrow it.
- Our conference is devoted mainly to the nuclear and related problems but I think that the main principles, strategies and general approaches we'll elaborate are absolutely applicable to the chemical and biological antiterrorism policy. This last ones are of the same vital importance as we discuss here now and may be the next conference of this type should be devoted exactly to these two issues.
- What we have done in Russia during the last year in strengthening the efforts of political power and of scientific community to get more security on national and international level?
- To recognize the role of science and scientists last year Presidential Council for science and high Tech has been created under the Chairmanship of President Putin.

This council (academician Velikhov and myself we are members of it) together with the National Security Council has considered and approved the main principles of the technological and socio-economic policy of Russia where the role of science and of scientific approach has been stressed. One of the aspects of this policy is to prevent by all means the international terrorism attempts to explode our world and to guarantee the safety and security of the country.

Some of the recommendations of this Council are already taken as practical steps in presidential and governmental initiatives.

Russian Academy of Sciences is playing important role in the activity of this Council and we are working in close contact with National Security Council in this direction.

- In summer 2001, three months before September 11 US National Academy of Sciences together with Russian Academy organized and realized in Moscow a three days seminar "Struggle against high tech terrorism in the modern world" where various aspects of nuclear, chemical, biological, radiological, computer, electromagnetic and other types of terrorism have been discussed and some important recommendations how to fight it have been done.
- Here is the booklet of the papers of this Symposium published in English and in Russian.
- I give it to the chairmanship of our conference. A group of prominent American scientists and specialists led by Professor Sig Hecker from Los Alamos (who is with us today) took part in this seminar.
- So even before September 11 we understood the danger and probability of terroristic attacks on global scale. It seemed to the participants of the seminar that we have discussed practically all aspects of technological terrorism. Unfortunately we

underestimated this evil and did not take into consideration the aircraft attack on the skyscrapers.

- Now we are preparing the next bilateral seminar with our American colleagues. To activate and to unify the efforts and the experience the specialists of Russia and USA have until now in the antiterrorism policy, the special joint Committee composed of members of both National Academy of Sciences in Washington and Russian Academy of Sciences has been organized this spring. The initiative came from the President of NAS Bruce Alberts and this committee has two co-chairs - Prof. Sig Hecker and academician Evgenii Velikhov.

It is worth to mention that six from 10 members of this committee on Russian side are present here at this conference.

- The aim of this committee is to analyze different technical approaches how to identify possible terrorists, how to prevent the terrorist attacks and how to minimize the damage if it happens. The main goal is however to elaborate proposals and suggestions to the White House and to the Kremlin, as well to corresponding ministries and organizations what should be done on national and international level in legislation activity, in technical measures and education and humanitarian activity to fight with terrorism as with one of the global danger for all of us today.
- Within Russian Academy of Sciences we have created few months ago also a special consultative Council for the problems of fighting against international terrorism. This Council chaired by the Academy's President Prof. Juri Ossipov (vice-chairmen are vice-president Nikolay Laverov, former vice-president Vladimir Koudryavtzev and vice-chairman of the Security Committee of the State Duma) has three sections.
  - a) Section on social, criminological and legal measures to oppose the terrorism
  - b) Section on scientific and technical counteractions to terrorism

c) Section on interaction with national and international public organizations and  
Mass Media

- Several sessions of this Council has already been organized, the recommendations of our council were submitted to governmental agencies, have been approved and part of them are already in realization.
- As one of the results of this activity may I present to our chairman a brochure which came out of print just last week about social and psychological problems to fight international terrorism. In the beginning of 2003 we plan to make another book about technical aspects what are the problems and how to oppose high-tech terrorism.

Modern terrorism has no religions or national frontiers and that is why beside the technical measures in antiterroristic activity we should seriously think about national and international education programs to teach and to train youngsters how to live in civilized world.

- Few words about chemical and biological terrorism. They are very dangerous and in some aspects more difficult to fight against these types of terrorism. It is often said that chemical weapon is the atomic bomb of poor and undeveloped countries. Unfortunately to prepare chemical super toxic agents is much easier then to make nuclear devices, but the real and especially psychological effect from using them is from some viewpoints bigger. Remember the action of the "Aum Senrique`" group in Tokyo metro few years ago.
- In Russia we have high positioned State Commission on Chemical disarmament led by Presidential nominee, his official representative in Volga region – Mr. Kyrienko. This Commission whose member I am is organizing all the process of the deterioration of CW stockpiles and we are collaborating with US, UK, Germany and other countries.

- This August we have opened, and I participated in it, the first line of newly built chemical plant for destruction of Lewisite – one of the oldest CW agents.

This ceremony held in presence of several dozens of diplomatic representatives and journalists showed that Russia is strictly following the approved time schedule for CW deterioration. One of the aspects of all these procedures is to install and keep double, triple and quaternary lines of safety and security control to prevent the unauthorized access to any place where the CW agents can be met.

- To discuss scientific issues of chemical, radiological and biological protection of people (armed forces and population) we have created some time ago at the Academy Interdisciplinary Scientific Council which aim is to give recommendations to the authorities what measures should be undertaken to organize better technical protection control for personnel being in contact with toxic materials.
- Biological weapon and bioterrorism. It already took place with anthrax envelopes in US. My friend Prof. Lev Sandakhchiev will tell about that more in details. Here I would like only to point out that our understanding that anthrax, pest, yellow fever, Ebola fever and other bacteria and virus based species are most efficient and widespread dangers in biological warfare seems to be inadequate today.
- Much more dangerous could be the products of gene-engineering if instead for instance vaccines somebody in modern classical laboratory of molecular biology will purposely manipulate with DNA introducing particular fragments in the genome to make organism lethally ill in very short time.

That danger is not recognized either by authorities or by public opinion in full scale yet but specialists are already talking about it loudly and our duty is to mobilize intellectual and financial efforts to this absolutely new danger to develop efficient

system to identify probable bioterrorists and to develop reliable control for preventing intrusion.

Thank you for your attention and patience.