

three countries demonstrate waste disposal

Scientists from fourteen countries made a five-week tour of Czechoslovakia, Poland and the USSR in the late summer to study how those countries, with nuclear programmes generally in advance of their own, have tackled a problem which is common to all: how to dispose safely of radioactive waste.

Discussions in Moscow.



Of the countries represented on the tour some have nuclear reactors already, and others may eventually have to consider requirements for additional sources of energy and possible needs for research facilities. All of them use radioisotopes, in hospitals and in scientific and industrial applications, and all have to deal with the waste from this work; by-products contaminated with radioactivity, or "hot" materials which must be stored safely. But their techniques for doing so differ widely.

The tour was designed to show as much treatment and disposal work in the host countries as was possible in a reasonable period of time. It was organized by the International Atomic Energy Agency in collaboration with the three host governments and with funds supplied under the United Nations Development Programme. This was the third study tour to be arranged: the first, in August 1966, was to the USSR, the United Kingdom, France and Czechoslovakia to see practical uses of radioisotopes in industry, and the second, last April, was to the USSR, Poland and Czechoslovakia to study developments in and the organization of programmes to protect workers and the public from the effects of radiation.

The participants on this latest tour came from Brazil, Chile, Greece, India, Indonesia, Iraq, Nigeria, Pakistan, the Philippines, Sudan, Thailand, Turkey, Venezuela and Yugoslavia. They attended extensive briefings in Vienna, at the headquarters of the Agency, then in mid-July moved on to Prague to begin nine days in Czechoslovakia.

They visited the Czechoslovak Uranium Plant at Mydlovary, the Institute for Production, Research and Utilization of Radioisotopes, Prague, the Central Waste Disposal Station at Litomerice, the waste treatment plant at the Nuclear Research Institute at Rez, and the radiochemical laboratories of the Institute of Synthetic Varnish and Resins, Pardubice. The party then went to Poland for four days, visiting the Nuclear Research Institute at Swierk, the Waste Burial Centre and the offices of the Polish Government Commission for the Use of Nuclear Energy, Warsaw, and at the end of the month travelled to Moscow.

Here began probably the most intensive part of their tour. A week of lectures at the UN Information Centre in Moscow — there were discussions and lectures throughout the tour — was followed by visits to the Novovoronezh Nuclear Power Station, the V. G. Khlopin Radium Institute and the Radiation Health Research Institute in Leningrad, the Atomic Reactors Research Institute at Melekess, the Decontamination Centre, the I. V. Kurchatov Institute of Atomic Energy, the "Isotop" All-Union Combine and the Atomic Energy Pavilion, all in Moscow, and the Central Radiation Survey Station, Zagorsk. The tour ended in Vienna with more meetings and discussions at Agency headquarters.

It was agreed by all those taking part that the tour would have lasting value to them and to their countries. One practical benefit was highlighted by the Sudanese representative, Mr. Omer I. Elamin, in his report on the tour when he said it had given him "the opportunity to meet not only scientists in these three countries but also the other members of the group with varying degrees of experiences under different conditions with whom I could discuss all problems I had in mind and with whom I can communicate in the future concerning all problems one may face in the field..."

announcement: IAEA bulletin to accept advertisements

From the beginning of 1970 the International Atomic Energy Agency will accept advertisements in the IAEA BULLETIN for equipment, services, fuel and other matters related to atomic energy.

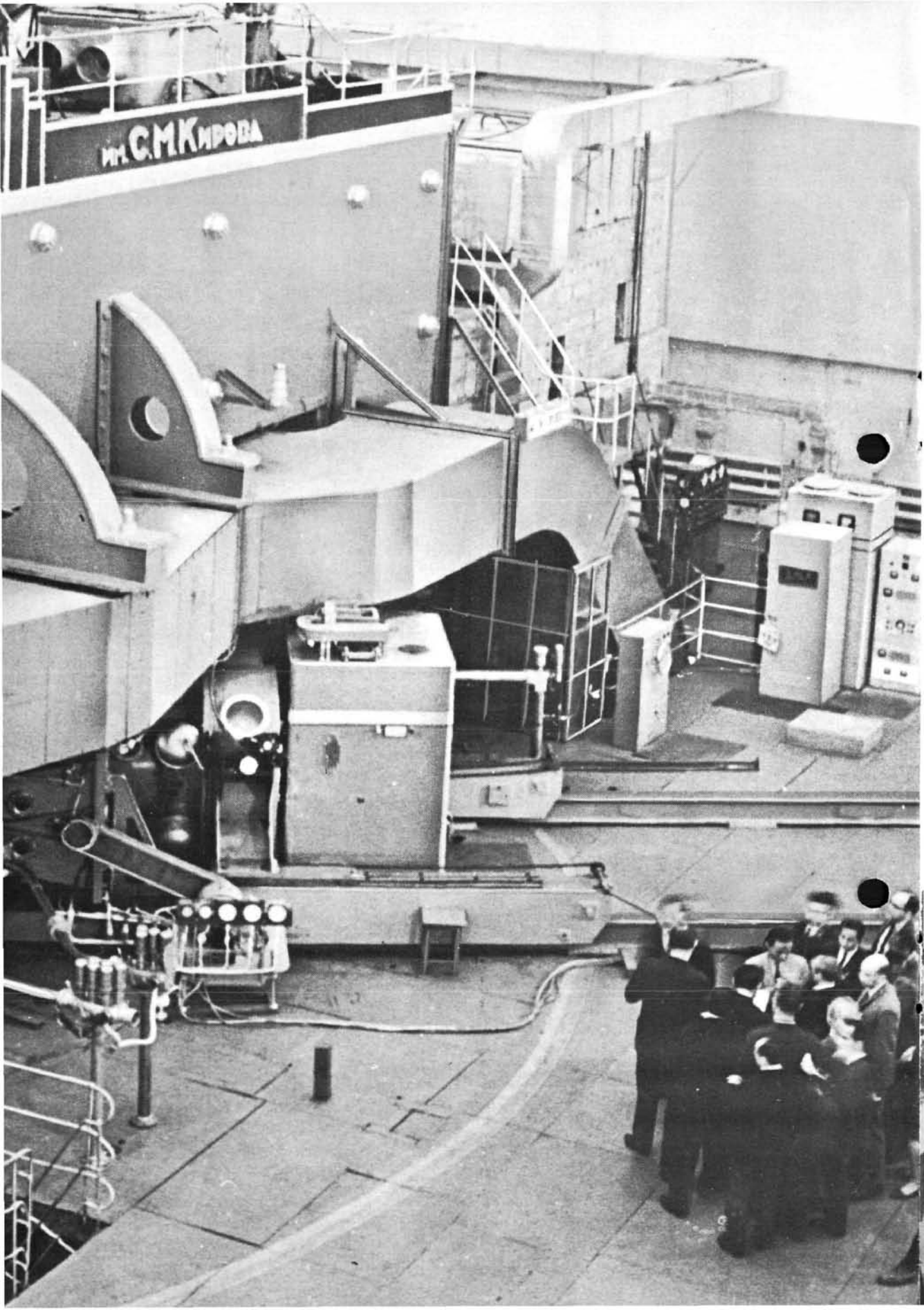
The International Atomic Energy Agency was established in 1957 to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. Besides providing technical assistance and recommendations in generating nuclear projects, it disseminates information to its 102 Member States and others.

The BULLETIN is one of IAEA's regular approaches to the interested world. Published every two months (February, April, June August, October and December) in English, French, Russian and Spanish, it goes to appropriate Government Departments in all of the Member States, Atomic Energy Commissions, research and development establishments, industrial organizations, universities, scientific and engineering institutions, colleges, schools, science journalists and in addition to a selected list of interested scientists throughout the world.

The BULLETIN provides an exceptional possibility of reaching those responsible for planning and executing national and private nuclear programmes. For nuclear power alone it is estimated that total world annual expenditure will increase from 3.2 billion dollars in 1970 to more than 14 billion in 1980, of which the fuel cycle will account for more than five billion dollars. At the same time there is a corresponding expansion in research and applications related to the use of radioisotopes and radiation in medicine, agriculture and industry.

Advertisements will be accepted in the original language submitted, for use in all editions. Further details may be obtained on request from:

The Director, Division of Publications,
International Atomic Energy Agency,
Kärntner Ring 11, P.O.Box 590,
A-1011 Vienna, Austria





Outside the Novo-Voronezh reactor

The Greek representative, Mr. Spyridon Amarantos, commented on a second aspect — that information given during the tour "will be useful in Greece in... the preparation of the legislation and the relevant regulations concerning radioactive waste." Others made similar comments. Mr. Victor R. Amalraj, of India, pointed out that "waste management philosophy and the treatment schemes have to be developed by every country based on its own local conditions. It is, of course, very advantageous to take lessons from other countries and adopt the same to meet the specific requirements... I am sure to derive the maximum benefit from the information collected for future use in my country."

The Pakistan representative, Mr. M. A. Mubarak, reported similarly that "this tour has been a good and useful opportunity for me to gain some knowledge about the details of many methods and techniques in the field of radioactive waste management. This knowledge will be useful in solving some of the problems of waste management in Pakistan."

And, in Mr. Mubarak's words, "more and more developing countries are going to have nuclear power stations and fuel reprocessing facilities very soon, and since the types of waste from such installations are the most difficult and dangerous to manage the Agency can play a very useful role by extending the scope of its present activities to the management of more difficult and more hazardous radioactive wastes."

Large accelerating machine at Dubna. Photo taken on a previous study tour.