

WELCOME ADDRESS TO THE 24th INTERNATIONAL MEETING ON REDUCED ENRICHMENT FOR RESEARCH AND TEST REACTORS

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Good morning Ladies and Gentlemen, my name is Pablo Adelfang and I am the head of the Department of Nuclear Fuels of the National Commission of Atomic Energy of Argentina (CNEA). On behalf of the Government of Argentina, it is a pleasure to welcome all of you to the 24th International Meeting on Reduced Enrichment for Research and Test Reactors.

I would like to thank all the attendance for joining us today; I know that for nearly all of you it has been a long way to be here and I want to express my appreciation for that. I am especially happy to know that we have almost 200 participants coming from almost 30 different countries. Among them we have representatives from governmental and international organizations, private companies, reactor operators, fuel developers, regulators and participants from Argentina, Brazil, Chile, Mexico, and Peru attending the workshop of the IAEA supported Latin America Technical Co-operation Regional Project on Management of Spent Fuel from Research Reactors (RLA/4/018).

This meeting has been organized in cooperation with the International Atomic Energy Agency and I would like to remark the support of the Agency to this conference and also its continuous commitment with the RERTR program. I particularly wish to thank the RERTR Program authorities for awarding us with the honor of hosting this meeting. I understand that this is a clear acknowledgment of the commitment of Argentina with the RERTR objectives, international non-proliferation policies and peaceful uses of nuclear energy.

I would also like to thank our sponsors for their very important financial support.

Argentina has been an active participant of the RERTR program since the seventies. An important milestone of the Argentinean RERTR program was the development and manufacturing at industrial scale of U_3O_8 dispersed fuel and its subsequent application to the conversion of the RA-3 reactor core to LEU fuel.

More recently, our activities were focused on the development of U_3Si_2 fuel with a density of 4.8 gU/cm^3 and the improvement of the manufacturing process of this type of fuel. The program to qualify CNEA as a supplier U_3Si_2 dispersed fuels is scheduled to finalize by mid 2003.

Currently, one of the main objectives is to develop and qualify the technology for the production of high-density LEU fuel elements using U-Mo alloy. An original way to produce U-Mo powder (the HMD process) was developed and its being upgraded to plant scale production. To hasten this program the main research reactor of Argentina, the RA3, raised its power from 5 MW to 8 Mw in October this year. This is an intermediate step in the program to increase RA-3 power to 10 MW.

Another significant progress, attained during the last two years, was the development of LEU targets for the production of ^{99}Mo , in the form of miniplates prepared with dispersed LEU U-Al_x . The manufacturing technology and radiochemical processing have been fully developed and implemented. I am proud to announce that, at present, highly enriched uranium is no longer employed to produce ^{99}Mo in Argentina. This is a direct consequence of the recent successful industrial implementation of these new LEU targets.

The shipment to USA of 207 MTR spent fuels containing US origin highly enriched uranium, successfully carried out in the end of 2000, is another remarkable achievement of the Argentinean RERTR program. This activity was carried out in the framework of the United States Foreign Research Reactor Spent Nuclear Fuel Acceptance Program. The fuels were fabricated in Argentina and used in the RA-3 reactor from 1968 to 1987. The inventory of the shipped HEU spent fuel consisted in 166 standard assemblies and 41 control assemblies.

The strong involvement of Argentina in the RERTR program will continue in the future and will be even increased. Examples of this are the present active participation of CNEA in the international effort to qualify U-Mo fuel and the planned activities to implement the use of uranium foil LEU targets in the Argentinean ^{99}Mo production facility.

I am deeply convinced that the world is, at present, at the gates of a revitalization of nuclear generation as a convenient, safe and clean source of energy. In the literature worldwide we know about new nuclear programs, innovative power plant design and more cost effective and safer concepts for the nuclear fuel cycle. Research reactors will have a lot to do with this nuclear revival. Among other things, new materials will need to be tested and characterized, new fuels will require irradiation experiments to assess operational limits and properties and more young professionals and technicians will have to be trained. Of course, one has also to consider the ever-increasing demand for industrial and medical radioisotopes. So, despite the present problems and difficulties, I envisaged a bright future for the research reactor community.

Let me make a final consideration related with what I said before: besides technical and scientific commitment to improve safety and reliability of research reactors design and operation, we have to face a different and much more difficult challenge. It is our responsibility to respond to public concerns, especially on issues related with the back-end of the nuclear fuel cycle. Not only have we to be excellent at doing our specific job, but also to communicate to the public our achievements and policies, especially those related with non-proliferation aspects and safety issues, in a consistent and effective way. This will be the right approach to compensate for the misinformation campaigns that produce public worry and anxiety. This is an undertaking for experts; improvisation may be a big mistake.

Keeping the public informed about the RERTR program policies to minimize and eventually eliminate the use of highly enriched uranium, in order to reduce the associated proliferation risks, is a key issue that will be helpful in increasing the public acceptance of research reactor activities in general. I think that a rigorous involvement of the research reactor community in public communication issues is a must for the near future.

Before giving the floor to the next speaker, I would like to thank all the members of the Organizing Committee for their hard working in preparing this meeting, which I am certain will be a great success. I look forward to a week of exciting interchange of ideas and experience. I wish you all a fruitful meeting and an enjoyable stay in this beautiful city of Bariloche.

Thank you.