#### INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR



# ITER EDA NEWSLETTER

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### **ITER DAYS IN MOSCOW**

by Dr. L. Golubchikov, ITER RF Contact Person

In connection with the successful completion of the Engineering Design of the International Thermonuclear Experimental Reactor (ITER) and the 50th Anniversary of Fusion Research in the USSR\*), the Ministry of the Russian Federation for Atomic Energy (Minatom), with the participation of the Russian Academy of Sciences, organized the International Symposium "ITER Days in Moscow" on 7–8 June 2001.



Opening of the ITER Days

The prime objective of this event was to familiarize the Russian and international communities with the R&D results, in support of the ITER Project, and with the progress in preparation for the possible construction of ITER on an international basis. Academician E. Velikhov chaired the Programme Committee of the Symposium. The sessions were held in the Presidential Hall of the new building of the Russian Academy of Sciences. About 250 people took part in the Symposium, including representatives from the Government of the Russian Federation, the State Duma, the Federation Council, and several Ministries, as well as scientists and engineers from research institutes and industries who actively participated in the ITER Design Activities. Also attending were representatives from the International Atomic Energy Agency (IAEA), the European Commission, Canada, Japan, Kazakhstan, Sweden, the USA, and several embassies and missions in Moscow. The participants of the ITER Days in Moscow were greeted by the Deputy of the Moscow Mayor and by the First Deputy Minister, Dr. L. Ryabev (Minatom). Dr. Ryabev noted that for Russia the ITER Project has always been one of the top priority scientific and technical governmental projects. It is considered as a necessary step to establish basis for a fusion energy source which would be ecologically acceptable, essentially inexhaustible and universally available. In his written message, Mr. G. Seleznev, Chair of the State Duma, greeted the participants of the Symposium and congratulated them on the successful implementation

<sup>\*)</sup> On 5 May 1951, Head of State Joseph Stalin signed a government resolution that nominated I.V. Kurchatov as Leader and L.A. Artsimovich (experiment) and M.A. Leontovich (theory) as his Deputies to head the fusion programme.

of an important phase of the ITER activities (its engineering design). Academician V. Fortov, Vice-President of the Russian Academy of Sciences, and Academician M. Kirpichnikov, First Deputy Minister of Science and Industry of the Russian Federation, also congratulated the ITER participants.

Mr. Carl Lindberg, Swedish Secretary of State, spoke at the opening session and noted, in particular, the negative influence of all presently used energy sources on the environment. He further said "this we have to tolerate since the industry and all aspects of our life in modern society are based on energy consumption. Therefore, we need to develop new clean and readily available energy sources to be used worldwide and, in this respect, we have great hopes for fusion and are looking forward to the next step in fusion energy development - the construction of ITER."

Dr. I. Tadgibaeva, DDG of the National Nuclear Center of Kazakhstan welcomed the participants on behalf of her colleagues. The Kazakh scientists participate in the ITER Project through the RF Party.

Of special interest for the participants of the Moscow event was the presentation of H.E. Rod Irwin,



Acad. E. Velikhov speaking on ITER history

Ambassador of Canada to Russia, who, stressing the importance of developing new, cleaner energy sources for our planet, said that the members of ITER have clearly demonstrated their commitment to this goal. Further he pointed out that during his posting as Ambassador of Canada, he has made many contacts with Russian officials on the subject of ITER, and Russia's strong commitment to ITER has always been clearly evident.

On behalf of the Government of Canada, Ambassador Irwin formally announced Canada's offer of the Clarington site, located just east of Toronto, on the northern shore of Lake Ontario, as location for the joint implementation of ITER. (For details please see the next article).



Participants in the ITER Days. In the first row is the Japanese Delegation



Dr. D. Sood presenting the IAEA view

During the working sessions, Dr. M. Yoshikawa (Japan) made a presentation on the "Role of Fusion in the Energy of the Future" and Academician E. Velikhov (RF) spoke on the history of ITER, beginning with the conception of the idea of international fusion collaboration, then the establishment of the International Fusion Research Council (IFRC) under the auspices of the IAEA on Academician Lev Artsimovich's initiative, followed by INTOR (1978–1984), ITER CDA (1988–1990), and the ITER EDA up to this point in time, which has been described by leading world fusion experts as the time when the ITER Project is ready for a decision to be made on its construction.

Dr. R. Aymar, ITER Director, spoke on the ITER objectives and its main parameters as well as on the organization of the overall activities of this unique project. Contributions by the HTs of EU, Japan and the RF to the success of the ITER Project were described by Drs. J.-P. Rager, Dr. T. Tsunematsu and Dr. O. Filatov, repsectively.

The program of scientific presentations also included the following lectures:

- · "US Interests in Burning Plasmas", by Dr. D. Baldwin, Senior Vice-President of General Atomics (USA);
- "ITER Physics Basis", by Dr. V. Chuyanov,;
- · "Effect of Fusion Research on General Physics", by Dr. A. Kingsep, NFI RRC Kurchatov Institute; and
- "Fusion Power Reactors" by Dr. G. Shatalov, NFI RRC Kurchatov Institute.



During the break: former RF Minister of Atomic Energy and TAC Member E. Adamov and Acad. V.Glukhikh (sitting) in company with the ITER Garching JWS Director V. Chuyanov (standing left), the Deputy Leader of the Russian ITER Home Team, V. Beljakov, and Dr. V. Panzernyi from Bochvar Institute.



During the ITER Days in Moscow, an exhibition and a poster session dedicated to fusion and ITER-related activities were organized in the lobby of the Presidential Hall of the Russian Academy of Sciences.

More than sixty representatives from the Russian and international media were accredited in the Press Center of the Symposium.

Coffee break: old colleagues Dr. K. Tomabechi, ITER Management Committee Chairman during ITER CDA (right), and Prof. P. Rutherford, former TAC Chair

### **CANADA LAUNCHES BID TO HOST ITER\***

"It is with the greatest pleasure that I now, on behalf of the Government of Canada, hereby formally announce Canada's offer of our Clarington site, located just east of Toronto on the northern shore of Lake Ontario, as the location for the implementation of ITER in Canada." With these words Rod Irwin, Canada's Ambassador to the Russian Federation, launched the Canadian bid to host ITER on 7 June at the ITER Days celebration in Moscow. The announcement was made in the Presidential Hall of the Russian Academy of Sciences. It was very well received by the international participants and was viewed with great interest by the Russian media present.



Ambassador Irwin presenting the Clarington Site

Dr. P. Barnard, Chairman and Chief Executive Officer of ITER Canada, also spoke to the plenary session of ITER Days and provided an overview of the Canadian bid to the Quadri-Partite Meeting on ITER Negotiations. The bid is the first to be received by the ITER Parties and is a comprehensive 3-volume, 450-page document. The full text of the bid is available on the ITER Canada website at http://www.itercanada.co/pdf/index.html.



Dr. Barnard speaking to the ITER Days Participants

With respect to ITER site offers, this Newsletter will report on the presentation of the offer only and will direct interested readers to the proponents' Web sites or contact points for further information on the content of the offer. This policy will apply to all offers and will apply until such time as the Negotiating Parties are in a position to report in the Newsletter on the joint assessment of site bids.

<sup>\*</sup>Editorial Note:

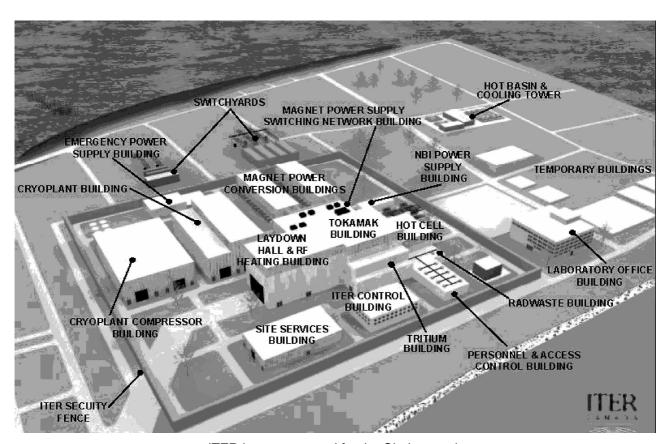
Closing his statement, Dr. Barnard said: "The launch of the Canadian bid to host the ITER project is an important step in making ITER a reality—the next crucial link in the development of fusion as a sustainable source of cleaner energy for our planet. Canada looks forward to participating in the upcoming negotiations, and the implementation at Clarington in 2003."



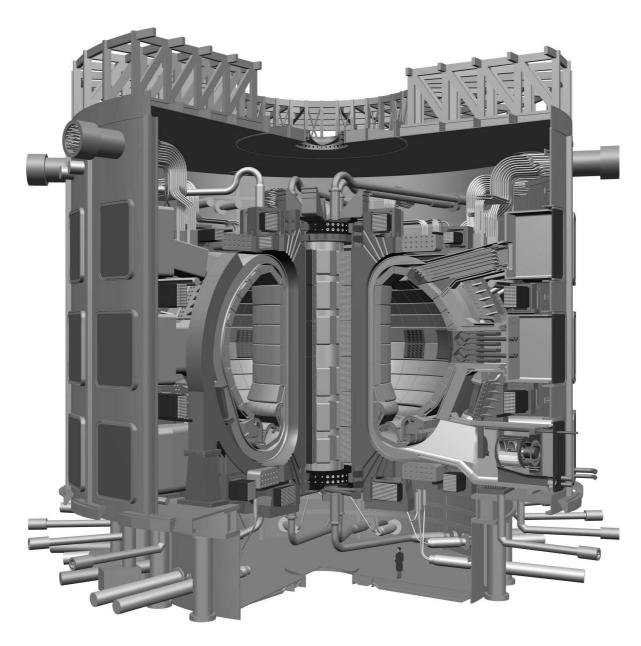
Canadian Bid Document

The Canadian bid document is organized into 14 sections, the first being the letter of presentation and a summary. The other sections provide a complete documentation of the Canadian bid, including, among other documents, the Technical Scope of the Plan, the Project Schedule and Organization and Licensing of ITER in Canada. It is available in its entirety at http://www.itercanada.com/pdf/index.html.

The conditions for beginning the ITER Coordinated Technical Activities (CTA) require a site offer and acceptances by each of the governments concerned of the IAEA's invitation to participate. With the Canadian site offer made and governmental acceptance of the IAEA invitation in progress, the CTA are expected to begin immediately after the end of the EDA.



ITER layout proposed for the Clarington site



ITER Design as presented in the ITER EDA final documents

Items to be considered for inclusion in the ITER Newsletter should be submitted to B. Kuvshinnikov, ITER Office, IAEA, Wagramer Strasse 5, P.O. Box 100, A-1400 Vienna, Austria, or Facsimile: +43 1 2633832, or e-mail: c.basaldella@iaea.org (phone +43 1 260026392).

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