

CEREMONY TO CELEBRATE THE ACHIEVEMENTS OF THE ITER ACTIVITIES
AT THE SAN DIEGO JOINT WORK SITE



The ceremony to celebrate the achievements of the ITER activities at the San Diego Joint Work Site (JWS) was held at the JWS on 14 December 1998.

The speeches by Acad. E. Velikhov, ITER Council Chair, Dr. A. Davies, on behalf of the US Department of Energy, and Dr. R. Aymar, ITER Director, are reproduced on the following pages.

Letters to the USDOE by Dr. M. Yoshikawa, ITER Council Co-Chair and ITER Management Advisory Committee Chair, and by Mr. T. Imamura, Deputy Director General, Science and Technology Agency, Government of Japan, are the most representative among the other messages received on this occasion. These letters are also reproduced in this issue.

The ceremony was attended by the members of the Joint Central Team, the SAIC support staff, high-level representatives of the USDOE, of the University of California, San Diego, and of the local government, as well as of the US ITER Home Team.

The leader of the local press, the *San Diego Union Tribune*, reported accurately on the ceremony in its 15 December issue (see page 7).



**CEREMONY
TO MARK COMPLETION OF
ITER ACTIVITIES
AT THE SAN DIEGO JOINT WORK SITE**

**LARGE CONFERENCE ROOM
AT THE SAN DIEGO JOINT WORK SITE
MONDAY, DECEMBER 14, 1998 AT 4:00PM**

REMARKS

**Academician Evgenii Velikhov
Chair, ITER Council**

**Dr. Anne Davies
ITER Council Member and
U.S. Fusion Program Director**

**Dr. Robert Aymar
ITER Director**

**Professor Robert Conn
Dean, Jacobs School of Engineering, UCSD**

**Dr. Thomas Dillon
Group Vice President, SAIC**

REMARKS MADE BY ACAD. E. VELIKHOV, ITER COUNCIL CHAIR



E. Velikhov

Dr. Davies, Director Aymar, Dean Conn, Dr. Dillon, JCT Members, UCSD/SAIC staff members, colleagues and friends.

Let me start with emphasizing the great accomplishments we have achieved together in our ITER collaboration. The result, so far, of this collaboration is the design of a fusion device that would demonstrate the scientific and technological feasibility of fusion energy. It is, undoubtedly, a remarkable achievement.

In the ITER organizational structure spread over three continents, the San Diego Joint Work Site was responsible for Project Integration during the past six EDA years. In addition to the Integration Division, which provided the overall integration of the design work from the other two Joint Work Sites and the Home Teams, ensuring coherence of the parts of the ITER design and confirming its feasibility, two other Divisions of the site, namely the Safety, Environment and Health Division, the Engineering Division, as well as the Physics Unit have also greatly contributed to the activities.

It would be wrong, however, letting this occasion pass without mentioning our common disappointment. A strong supporter of international collaboration, the US, has to withdraw its participation from the farthest reaching comprehensive and technically successful joint project in fusion research. We regret the Project's loss of the talent, expertise and devotion our US colleagues in the JCT and the US Home Team brought to the EDA.

Nevertheless, I sincerely hope that the three remaining ITER Parties will complete the EDA and will commit to the construction of ITER. We also hope that the situation will change and the US Congress will support further US participation in the most important fusion project in history. We would, of course, greatly appreciate the return of the US to ITER.

In closing, let me, on behalf of the ITER Council, thank you all wholeheartedly for making and serving the San Diego ITER Joint Work Site of which we all can be proud.



Flag Raising Ceremony held at San Diego JWS on 1 October 1993 (Archive Photo)

REMARKS MADE BY DR. ANNE DAVIES, US FUSION PROGRAM DIRECTOR



A. Davies

Chairman Velikhov, Director Aymar, Dean Conn, Dr. Dillon, JCT members, UCSD/SAIC staff members and ladies and gentlemen, I appreciate your participation here today and the opportunity to speak to you as we strive to complete the work for the ITER EDA undertaken here at the San Diego Joint Work Site.

Although the U.S. is winding down our participation in the EDA, today I want to celebrate the great accomplishments we have made together in our ITER collaboration. That we have in hand the design of a fusion experiment that would demonstrate the scientific and technological feasibility of fusion energy, is a remarkable achievement. That the ITER Team could so quickly identify a scaled back design which would still meet the programmatic objectives set for ITER indicates the strength and the skill of the Team. That our partner in ITER appear to be moving forward with the extended EDA, even without the U.S., attests to the strength of the ITER enterprise.

Personally, I fervently hope that the three remaining partners will complete the EDA and will commit to the construction of ITER. At that time, I expect the situation in the U.S. would change, that our community would want very much to participate in the most exciting fusion experiment in history, and that our authorities and our Congress would support us to do so. If so, I hope that our partners would be willing to accept us back into this enterprise.

I would like to take this opportunity to recognize and thank the UCSD/SAIC San Diego ITER Joint Work Site support services team for the high quality of service and support provided by them to the ITER JCT and the Director throughout the EDA.

I have appreciated your support of ITER Council meetings, and I have heard of your support of other meetings here. So I thank you on behalf of all my colleagues in the fusion program for the warm welcome and efficient professional support that all visitors have received.

Although significant changes in the JCT and its management have occurred, including staff attrition, programmatic challenges, and other changes that required the staff to respond quickly, but positively, the UCSD/SAIC team met these challenges, in a manner that was always consistent with providing the highest quality services. Your proactive approach and creativity in meeting the project challenges have been instrumental in enabling the successful EDA effort here at the San Diego Joint Work Site to meet its mission.

I think you have set a high standard in international project support.

Thank you also to the State of California, which has partnered with the Department of Energy in hosting this Joint Work Site. And thanks to the San Diego business community, which has helped with living expenses.

To our guests on the JCT, I want to thank you for your contributions and wish you well as you finish the outline design report and prepare to continue your progress with ITER at the Garching and Naka JWSs.

To the Director, my highest regards and appreciation for your leadership. While it is not clear how often you will want to return here, you will always be welcome. I am pleased to say that our Home Team Leader, Dr. Charles Baker, will keep a desk warm for you, with an ITER flag flying, that you or other ITER visitors can use any time. And I am sure he can also make available rooms for Physics Experts Groups meetings or others.

Again, on behalf of the Department of Energy, I thank each of you, in UCSD, in SAIC, in the government of the State of California, in the local welcoming community, the Director, the members of the JCT and your families, for making this a model Joint Work Site, of which we can all be proud.

In closing, I again wish our partners well in this grand effort called ITER. You must succeed, for all our sakes.

REMARKS MADE BY DR. ROBERT AYMAR, ITER DIRECTOR



R. Aymar

Chairman Velikhov, Dr. Davies, Dean Conn, Dr. Dillon, colleagues and friends. An occasion such as this is inevitably one of mixed emotions - on the positive side we can feel satisfaction and some pride in what we have achieved here and gratitude to those who helped make these achievements possible.

Both previous speakers have spoken warmly of the overall quality of output from this Joint Work Site and I thank them for their kind words. Let me, for the record, be a little more specific in outlining from my perspective the special contribution to ITER made at this site.

When the Parties agreed on the three site configuration, San Diego was dubbed the "Site for Project Integration". Over the last six years, the singular achievement of this site has been to turn this quite abstract designation into concrete outputs from its four main fields of technical activity.

The Safety, Environment and Health Division has transformed the whole field of safety and environmental analysis for fusion energy.

Where previously the safety case tended to rest on a set of generalized assertions, there is now a comprehensive, disciplined and integrated analytical framework, widely applicable, that will stand up to critical scrutiny by regulatory authorities.

In Physics, ITER, through the Expert Groups serviced by the Physics Unit here in San Diego, has been the catalyst for a blossoming of progress and consensus on the world scene, as witnessed at the last IAEA conference by the strength of the ITER contributions and the ubiquity of the ITER databases and modelling work as the reference point for more general work.

The Engineering Division - most literally in concrete terms - has provided impressive and mature designs for the site layout, buildings and support infrastructure for ITER; and

the Integration Division has provided the overall integration of the design work from the other two JWSs, the Home Teams, and elsewhere in a rigorous framework that ensures the overall coherence of the parts with the whole, and confirms, through configuration control, assembly planning and costing and scheduling, the feasibility and practicality of the design.

As Director I, therefore, want to thank all my colleagues here at the JWS, both the JCT and the members of SAIC staff who through their consistent and dedicated support, from the design office through to administrative and logistic support, have made the achievements possible.

I should recognize as well all those who contributed to our success by helping the JCT and their families to feel welcome and comfortable here in San Diego. It is a big undertaking to relocate with family from one continent to another. I know how much my colleagues have appreciated the friendly support that they and their families have received from the International Centre at the University and from other members of the local community, especially the San Diego Site for ITER committee. Many of you have devoted large amounts of your personal time to our service. It is invidious to start naming names on an occasion like this, but I see you in the audience here; for myself and for all the members of the JCT and their families I say "Thank you" for your interest, your kindness and your generosity.

Let me now turn to the US Organizations represented here who have been involved in ITER. I know that SAIC has been more than just a host service provider, but has also worked strenuously and beyond the call of duty at local and national levels to encourage and sustain interest in ITER. Likewise the US Home Team, from their base at the University, have worked both to deliver the results for the ITER tasks assigned to them and, more widely, to encourage the US fusion community and related industries to participate in and to support ITER. We have also had valuable interactions with our fusion colleagues in GA.

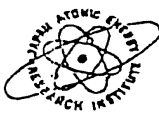

Finally, to those individuals in the USDOE, who have consistently believed in ITER and have been prepared to put themselves out to work for the Project and to support and maintain the US participation, may I say how I recognize and appreciate your efforts on the Project's behalf.

However, as well these heartfelt expressions of thanks, it would be wrong to let this occasion pass without mention of the sense of disappointment that I am not alone in feeling at the circumstances that have led to today's event. A charter member of ITER and a vociferous advocate of international collaboration, the US is having to withdraw its participation from the most far-reaching, comprehensive and technically successful joint project in fusion research on arguments that seem hard to comprehend and harder to share.

I regret the project's loss of the talent and expertise that our US colleagues in the JCT and in the Home Teams and industrial participants brought to it and I share the personal disappointment that many have expressed, after years of commitment to a common goal, at being unable to share in the work towards realizing ITER. In a wider sense, I also fear the impact that this might have on attitudes to future proposed collaborations.

It is now for the Project and the three Parties to create the conditions that will lead to ITER's construction and operation. I and my colleagues will be devoting all our energies to bringing this about.

I believe that we shall succeed, and I hope and expect that, as the reality of construction becomes more apparent, we shall find that this ceremony marks only an "Au revoir" to our American friends and colleagues.

	Japan Atomic Energy Research Institute
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<p>Dr. N. A. Davies Associate Director for Fusion Energy Sciences Office of Science US Department of Energy Germantown, MD 20874-1290., USA</p>	<p>November 18, 1998</p>
<p>Dear Dr. Davies,</p>	
<p>It is with great appreciation to note, at this occasion marking the completion of ITER activities at San Diego Joint Work Site, tremendous achievements which were realized here for this remarkable international endeavor.</p>	
<p>I would like to thank US DOE for having provided this efficient and comfortable work site as a workplace for this truly integrated international design team. My deep appreciation is also due to the Director, Deputy Directors, and the JCT Members of the San Diego Joint Work Site who made great efforts to carry out ITER activities and completed their assigned works.</p>	
<p>It is my firm belief that, with continued dedication of ITER community, the ITER EDA will be successfully extended and implemented. I further look forwards to future construction of ITER and your continued interest in those processes.</p>	
<p>Sincerely,</p>	<p>Masaji Yoshikawa Co-Chair, ITER Council Advisor to the President JAERI</p>
	
<p>c.c. Academician E. P. Velikhov, IC Chair Dr. R. Aymar, Director, ITER EDA</p>	



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December 7, 1998

Dr. N. Anne Davies

Associate Director for Fusion Energy Sciences
Office of Energy Research
Department of Energy
Germantown, MD 20874-1290

Dear Dr. Davies

As a member of ITER Council, may I take this opportunity to express my sincere appreciation for the great contribution by the U.S. IC members led by you, U.S. members of the ITER Joint Central Team, U.S. Home Team, and all other personnel concerned.

In the past 6 years, contribution of your country to the ITER Project not only have produced a significant progress in the research and development of fusion energy, but also have yielded a close cooperative relation and friendship among all the countries and people who have involved in the ITER Project. I appreciate it as one of the most significant outcome of the ITER collaboration.

We Japan will keep our firm intention to continue the design activity under the collaboration with EU and Russia toward the realization of ITER.

We will miss the JCT secondees from your country recalled back home and the San Diego Joint Work Site being closed down.

In the collaboration on the fusion research and development, however, we strongly hope to maintain a close relationship with the experts in your country, and looking forward to having your country eventually as a major contributor in the future construction of ITER to be realized by an international endeavor.

With best regards,

A handwritten signature in black ink, appearing to read 'Tsutomu Imamura'.

Tsutomu IMAMURA
Deputy Director-General
Science and Technology Agency
Government of Japan

The San Diego Union-Tribune.

15 December 1998, Tuesday

Sadness marks impending end of U.S. role in fusion project

David E. Graham
STAFF WRITER

It was an afternoon of praise for the accomplishments and of sadness for what was ending as leaders of an international fusion energy research effort met in La Jolla to mark the final days of American participation in the ambitious program.

"It would be wrong if I did not express a sense of disappointment," said Robert Aymar, a French scientist who is director of the International Thermonuclear Experimental Reactor, or ITER, research program.

For six years the United States has been working with Japan, Russia and European Community nations to design a new-generation fusion reactor that might one day provide practical, clean energy for Earth.

When Congress voted not to give money for a three-year extension of the work, American participation had to end. Some 18 American scientists and engineers here will have concluded their work by year's end and returned to their home institutions.

"Today what I really want to do is celebrate our great accomplishments together", Anne Davies, director of the Department of Energy's office of fusion research, told a gathering of about 50 administrators, scientists and staff members working with ITER here.

Even So, the ITER headquarters offices in La Jolla will be empty by February when

scientists from the other nations finish some lingering work on the design, Davies said. UCSD, General Atomics and Science Applications International Corp. have been key participants in the ITER work here.

Davies said the research team has made great strides toward a reactor design, and the remaining nations have signed agreements to carry on the next design phase. Scientists from the other nations will take assignments at ITER headquarters sites in Japan and Germany.

The redesign is for a doughnut-shaped machine about half the size of the original, but one that still would meet many of the original goals. It is possible in part, Davies said, through advances in science developed during the ITER project.

Officials hope the new reactor might be built for half the cost of the original design, estimated to cost \$10 billion.

Once that work is done, the nations would have a choice of whether to actually build the reactor.

"You must succeed for all our sakes," Davies told the gathering.

International efforts toward building ITER might again attract U.S. interest and even congressional interest in participating, she said on a podium flanked by flags of the participating nations.



Pacific Ocean Shore at the ITER San Diego Joint Work Site

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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