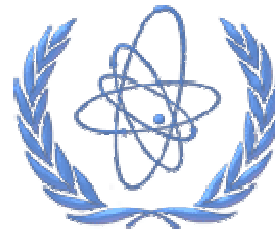


4th IAEA Technical Meeting on
"ECRH Physics and Technology for ITER
"

6 -8 June 2007
Vienna, Austria

International Atomic Energy Agency
Wagramer Str. 5, A1400 Vienna, Austria



IAEA
International Atomic Energy
Agency
www.iaea.org

[Form A](#)

[Form B](#)

[Form C](#)

INTRODUCTION

In order to attain the necessary temperatures in a fusion reactor, auxiliary heating will have to be implemented in addition to the ohmic heating generated by the induced plasma current. Current profile control, which is indispensable to access advanced operation of a tokamak, can also be accomplished by auxiliary power systems. Moreover, some auxiliary power systems can in principle be used for instability suppression, thus improving the plasma performance. For ITER, several auxiliary power systems are foreseen which can deposit energy at different radial locations. These are the Neutral Beams and three wave launching systems: i) Electron Cyclotron (EC), ii) Ion Cyclotron (IC) and iii) Lower Hybrid (LH).

The auxiliary power system for launching Electron Cyclotron (EC) waves for ITER is one of major importance because it can provide effective bulk heating, bulk current drive, and localized heating and current drive for instability control. Physics studies concerning wave/plasma interaction are progressing and new technology developments are being tested. These studies are necessary in order to better predict the operation and optimise the EC system for ITER.

OBJECTIVES

The IAEA-TM on ECRH Physics and Technology for ITER will provide a forum for open discussion on the most recent experimental achievements both in technology and physics, focusing on those with implications for the ITER system design. Three meetings have already been held in the past (1999, Oharai, Japan, 2003, Kloster Seeon, Germany, and 2005, Como, Italy).

MEETING FORMAT

The meeting will have contributed papers presented in sessions devoted to special topics with subsequent discussions. It is expected that all papers will be presented orally; however, the meeting format will be finalized only after the abstracts have been selected by the International Advisory Committee. It is expected that contributed talks will be no less than 20

minutes plus time for discussion. An electronic projector with a computer capable of reading CD's and memory sticks will be available (Power Point or PDF recommended). It is intended that the meeting will include significant time for discussion.

The official language of the meeting is English (no interpretation will be provided). It is expected that the meeting will start at 09:00 on 6 June 2007 and end by 18:00 on 8 June 2007.

TOPICS

- A. EC wave physics: current understanding and extrapolation to ITER
- B. Application of EC waves to confinement and stability studies, including active control techniques for ITER
- C. Transmission systems/Launchers: state of the art and ITER relevant techniques
- D. Gyrotron development towards ITER needs
- E. System integration and optimisation for ITER

PAPERS

Papers must be prepared according to the [author instructions](#).

Authors must submit [Form B](#) for copyright proposes.

Electronic versions of papers will be collected at the meeting. A CD-ROM of proceedings will be produced and later distributed to the participants containing the meeting abstracts, contributed manuscripts and presentations.

A summary report of the meeting will be prepared for submission to the "Nuclear Fusion" journal.

VISA

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as soon as possible. A letter of invitation will be sent to all officially nominated participants.

In order to participate in the meeting, these major steps must be completed:

1) Abstract Submission

Anyone wishing to present a paper during this meeting must submit an abstract, in electronic format (WORD preferred) directly to physics@iaea.org.

The email subject for abstract submission shall include: IAEA-TM on ECRH Physics and Technology for ITER. The file name should be in the following format: "lastname.i.n.i.t.i.a.l.s.-topic.doc"

The abstract may be submitted by post or fax to the IAEA Scientific Secretary (to arrive before 15 March 2007):

The abstracts shall be prepared as according to the instructions:

- 1) Page size: A4 (297mm by 210 mm) – vertical orientation
- 2) Margins 25mm all around
- 3) Layout:

Title: single-spaced, 14-point size, Times New Roman Font, **bold**
Authors: single-spaced, 12-point size, Times New Roman Font
Affiliation: single-spaced, 12-point size, Times New Roman Font, *italic*
Text: 1.5 spaced, 12-point size, Times New Roman Font
Length: one page

A Book of Abstracts will be compiled for distribution at the meeting to every participant.

The authors must make sure that the files do not include copyrighted fonts or other impediments for reproduction. The abstracts will be selected and classified by the International Advisory Committee. Authors will be informed of the acceptance and placement of their contributions by email, by mid April 2007.

2) IAEA Participation Form.

About fifty persons from IAEA Member States or international organizations are expected to attend. Participants should be experts actively involved in the topics of the meeting.

Following the standard IAEA procedure, official participants of the meeting must be nominated through their national authorities (Ministry of Foreign Affairs or National Atomic Energy Authority) by submitting the [Form A](#) to the IAEA Scientific Secretary through their official authorities.

Please also send a completed Author [Form B](#) (PDF, Microsoft Word) with the abstract of your presentation to your appropriate authority (Ministry of Foreign Affairs, National Atomic Energy Authority) for subsequent transmission to the IAEA.

Please send an additional copy of the Author [Form B](#) and abstract by e-mail or fax directly to the IAEA Scientific Secretary (please see contacts at the end)

3) EXPENDITURES AND FINANCIAL SUPPORT

No registration fee will be charged to participants.

As a general rule, the IAEA does not pay the cost for attendance to the meeting (i.e. travel and living expenses) of participants. However, limited funds are available to help meet the cost of attendance and participation of a few selected specialists mainly from developing countries with low economic resources. Generally, not more than one grant will be awarded to any one country. The grants awarded will be in the form of lump sums usually covering part of the cost of attendance.

If governments wish to apply for a grant on behalf of one of their specialists, they should address specific requests to the IAEA Scientific Secretary at the International Atomic Energy Agency to this effect. Governments should ensure that applications for grants:

- a) are received by the IAEA by 15 March 2007 and
- b) are accompanied by a duly completed and signed Author [Form B](#) and Grant [Form C](#) including the abstract of the paper to be presented.
- c) an estimation from an official travel Agency is included for the traveling costs.

Applications that do not comply with the conditions mentioned above cannot be considered. Awards will be announced around mid April 2007.

DEADLINES

15 March 2007 - Submittal by email, fax or post of abstracts according to the instructions above for paper selection.

15 March 2007 - Request to the IAEA for financial support

15 April 2007 - The International Advisory Committee will inform Participants of the acceptance of their papers

Mid April 2007 – Grant awards

6 June 2007 – Meeting begins – please bring an electronic word file of your paper to be collected by the IAEA Scientific Secretary.

INTERNATIONAL ADVISORY COMMITTEE

Bora, D.	India
Cirant, S.	Italy
Erckmann, V.	Germany
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Sakamoto, K.	Japan
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