



# IAEA

International Atomic Energy Agency

*Atoms for Peace*

## **23rd IAEA Technical Meeting (TM) on Research Using Small Fusion Devices**

29 - 31 March 2017

Chile

### **ANNOUNCEMENT**

#### **INTRODUCTION**

The International Atomic Energy Agency (IAEA) will hold the 23rd IAEA Technical Meeting on Research Using Small Fusion Devices from **29 to 31 March 2017** in Chile. Previous meetings in the series were held in Budapest (1985), Nagoya (1986), Nice (1988), Washington DC (1990), Hefei (1991), Wuerzburg (1992), Campinas (1993), Madrid (1994), Ahmedabad (1995), Prague (1996), Cairo (1997), Tokyo (1998), Chengdu (1999), Sao Paulo (2002), Vienna (2003), Mexico City (2005), Lisbon (2007), Alushta (2008), Kurchatov (2009), Vienna (2011), San José (2014) and Prague (2015).

#### **BACKGROUND**

The Technical Meeting on Research Using Small Fusion Devices is an ideal forum for laboratory size fusion experiments to report about their latest achievements utilizing medium size and small scale tokamaks, compact tori, dense plasma focus, reversed field pinches, helical devices, linear machines, and other small plasma devices. About 40 – 50 international experts will discuss new challenges on topics concerning plasma physics such as transport, turbulence, confinement and stability and on technology developments such as new diagnostic concepts and prototypes, materials testing as well as characterization and improvement, remote participation experiments and design of control and data acquisition systems and others. Special emphasis is put collaboration between the laboratories on new and emerging technologies.

The Technical Meeting is aiming to stimulate new synergies which can contribute to better streamline the research outputs to the mainstream fusion research. Of importance are the contributions of younger scientists, especially from countries with emerging economies.

Depending on the availability grants will be provided to young researchers to support their contribution to the Technical Meeting.

Main emphasis will be put on the specific needs of the magnetic confinement and the dense plasma focus community, where some topics will be discussed in separate sessions in order to accommodate in-depth discussions for the specialists.

## **OBJECTIVES**

The objective of the meeting is to provide a forum for discussion of approaches to fusion research based on small and medium scale devices, such as small tokamaks, compact tori, dense plasma focus, reversed field pinches, helical devices, linear/discharge machines, etc. The meeting will also cover other devices such as non-magnetic confinement devices, devices using beams or lasers and new trends or innovation concepts for fusion research. The meeting will provide an opportunity for scientists working in different fusion topics and different devices to exchange and discuss results of their research, compare methodologies and promote possible collaborations.

## **TOPICS**

The meeting will cover the following topics:

- A. Magnetic Confinement:**
  - **A-OV Overview;**
  - **A-SP Specialized Session Magnetic Confinement;**
  
- B. Dense Magnetised Plasmas:**
  - **B-OV Overview;**
  - **B-SP Specialized Session DPF;**
  
- C. Innovative Fusion Technology and Applications;**
  
- D. Fusion Materials Research;**
  
- E. Diagnostic Systems and Components;**
  
- F. Control and Data Acquisition Systems and Remote Participation Tools.**

## **MEETING ORGANIZATION AND FORMAT**

The meeting will consist of plenary, invited and contributed oral presentations, poster sessions. The time allotment will be 45 minutes plus 5 minutes discussion for plenary talks, 35 minutes plus 5 minutes discussion for invited talks and 15 minutes plus 5 minutes discussion for contributed oral talks. Poster sessions shall be used for longer discussions. An electronic projector connected to a computer capable of reading CDs and memory sticks will be available (Power Point or PDF recommended). It is expected that the meeting will start at 10:00 on 29 March 2017 and end by 17:00 on 31 March 2017.

### *Language*

The working language of the meeting is English; no interpretation will be provided.

### *Participation*

About 40 experts from IAEA Member States and International Organizations are expected to attend the meeting. Participants should be actively involved in the topics of the meeting. Participants will be accepted only if their duly completed Participation Form (Form A) is transmitted to the IAEA through their appropriate governmental authority by **20 February 2017**.

## **MEETING VENUE AND TRANSPORTATION**

The meeting will be held at the Comisión Chilena de Energía Nuclear, Santiago de Chile, Chile

## **MEETING WEBSITE:**

<https://nucleus.iaea.org/sites/fusionportal/Pages/List-of-TMs-on-RUSFD.aspx>

## **ABSTRACT**

Participants wishing to make a contribution at the meeting are requested to submit a one-page electronic abstract. Abstracts should be submitted to the email address [Physics@iaea.org](mailto:Physics@iaea.org) by **15 February 2017**. Abstracts should be prepared according to the following 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 (TNR), **bold**
  - Authors: single-spaced, 12-point size, TNR Font
  - Affiliation: single-spaced, 12-point size, TNR Font, *italic*
  - Text: 1.5 spaced, 12-point size, TNR Font
  - Length: one page

**Abstracts can be text only or contain figures and graphics. The abstracts must contain the authors' names, affiliation and email address. Acceptable file formats are Microsoft Word (preferred) or PDF.** The filename should be in the following format: "lastname.i.n.i.t.i.a.l.s.-topic.filetype".

Authors must make sure that the files do not include copyrighted fonts or any other impediments for reproduction. The abstracts will be reviewed and selected by the International Programme Advisory Committee. Authors will be informed of the acceptance of their contributions via email by **27 February 2017**. A Book of Abstracts will be compiled for distribution during the meeting.

## **PAPERS**

A summary report of the meeting will be prepared by the Chair and the International Programme Advisory Committee for submission to the “Nuclear Fusion” journal.

## EXPENDITURES AND FINANCIAL SUPPORT

The costs for the organization of the meeting are borne by the IAEA. No registration fee will be charged to participants. As a general rule, the IAEA does not pay travel and accommodation expenses for meeting participants. However, limited funds are available to help meet the cost of attendance of a few selected specialists, primarily those 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.

Governments wishing to apply for a grant on behalf of one of their specialists should address specific requests to the Scientific Secretary responsible for this meeting to this effect. Governments should ensure that applications for grants are:

- 1) received by the IAEA by 20 February 2017,
- 2) accompanied by a duly completed and signed Grant Form C including the abstract of the paper to be presented,
- 3) should include an estimate from an official travel agency of the travel cost.

Applications that do not comply with the conditions mentioned above will not be considered. Awards will be announced by **27 February 2017**.

## VISAS

Participants who require a visa to enter to Chile should submit the necessary application to the nearest diplomatic or consular representative of Chile as soon as possible. An official letter of invitation will be issued to all participants. This letter will be needed for the visa application. In case of special requirements, please contact Mr. Leopoldo Soto at [lsotonorambuena@yahoo.es](mailto:lsotonorambuena@yahoo.es).

## DEADLINES

<b>15 February 2017</b>	Submission of abstracts according to the instructions above for paper selection.
<b>20 February 2017</b>	Submission of the Participation Form through the appropriate governmental authority.
<b>27 February 2017</b>	Grant awards
<b>27 February 2017</b>	Participants will be informed about the acceptance of their papers.
<b>29 March 2017</b>	Meeting begins

## INTERNATIONAL PROGRAMME ADVISORY COMMITTEE

The International Programme Advisory Committee (IPAC) is composed by the following members:

L. Soto (Chair)	Chile
I. V. Blanco	Costa Rica
X. Chijin	Canada
H. Fernandes	Portugal
M. Gryaznevich	UK
J.J. E. Herrera	Mexico
A. Melnikov	Russian Federation
R. Miklaszewski	Poland
Y. Hwang	Korea
J. Stöckel	Czech Republic

## IAEA SECRETARIAT

### IAEA Scientific Secretary

Ms Sehila Maria Gonzalez de Vicente  
[S.M.Gonzalez-De-Vicente@iaea.org](mailto:S.M.Gonzalez-De-Vicente@iaea.org)  
NAPC Physics Section  
International Atomic Energy Agency  
Office A2375  
Wagramer Str. 5, P.O. Box 100,  
A1400 Vienna, Austria  
Tel.: +43 1 2600-21753, FAX: +43 1 26007

### IAEA Administrative Secretary

Ms Emily Slater  
[E.Slater@iaea.org](mailto:E.Slater@iaea.org)  
NAPC Physics Section  
International Atomic Energy Agency  
Office A2317  
Wagramer Str. 5, P.O. Box 100,  
A1400 Vienna, Austria  
Tel.: +43 1 2600-25119, FAX: +43 1 26007

## LOCAL ORGANIZATION COMMITTEE

Leopoldo Soto  
[lsotonorambuena@yahoo.es](mailto:lsotonorambuena@yahoo.es)  
Comisión Chilena de Energía Nuclear