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*Dear Burning Plasma Aficionados:*

This newsletter provides a short update on U.S. Burning Plasma Organization activities. E-News is also available online at <http://burningplasma.org/enews.html> Comments on articles in the newsletter may be sent to the editor (R. Nazikian [mazikian@pppl.gov](mailto:mazikian@pppl.gov)) or assistant editor (Emily Hooks [ehooks@mail.utexas.edu](mailto:ehooks@mail.utexas.edu)).

Thank you for your interest in Burning Plasma research in the U.S.!

## **Director's Corner** by J. Van Dam

### Special Expert Groups for ITER

In last month's column, I mentioned three special working groups of experts that the ITER Organization is setting up, one group to work on extending the ITER Research Plan document, another to coordinate the development of integrated modeling capabilities for ITER, and the third to guide the Test Blanket Module program on ITER. The U.S. was asked to provide participants for all three groups.

I'm happy to report that the following persons will serve in these capacities:

1. *ITER Research Plan Working Group*—Michael Bell, Stan Milora, Ed Synakowski, Mickey Wade, and Steve Wolf will be the U.S. participants. Note that Bell, Synakowski, and Wade were the original three U.S. representatives on this working group, which produced Version 1 of the ITER Research Plan last year. The plan for Version 2 is to fold in the Test Blanket Module program, heating and current drive commissioning, accelerated deuterium-tritium operation, and other items.
2. *Integrated Modeling Expert Group*—Don Batchelor and Lang Lao will be the U.S. participants. Development of integrated modeling capabilities for ITER will leverage on the corresponding efforts in the domestic programs of the ITER Members and complement the voluntary R&D on model validation being performed through the International Tokamak Physics Activity.

3. *Test Blanket Module Program Committee*—The U.S. representatives will be Jeff Hoy, Mike Hechler, Mohamed Abdou, and a fourth person. Because the first meeting of the Test Blanket Module Program Committee, in March 2009, will concentrate on intellectual property issues, a lawyer from the U.S. Department of Energy will participate. At future meetings, the plan is to have a U.S. scientist with experimental tokamak operations experience serve as a participant.

**Topical group meetings of the International Tokamak Physics Activity**

Each of the seven ITPA topical groups holds two meetings each year, usually in the fall (October-November time frame) and again in the spring (March-April). The spring round of meetings in 2009 is coming up. The scheduled dates for these meetings are listed below. If you are interested in attending any of these workshops or suggesting agenda items, please feel free to contact the U.S. group coordinators (listed in the [August 2008 eNews](#) issue).

<b>Topical Group</b>	<b>Date</b>	<b>Place</b>
Transport and Confinement	March 31-April 2, 2009	Naka, Japan
Integrated Operation Scenarios	March 31-April 3, 2009	Naka, Japan
Pedestal and Edge Physics	April 20-22, 2009	Cadarache, France
MHD	April 21-24, 2009	Daejeon, Korea
Energetic Particles	April 21-24, 2009	Daejeon, Korea
SOL and Divertor	May 5-8, 2009	Utrecht, Netherlands
Diagnostics	April 20-24, 2009	St. Petersburg, Russia
Coordinating Committee	July 15-16, 2009	Cadarache, France

**Remote Seminar on Lower Hybrid Current Drive for ITER**

On Monday, February 23, at 3:00 p.m. CST, the USBPO will host a special seminar about some developments of a possible lower hybrid current drive system for ITER. The speakers are to be Dr. Alain Becoulet and Dr. Tuong Hoang, both affiliated with CEA Cadarache. They are leaders of a new European task group called “LH4IT” (the meaning of the acronym becomes obvious if you stare at it long enough). This task group is sponsored by the European Fusion Development Agency (EFDA) in coordination with Fusion for Energy (F4E for short, or should I say 4 short). Its function is to look at issues such as physics design, research and development, costing, work sharing, and schedule, in order to provide information to ITER for decision-making. The seminar on February 23 will describe the status of this activity and proposals for collaborations. Connection details can be obtained by contacting Jim Dekock at [dekock@burningplasma.org](mailto:dekock@burningplasma.org) or (608) 263-8921 (capacity limited to 24 lines).

**Research Needs Workshop (ReNeW)**

The DOE Office of Fusion Energy Sciences is sponsoring this workshop as a community-wide strategic planning exercise to develop a list of priority research thrusts. The actual workshop will be held June 7-13 in Bethesda, MD. To prepare for it, five Theme Areas have been set up, each having four to seven panels, with about half a dozen participants on each panel. The structure of the ReNeW activities can be seen at its web page (hosted on the USBPO web site): <http://burningplasma.org/renew.html>. The Theme Areas are

planning to hold theme workshops in March. These workshops are open to anyone. Input to the Theme Areas from the fusion community is strongly encouraged, especially in the form of white papers that lay out scientific issues, along with associated research requirements and suggestions for scientific campaigns. Many of the USBPO topical group leaders and members of the USBPO Council and Executive Committee are actively involved in the ReNeW Theme Areas and panels. I happen to be serving as the chair for Theme I “Achieving and Understanding the Burning Plasma State.” Amanda Hubbard (USBPO Council chair) and Chuck Greenfield (USBPO deputy director) are the chair and vice-chair for Theme II “Creating Predictable High-Performance Steady-State Plasmas.” Mike Zarnstorff (USBPO Council vice-chair) is the vice-chair for Theme V “Optimizing the Magnetic Configuration.” In recent years, the USDOE Office of Basic Energy Sciences has successfully used these types of workshops; the series of reports that resulted are posted online (<http://www.sc.doe.gov/bes/reports/list.html>).

### **Unofficial ITER fan club forum**

I noticed that a web site has been set up called <http://forums.iterfan.org/> to serve as a forum for all devotees of ITER. Enjoy!

### **Fusion Acronyms**

A regular reader of *eNews* wrote me recently to point out that too many acronyms—undefined at that—are appearing in the articles. I appreciated his constructive criticism; my high school English teacher would definitely agree. The name ITER itself used to be an acronym (“International Thermonuclear Experimental Reactor”) but is no more, having been officially redirected to mean the Latin word for “way.” But, just to save space, there are still a few other acronyms in this column, defined of course. Please keep the comments coming.

## **↵ Announcements**

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# 2009 Burning Plasma Events

Jan 13-14

[FESAC](#)

Gaithersburg, MD

Jan 18-23

[8th IEA International Wksp on SiC/SiC](#)

Daytona Beach, FL

Mar 2-4

[4th Workshop on Stochastic Fusion Plasmas](#)

Julich, Germany

Mar 31-Apr 2/3

Joint mtg of the ITPA Transport & Confinement TG & the Integrated Operational Scenarios TG

Naka, Japan

Apr 6-8

ITER Export Control Working Group Mtg

Washington, DC

Apr 20-22

ITPA Pedestal & Edge Physics Topical Group Mtg

Cadarache, France

Apr 20-24

ITPA Diagnostics Topical Group Mtg

St. Petersburg, Russia

Apr 21-24

Joint mtg of the ITPA Energetic Particles TG & the MHD TG

Daejeon, South Korea

Apr 28-May1

[Transport Task Force Workshop](#)

San Diego, CA

May 2-5

Sherwood Theory Fusion Conference/APS April Mtg

Boulder, CO

May 5-8

ITPA Sol & Divertor Topical Group Mtg

Utrecht Amsterdam, FOM Rijnhuizen

May 11-14

[12th International Wksp on Plasma-Facing Materials & Components for Fusion Applications](#)

Julich, Germany

May 25-30

STAC, MAC CPWG

TBD

May 31-Jun 5

[ICOPS-SOFE 2009 Conference](#)

San Diego, CA

Jun 14-18

[ANS Annual Mtg](#)

Atlanta, GA

Jun 24-26

[18th Conf on RF Power in Plasmas](#)

Gent, Belgium

Jun 29-Jul 3

[14th International Conference on Emerging Nuclear Energy Systems \(ICENES-2009\)](#)

Ericeira, Portugal

Jul 12-16

[17th International Conference on Nuclear Engineering \(ICONE 17\)](#)

Brussels, Belgium

Jul 15-16

ITPA Coordinating Committee Mtg

Cadarache, France

Sept 6-11

[6th International Conf on Inertial Fusion Sciences and Applications \(IFSA 2009\)](#)

San Francisco, CA

Sept 7-12

[14th International Conf on Fusion Reactor Materials \(ICFRM-14\)](#)

Sapporo, Japan

Sept 21-24

[14th International Symp on Laser-Aided Plasma Diagnostics \(LAPD-14\)](#)

Castelbrando, Treviso, Italy

Oct 5-7

ITPA Transport & Confinement Topical Group Mtg

PPPL, US

Oct 6-8

ITPA Pedestal & Edge Physics Topical Group Mtg

Princeton, New Jersey

Oct 11-16

9th International Symp on Fusion Nuclear Technology (ISFNT-9)

Dalian, China

Nov 2-6

51<sup>st</sup> APS-DPP Mtg

Atlanta, GA

Fusion Research-related events can also be seen on the USBPO web at <http://burningplasma.org/events.html>.