



U.S. Burning Plasma Organization e-News
August 15, 2008 (Issue 23)

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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 rnazikian@pppl.gov) or assistant editor (Emily Hooks ehooks@mail.utexas.edu).

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

Director's Corner by J. Van Dam

USBPO Council: In the July eNews issue, it was reported that the first election to fill two open seats on the Council had been held, resulting in the election of new members Martin Greenwald (MIT) and Ed Synakowski (LLNL). In accordance with the USBPO Charter, the other two open slots were to be filled by appointment, and I am pleased to announce that C. S. Chang (NYU) and Michael Ulrickson (SNL) are these two appointees. The entire USBPO Council—including the incoming members for the first time and the outgoing members for the last time—held a meeting by videoconference on July 16, led by Council chair Amanda Hubbard. Items on the agenda included a proposal for several new USBPO topical group leaders, the revised US membership for the Integrated Tokamak Physics Activity with interface to the USBPO (cf. first article in the Announcements section), a report from the Council's strategic planning panel on burning plasma research, and suggestions for USBPO activities at the upcoming 2008 APS Division of Plasma Physics Annual Meeting. Note that minutes of past Council meetings are posted on the USBPO web site.

USBPO Research Committee: At its recent meeting, the USBPO Council approved the following changes in topical group leadership:

- For the MHD Macroscopic Plasma Physics topical group, Chris Hegna (UW), previously the deputy leader, will become the new leader, and Ted Strait (GA) will become the new deputy leader.
- For the Confinement and Transport topical group, Ed Doyle (UCLA), previously the deputy leader, will become the new leader, and John Rice (MIT) will become the new deputy leader.

Welcome, Ted and John. Also, thanks to Jon Menard and Paul Terry, the retiring leaders, respectively, for the MHD and Transport topical groups, for their service to the community. The topical group leaders and deputy leaders comprise the Research Committee, which meets biweekly.

Special Activities at the APS-DPP Meeting: This year's APS Division of Plasma Physics Annual Meeting, to be held November 17-21 in Dallas, TX, will mark its 50th anniversary. During this meeting, the USBPO will sponsor two activities: a contributed oral session on ITER-related research and a special evening town meeting on the status of the ITER project. Credit for initiating the contributed oral session (10-minute talks) goes to Mickey Wade (GA), who solicited interest and received positive responses from leaders of a number of the major U.S. and international fusion experimental facilities. If you are interested in this session, please contact Chuck Greenfield, USBPO deputy director, who has been organizing it with Mickey. The special town meeting on ITER will be held on Tuesday evening; we will announce the speakers later.

CRISPPP Report: On July 29, the National Research Council of the U.S. National Academies of Science released a pre-publication version of the final report of its Committee to Review the US ITER Science Participation Planning Process (CRISPPP). This special committee had been charged with evaluating the Energy Policy Act (EPA) Report, which was written by the USBPO in 2006. The report of the CRISPPP panel is entitled "A Review of the DOE Plan for U.S. Fusion Community Participation in the ITER Program." The pre-publication version and the executive summary can be downloaded at <http://www.nap.edu/catalog/12449.html>, and the publication version will soon be available for order. Overall, the report endorsed the ITER international project and commended the U.S. plan for coordination of research activities. In terms of recommendations, the report called for addressing gaps in the planning for a DEMO power plant, maintaining a vigorous and balanced U.S. fusion program, and restoring federal funding for the U.S. share of the construction of ITER. From the USBPO, Tony Taylor, Dennis Whyte, and Mike Zarnstorff served as participants on the CRISPPP panel, with Tony and Mike taking a leave of absence from the USBPO Council during that time. We welcome their recent return.

ITPA Coordinating Committee Meeting: The 10th meeting of the Coordinating Committee for the International Tokamak Physics Activity (ITPA) was held June 30-July 1, 2008, in Aix-en-Provence, France. Each of the seven ITER Partners contributes four members of the Coordinating Committee. Erol Oktay, Ned Sauthoff, Ron Stambaugh (who also serves as the chair of the Coordinating Committee), and I are the US members.

The attendance at this year's meeting was especially high, since both the outgoing and the incoming chairs and deputy chairs of the seven topical groups were invited to participate, along with the co-deputy chairs from the ITER Organization. Leaders for each of the topical groups presented reports about their research activities. Also, representatives from each of the ITER Partners gave status reports about their respective national fusion science programs. From ITER, David Campbell presented two talks, one on "ITER Current Design Status and ITER Research Plan" and the other on "ITER Physics Research Needs and ITPA Contributions." In addition, he discussed a list of "High Priority Research Tasks 2008-2009." All of these presentations have been posted on the ITPA web site (<http://itpa.ipp.mpg.de/>), click on Topical Groups, click on Coordinating Committee, click on 10th Meeting, click on Contributions). Note that the revised ITPA Charter is also posted on this web site. The annual meeting to plan joint ITPA experiments will be held December 12-13 in Cambridge, MA.

ITER Organization: In order to inform the general public about the objectives of the ITER project, a special session on fusion was held at the European Open Science Forum (July 18-22, Barcelona, Spain). Talks during this session explained the potential of fusion as a future energy source and described some of the scientific and technical challenges. More than 1000 people visited the ITER exhibition booth at this Forum. Also, in order to attract bright young students to the fusion field, the 2nd ITER International Summer School was held at the University of Kyushu in Japan (July 22-25). In attendance were 132 students and 15 lecturers (including the ITER director-general) from ten countries. The students heard lectures given by international scientists, participated in tutorials, and presented posters on their own work.

The ITER Council, at its June meeting, commissioned its Management Advisory Committee to set up an independent committee for the purpose of assessing the ITER project cost and staffing estimates. This committee, led by Dr. Frank Briscoe, held its first meeting during the last four days of July. Also in July, a meeting of scientists and engineers from the ITER Organization and the Domestic Agencies was held to review and freeze the design of the vacuum vessel. Brad Nelson of the U.S. ITER Project Office chaired this Vacuum Vessel Final Design Review. This review was extremely important because the vacuum vessel is a safety-class component that forms part of the first containment barrier and also because the vessel interfaces with many other device systems on the project critical path.

The ITER Organization posted 80 new open positions at:

http://www.iter.org/a/index_jobs.htm

For further information, please contact the U.S. ITER Project Office, which is collecting all U.S. nominations and will work with the Department of Energy in preparing and forwarding the U.S. nominations to ITER. Detailed position information is also listed below in Announcements.

Leadership of the Office of Fusion Energy Sciences: Effective August 1, Dr. Raymond Fonck stepped down as OFES Associate Director and returned to his professorship at the University of Wisconsin. Before that, Ray had served as the founding

director of the USBPO. Under Secretary for Energy Ray Orbach praised him for his inspiring leadership of the US fusion energy sciences program for the past year and a half. With the highest personal regard, we add our sincere thanks to Ray for his outstanding service to our field. DOE has announced that Gene Nardella, a 30-year veteran of the OFES, will be the Acting Associate Director while the DOE conducts a search for a permanent replacement.

The [vacancy posting](#) for the Associate Director, Office of Fusion Energy Sciences is now posted on the Jobs USA webpage.

📣 **Announcements**

US Membership in ITPA

In last month's eNews, we showed a table of the new leaders, deputy leaders, and ITER co-deputy leaders for the seven ITPA topical groups. Following extensive discussions that involved the Office of Fusion Energy Sciences, the USBPO, the ITPA leadership, and U.S. program leaders, we are happy to announce the complete list of new U.S. members for the various topical groups, as follows.

Topical Group	US Members
Transport and Confinement (TC)	Stan Kaye (US coordinator) [1] George McKee (US deputy coordinator) Andris Dimits Ed Doyle Dave Mikkelson Craig Petty John Rice
Divertor and SOL	Bruce Lipschultz (US coordinator) [1] Tony Leonard (US deputy coordinator) Russ Doerner Mathias Groth Charles Skinner Peter Stangeby Dennis Whyte
MHD Stability	Ted Strait (US coordinator) [2] Bob Granetz (US deputy coordinator) Valerie Izzo Steve Jardin John Wesley Steve Sabbagh Francois Waelbroeck
Pedestal	Phil Snyder (US coordinator) Rajesh Maingi (US deputy coordinator) C. S. Chang Max Fenstermacher Jerry Hughes Alexei Pankin

	Tom Rognlien
Energetic Particles	Raffi Nazikian (US coordinator) Boris Breizman (US deputy coordinator) Johan Carlsson Eric Fredrickson Bill Heidbrink Don Spong Steve Wukitch
Diagnostics	Rejean Boivin (US coordinator) [1] Jim Terry (US deputy coordinator) Steve Allen David Brower Don Hillis Dave Johnson Brent Stratton
Integrated Operation Scenarios	Chuck Kessel (US coordinator) Tim Luce (US deputy coordinator) Paul Bonoli Amanda Hubbard Masanori Murakami Ron Prater David Gates

Four of the US members also function as either the international leader [1] or the deputy leader [2] of various topical groups, as indicated.

The members listed above are expected to attend ITPA meetings, contribute to joint projects, and interface with the U.S. fusion community. They represent the international extension of the USBPO, since the ITPA and the USBPO have been integrated on the national level. We are working on ways to more broadly keep the US scientific community informed of and involved with ITPA activities. Please also note that attendance at ITPA topical group meetings is open to scientists beyond those on this list. Our thanks to past ITPA members for their many years of service and also to those have committed to serve as the new ITPA members.

US ITER Announces New International ITER Positions

Dear Colleague:

ITER's Director General Nominee (DGN) Kaname Ikeda has recently requested that the seven ITER parties nominate candidates for the International ITER Team's open positions. This U.S. ITER solicitation for nominations from the U.S. community serves as one source for U.S. nominations and invites community self-nominations. The U.S. ITER Project Office is collecting all U.S. nominations and will work with the Department of Energy in preparing and forwarding the U.S. nominations to DGN Ikeda. The International ITER Team will then review candidates nominated by all the ITER parties and make a final selection from the candidates from all the parties.

Professional Staff Repost- Deadline for applications August 15, 2008

[High Voltage Magnet Engineer](#) (TKM-014)

[Structural Engineer - Magnets](#) (TKM-025)

[Mechanical Engineer](#) (TKM-036)

Professional Staff New Positions - Deadline for applications September 24,2008

[Senior Logistics Coordinator](#) (ADM-049)

[Cryo Distribution Engineer](#) (CEP-077)

[Coordination Engineer for Design Collaboration](#) (CEP-078)

[Design Configuration Control Section Leader](#) (CEP-079)

[Electrical Engineer](#) (CEP-080)

[Electro-Mechanical Engineer](#) (CEP-081)

[Power Electronic Engineer](#) (CEP-082)

[Radioactive Waste Process Engineer](#) (CEP-083)

[Senior Cooling Water Systems Engineer](#) (CEP-084)

[Tritium Plant System Engineer](#) (CEP-085)

[Vacuum Design Engineer](#) (CEP-086)

[Wall Conditioning System Engineer](#) (CEP-087)

[Microwave Engineer](#) (CHD-049)

[Neutral Beam Integration and Control Engineer](#) (CHD-050)

[Interlock Systems Engineer](#) (CHD-051)

[Database Engineer](#) (CHD-052)

[Control System Engineer](#) (CHD-053)

[Developer for Integration of Project Applications](#) (CHD-054)

[Diagnostic Physicist](#) (CHD-055)

[Diagnostic Engineer](#) (CHD-056)

[Technical Officer, TBM Program Technology](#) (FST-019)

[Computational Plasma Physicist: Plasma-surface interactions-Science](#) (FST-020)

[Scientific Officer, Heating and Current Drive Physics Science](#) (FST-021)

[Electromagnetic Analyst Expert](#) (PRO-062)

[Senior Officer for Reliability, Availability, Maintainability and Inspectability](#) (RAMI) (PRO-063)

[Project Management Officer](#) (PRO-064)

[Senior Officer for Systems Engineering Processes](#) (PRO-067)

[Lead Quality Assurance Engineer](#) (SAS-014)

[Magnets Quality Assurance Engineer](#) (SAS-015)

[Coil Designer](#) (TKM-069)

[Coil Designer](#) (TKM-070)

[Coil Designer](#) (TKM-071)

[Superconductor Engineer](#) (TKM-072)

[Cryostat and Vacuum Vessel Pressure Suppression Section Leader](#) (TKM-073)

[Vacuum Vessel Mechanical Engineer](#) (TKM-074)

[Vacuum Vessel Manufacturing Engineer](#) (TKM-075)
[Design Engineer/Physicist](#) (TKM-076)
[Design Engineer/Analyst](#) (TKM-077)
[Engineer for Divertor Procurement](#) (TKM-078)
[Divertor Welding Engineer](#) (TKM-079)
[Plant Systems Installation Engineer](#) (TKM-080)
[In-Cryostat Assembly Engineer](#) (TKM-081)
[Remote Handling Engineer](#) (TKM-082)
[Remote Handling Engineer](#) (TKM-083)

**Technical Support Staff New Positions- Deadline for applications
September 24, 2008**

[Assistant Accountant](#) (ADM-046)
[Administrative Assistant for Procurement and Contract Division](#) (ADM-047)
[Administrative Assistant for Head of Human Resources Division](#) (ADM-048)
[CAD Quality Design Coordinator](#) (CEP-088)
[Cryogenic Technical Engineer](#) (CEP-089)
[Secretary for the CEP Department](#) (CEP-090)
[Design Collaboration Infrastructure Engineer](#) (CEP-091)
[Technical Coordinator for Design Collaboration](#) (CEP-092)
[Technical Engineer for Low Voltage Power Distribution](#) (CEP-093)
[Mechanical Design Coordinator - Cryostat and Thermal Shield](#) (CEP-094)
[Mechanical Design Coordinator - Divertor and Blanket](#) (CEP-095)
[Plant Design Coordinator - Coil Power Supply](#) (CEP-096)
[Plant Design Coordinator - Cooling Water System](#) (CEP-097)
[Plant Design Coordinator - Cryo-System](#) (CEP-098)
[Plant Design Coordinator - Steady State Electric Power Network](#) (CEP-99)
[Plant Design Coordinator - Tritium Plant](#) (CEP-100)
[Tritium Analysis Technical Engineer](#) (CEP-101)
[Vacuum Technical Engineer](#) (CEP- 102)
[Technician for Web Application Development Support](#) (CHD-057)
[Junior Engineer /Technician: Instrumentation / Standardization](#) (CHD-058)
[Secretary for Diagnostics Division](#) (CHD-059)
[Secretary for Heating and Current Drive Division](#) (CHD-060)
[Secretary for CODAC & IT Division](#) (CHD-061)
[Secretary for the Office of the Director General](#) (ODG) (ODG-020)
[Technical Officer for Reliability, Availability, Maintainability and Inspectability](#) (RAMI) (PRO-060)
[Technical Coordination Assistant](#) (PRO- 061)
[Technical Officer for Coordination with Design Office Activities](#) (PRO 065)
[Technical Engineer for Integration of Port System](#) (PRO 066)
[Health and Safety Officer](#) (SAS-016)
[Safety Control Assistant](#) (SAS-017)
[Magnet Database Technician](#) (TKM-084)
[Magnet Analyst](#) (TKM-085)
[VV Technical Engineer/Analyst](#) (TKM-086)

[Divertor Technical Officer](#) (TKM-087)
[Technical Engineer - Technical Coordinator](#) (TKM-088)
[Remote Handling Technical Engineer](#) (TKM-089)

Professional Staff Repost- Deadline for applications September 24, 2008
[Leader of the Coil Power Supply Section](#) (CEP-025)

Professional Staff Replacement- Deadline for applications September 24, 2008
[CAD/PLM Development and Customization Coordinator](#) (CEP-013)

Technical Support Staff Repost- Deadline for applications September 24, 2008
[Cooling Water Project Specialist](#) (CEP-052)
[Radwaste System Technical Engineer](#) (CEP-072)

The U.S. ITER Project Office invites individuals and institutions to nominate U.S. candidates through a special web site dedicated to this solicitation, <http://www.usiter.org> and select Jobs and International Organization Positions. This website has additional information on these positions and the current understandings on terms and conditions for employment.

(https://erie.ornl.gov/iter_ddgs/documents/terms.cfm)

Applicants are kindly requested to provide the following documents in Microsoft Word:

1. Motivation/Cover Letter
2. Curriculum Vita/Resume
3. ITER Personal History Form-the ITER Organization requires electronic submission of a Personal History form by all candidates for secondment and staff positions. Although we collect the form, it will be used solely by the ITER Organization and not by DOE, ORNL, the U.S. ITER Project Office, or UT-Battelle.

YOUR COMPLETION AND SUBMISSION OF THE PERSONAL HISTORY FORM CONSTITUTES YOUR CONSENT TO:

- Storage of the form at ORNL in accordance with DOE cyber security procedures; and
- Our forwarding the form in electronic format to the ITER Organization in France; and
- Use and management of the form by the ITER Organization in accordance with its practices and policies.

Ned R. Sauthoff, Project Manager
U. S. ITER Project Office

2008 BPO-Related Meetings

Aug 25-29

[24th Summer School & International Symp on the Physics of Ionized Gases](#)

Novi Sad, Serbia

Sep 1-4

[13th EU-US TTF Wksp](#)

Copenhagen, Denmark

Sep 8-12

[Int'l Congress on Plasma Physics](#)

Fukuoka, Japan

Sep 15-18

ITPA SolDiv Topical Group Mtg

Japan

Sep 15-19

[25th Symp on Fusion Technology \(SOFT\)](#)

Rostock, Germany

Sep 22-27

[Int'l Conf & School on Plasma Physics & Controlled Fusion and 3rd Alushta Int'l Wksp on the Role of Electric Fields in Plasma Confinement in Stellarators and Tokamaks](#)

Crimea, Ukraine

Sep 25-27

[18th IAEA Technical Mtg on Research using Small Fusion Devices](#)

Crimea, Ukraine

Sep 28-Oct 2

[18th ANS Topical Mtg on the Technology of Fusion Energy](#)

San Francisco, CA

Sep 29-Oct 2

[coNuSS 2008](#)

Belgrade, Serbia

Oct 12-18

[22nd IAEA Fusion Energy Conf - 50th Anniversary of Controlled Nuclear Fusion Research](#)

Geneva, Switzerland

Oct 20-25

[11th Int'l Conf on Electrostatic Precipitation \(ICESP-XI\)](#)

Hangzhou, China

Oct 20-22

[ITPA Transport & Confinement and Pedestal & Edge Topical Group Mtg](#)

Milan, Italy

Oct 20-22

ITPA MHD Stability, Energetic Particles, & Integrated Operation Scenarios Topical Group Mtgs

Lausanne, Switzerland

Nov 9-13
[ANS Winter Meeting](#)
Reno, NV

Nov 17-21
[50th APS-DPP](#)
Dallas, TX

Nov 17-21
ITPA Diagnostics Topical Group Mtg
IPR, India

Nov 23-25
MHD Control Wksp
Austin, TX

Dec 9-12
18th International Toki Conference
Toki-City, Japan

Dec 11-13
ITPA/IEA Joint Experiment Coordination Mtg
MIT

Aug 25-29
[24th Summer School & International Symp on the Physics of Ionized Gases](#)
Novi Sad, Serbia

Begin submitting your 2009 events now to ehooks@mail.utexas.edu.
For more Fusion Research-related events, visit the USBPO Upcoming Events page online at <http://burningplasma.org/events.html>.