

Meeting of the Council of the U.S. Burning Plasma Organization

Held by teleconference + ReadyTalk on May 8, 2013 from 2-4 PM Eastern
Meeting notes taken by A. Gonzales (USBPO Administrator)
Meeting minutes and council recommendations by J. Menard

Council members in attendance:

Richard Buttery
Troy Carter
Jerry Hughes
Mark Koepke (Deputy)
Jon Menard (Chair)
Cynthia Phillips
Tom Rognlien
Don Spong
Anne White
Clement Wong

Ex Officio members in attendance

Steve Eckstrand
Charles Greenfield (BPO Director)
Amanda Hubbard (Deputy Director)

Ex Officio members unable to attend

Stanley Milora
Gene Nardella
Al Opdenaker
Edmund Synakowski
Nermin Uckan
James Van Dam

Council members unable to attend

Chris Hegna
Steve Knowlton

MINUTES

1. Roll call and Agenda

The meeting was called to order at 2:05PM Eastern time. Jon Menard described the agenda for the meeting including: an update on the council election process, discussion of the disruption mitigation task group, and discussion of information exchange between ITPA/ITER and the BPO.

2. Update on BPO council elections

The nominating subcommittee for the 2013 USBPO council election has the following members: David Brower, Steve Knowlton, George McKee, Tom Rognlien (chair), and Anne White. During the several weeks prior to the council meeting, the subcommittee gathered nominations and 15 potential candidates were identified with a majority coming from the broader community. After checking the BPO member list, it was determined that there were a number of nominees that were not BPO members. The non-members were advised that they had two days to sign up to become members, and 3 of the non-members did not respond to become BPO members. This left 12 potential candidates. Additional voting within the subcommittee was performed to reduce the number of candidates to 7 consistent with the previous council elections – in particular to provide institutional balance and reduce/eliminate multiple candidates from the same institution if

that institution was already represented on the council. At the time of the council meeting, 6 candidates were selected to be on the ballot (Larry Baylor, Antoine Cerfon, Brett Chapman, Bruce Cohen, Punit Gohil, and Chuck Kessel) and a 7th candidate was in the process of agreeing to becoming the final candidate. As per the BPO bylaws, the council election process will provide two new members to the council, and the final two new members will be chosen by the BPO directorship.

3. Status and plans for the BPO disruption mitigation task group

Chuck Greenfield provided an update on the progress and issues of the disruption mitigation task group. It was noted that much of the disruption work in the community is planned without reference to the BPO disruption mitigation task group. Instead, much of the collaborative disruption research is carried out through DIII-D's Disruption Mitigation Task Force. Progress during the last year includes the execution of ITPA joint experiments on runaways including participation from DIII-D, MIT, ORNL, and PPPL, but with the majority of the research participation from DIII-D and MIT. More disruption experiments are planned for the 2013 campaign on DIII-D, and DIII-D will apparently be the only operating U.S. tokamak during 2013-14 which can carry out such experiments. The results of these and other near-term experiments to be carried out on ASDEX-U and JET will feed into decisions on the specifications of the ITER disruption mitigation system. The U.S. is responsible for fabrication of the ITER mitigation system with a final design review presently scheduled for 2016.

The council raised concerns about whether the disruption task group is functioning as a BPO task-group with sufficient outreach and (in particular) sufficient communication to the community since the successful disruption workshop held in the spring of 2012. Other factors impacting effectiveness of the task-group include the fact that the number of researchers in the disruption area is relatively small and most of the work is pro-bono. The names of several people were mentioned from PPPL and GA who might be able to supplement the task group leadership to improve communication.

An opportunity to increase visibility and participation in the disruption mitigation task group (and disruption research generally) is the disruption theory/modeling workshop to be held at PPPL in July 2013. U.S. and international disruption experts (including several from ITER) will be in attendance, and this meeting is anticipated to be an important means of recruiting new people to contribute to the task group. It was noted that an important outcome could be increased interactions between theorists and experimentalists, increased modeling support of existing experimental data, and definition of specific disruption physics and/or operational questions that translate to code development and/or simulation.

4. Information flow from ITPA/ITER to the broader US community

The council noted that the BPO "forum" capabilities of the BPO website are very infrequently used, and correspondingly, there is relatively little BPO research group activity at the present time. In general, this is understandable, since ITER is a

construction project and most ITER design issues have been resolved and no longer require urgent BPO research input. Given the ITER schedule for operation, this situation for the BPO is likely to remain the same for some time. However, the council noted that the BPO could do more to link the broader U.S. community to ITER by bringing back and sharing information from ITPA and ITER meetings. Several council members suggested that in order for people to stay engaged in the BPO and ITER, BPO topical group leaders could act more as leaders in their respective research areas, in particular for information sharing.

The council noted that progress has already been made on these communication issues through the leadership of BPO deputy director Amanda Hubbard who has been working with the research committee over the last several months. The council discussed possible means of sharing ITPA/ITER information, and noted that BPO-led webinars have been effective in the past with significant community interest and participation. Having BPO leaders and deputies report/summarize important ITPA meeting outcomes and conclusions a total of two times per year (once for each ITPA meeting) was discussed as a reasonable expectation. It was also noted that if BPO leaders know prior to an ITPA meeting that they are expected to provide such summaries after the meeting, they can be better prepared to gather summary information.

The council discussed possible ways of formalizing expectations for such information sharing – including amending the bylaws to set an expectation for routine information sharing – but concluded that such bylaw amendments are premature but could be considered in the future. There was agreement that the BPO directorship should first continue ongoing work with the research committee members to draft and document expectations for ITPA/ITER information dissemination, and work to meet the expectations.

A. Hubbard noted that extending/expanding the ITPA section of the BPO eNews beyond listing the ITPA meeting dates to incorporate more summary information (bullet points to a paragraph) is a good place to start and has already been discussed. One of the concerns raised regarding summarizing ITPA meetings was getting approval to present some of the information being given at the meetings. Such approval processes can take a long time, and some of the information shown at ITPA is not meant to be public and must be treated carefully since some data is unpublished and provided to ITER in confidence. On the other hand, it was felt that it should be easier to get agreement from U.S. ITPA participants to share results from U.S. machines/groups with the USBPO community. Further, lists of joint experiments and activities should be relatively easy to get agreement for posting, and the BPO could post such documents.

5. Upcoming changes for BPO Communications Coordination

Chuck and Amanda reported they were recently informed that the BPO Communications Coordinator Jim DeKock will be retiring in July of this year. Jim has been with the BPO since its inception and has provided extremely valuable service to the BPO. To prepare for the transition, Chuck is gathering information from Jim before he departs to document his various BPO job duties, what kind of equipment he is using, and to finalize/launch the completed major upgrade of the BPO website. Chuck will also work with DOE FES to determine the next course of action for finding a new coordinator.

6. BPO Council Recommendations

Prior to, and during the council meeting, the council generated several recommendations related to the agenda items described in Sections 3 and 4 above.

Council recommendations for the BPO disruption mitigation task group

1. The leadership of the BPO should work with the leadership of the 3 major US facilities to identify additional researchers who could participate in the BPO disruption mitigation task group to assist in the research, co-leadership, and dissemination of information on the progress and plans of the disruption mitigation task-group.
2. The disruption mitigation task group should hold a webinar prior to the July disruption theory workshop. Possible topics to discuss: outcome of DMS CDR held in December, status/plans/opportunities for the task group and outreach to the community, advertising of and preparation for the July workshop including tentative goals, agenda, speakers, deliverables, etc.
3. The leadership of the BPO should consider broadening the scope of the BPO disruption mitigation task group to include increased participation and/or co-leadership by disruption theory and modeling experts to foster enhanced disruption mitigation understanding and predictive capability.

Council recommendations for ITPA/ITER communication to BPO community

1. The BPO directorship should develop and circulate to the council and research committee a document outlining expectations for BPO topical group leaders for each ITPA meeting, including advertising the agenda (even though agendas are often produced last minute and change frequently) and preparation of a summary of the meeting to be presented to BPO members following the ITPA meeting. These expectations should also be posted on the BPO website – perhaps in the “Activity Guidelines of the US Burning Plasma Research Committee” document.

2. The BPO directorship should develop an agenda for webinars for the next 4-6 months for ITPA/ITER summary presentations based on the recent set of ITPA meetings, circulate the agenda to the broader BPO membership, and run the webinar series. It is also recommended to monitor participation/attendance in the webinars, and also monitor which webinars generate the most interest/verbal interactions from the community to provide feedback to the research committee on which presentation formats are most effective to aid future presentations.
3. Update the BPO ITPA Meetings web-page to list the ITPA meeting dates and locations for 2013 (as available).
4. Post ITPA joint experiment/activity lists and coordinating committee summaries on a dedicated BPO ITPA page.

7. Likely agenda items for next BPO council meeting

1. Welcome the new council members elected in May 2013
2. Invite Jim DeKock to the meeting and thank him for his service (before July)
3. Get status report on response to recommendations noted in Section 6 above
4. Get report on status and plans for the “Modes of Research Participation on ITER” task group.

8. The council meeting concluded at 4:05PM Eastern time