Spring 2008 Meeting of the Illinois Section of the AAPT
"Physics Education and Student Cognition"
April 4-5, 2008
Univ. of Illinois at Urbana-Champaign

You are invited to attend the spring meeting of the ISAAPT, which will be held in the Dept. of Physics at the University of Illinois at Urbana-Champaign. Please join us, to learn more about physics, discover new tools and techniques for teaching physics, share your experiences via contributed presentations and Take Fives, and meet old and new friends.

The invited talks, all given by speakers from the University of Illinois at Urbana-Champaign, are:

“The Ultra-Cold Frontier” by Prof. Brian DeMarco, Dept. of Physics (banquet speaker on Friday evening)

“Cognitive Science: Problem Solving and Learning for Physics Education” by Prof. Brian Ross, Dept. of Psychology (Friday afternoon at 3:00)

“Mental Models in Understanding Physics: Misconceptions and Learning” by Dr. David Brookes, Dept. of Physics (Friday afternoon at 3:30)

What Instructors Should Know About How Students Interpret Symbols in Physics” by Eugene Torigoe, Dept. of Physics, (Saturday morning at 9:30 a.m.)

“Do Problem-Solvers Notice Changes Made to a Physics Problem while They are Reading and Explaining It?” by Adam Feil, Dept. of Physics, (Saturday morning at 10:00 a.m.)

There will be three workshops. Sign up for these on the Registration form.

W1 "Increasing Student Engagement Using Personal Response Systems in Lecture", Mats Selen, University of Illinois at Urbana-Champaign. Friday 10:00 a.m. to noon. No fee.

W2. "Inquiry-Based Teaching in High School Physics", Members of the 2008 graduating class of PTE majors at Illinois State University. Friday 10:00 a.m. to noon. - This workshop provides a working example of inquiry-based teaching along with rebuttal of arguments arrayed against teaching by inquiry at the high school level. No fee.

W3. Cracker Barrel: "Physics Teacher Candidate Preparation" - Ad Hoc Committee for the Recruitment, Preparation, and Retention of High School Physics Teachers. 11:00 a.m. to noon. - led by Carl Wenning, David Sykes, and Tom Foster. Discussion focusing on improved preparation of high school physics teachers in Illinois. No fee.
Attendees are welcome to present talks at this meeting. We solicit your innovative ideas and student projects in any area of classroom physics. Many of you have proven methods and techniques and we want to hear about them. Some of you have students who are involved with you on a student research project.

Students are invited to present a talk at the Student Research Symposium, and there will be awards for best student papers. See the ISAAPT web site for details and rules. The length of the presentation is 15 minutes, including time for questions. The title of your presentation should be submitted by Friday, Mar. 21. The deadline for all of the information, including a one paragraph description, is Friday, Mar. 28. Use the form on two occasions, if necessary, to first submit the title, then later to submit the description (or abstract).

W I T H I T – What in the heck is this?

Do you have something in your storeroom that has you baffled? Please bring it, place it on the designated table (with your name) so we can all look at it during the breaks. Please use the Registration form to tell us that you will be bringing an item, or just bring something anyway!

You are welcome to come at the last minute, and on-site registration will be available, but for banquet and lunch reservations, you must register online by March 28. For more information, maps and directions, registration forms, hotel information, and the program, see our website: www.isaapt.org.

Future ISAAAPT Meetings

- Spring 2008 – April 4-5 – University of Illinois at Urbana-Champaign
- Fall 2008 – Oct. 10-11 – Illinois State University, Normal (joint with IACT)
- Spring 2009 – Illinois Wesleyan University, Bloomington
- Fall 2009 – Illinois Central College, East Peoria

If you are considering being a host for a future meeting, please contact Dave Sykes at dave.sykes@llcc.edu.

Future Chicago section meetings

- Spring 2008 – March 15 – Harper College, Palatine (Hosted by Deb Damcott)
- See: www.aapt-chicago.org

Future national AAPT meetings

- Summer 2008 – July 19-23 – University of Alberta, Edmonton, AB, Canada
- Winter 2009 – Feb. 12-16 – Chicago (joint with AAAS)
- Summer 2009 – July 25-29 – Ann Arbor, Michigan
- Winter 2010 – Feb. 11-18 – Washington, DC (joint with APS)
- See: www.aapt.org/Events/meetings.cfm
Bill Hogan Receives Distinguished Service Citation

Prior to the spring Section Meeting, the Executive Council solicits nominations for the Distinguished Service Citation. This award is conferred by the ISAAPT during the fall meeting if a suitable candidate is identified. The recipient of the 2007 DSC was Dr. Bill Hogan, Instructor of Physics at Joliet Junior College.

The award was conferred in recognition of the outstanding contributions Dr. Hogan has made to the field of physics teaching in the state of Illinois. Through the award special recognition is given in the areas of leadership of colleagues and students through physics teaching, professional contributions to section activities through contributed papers, workshop presentation, committee service, or elective office and distinguished service at the home institution.

Illinois Science Teaching – Web site

Do you know young people interested in science teaching? Direct them to the Web page at:

illinois-science-teaching.info

Call for Nominations for Outstanding High School Physics Teacher Award

Each school year the Illinois Section of AAPT is pleased to receive nominations for outstanding high school physics teachers in the state. Fellow teachers and school administrators who are aware of exceptional performance and enthusiastic student response are encouraged to fill out the online nomination form found on the ISAAPT website. The person who is nominated will be notified and asked to fill out the online candidate information form. Please note that the deadline for receiving nominations is December 1, 2008. The teacher who is selected will be notified and presented with the award at the spring 2009 meeting of the Section.

ISAAPT's Recruitment Materials a Hit!

The high school physics teacher recruitment guidelines and brochure were a real hit at the winter AAPT meeting held in Baltimore. Ann Brandon, who has taken charge of the dissemination of these materials, was able to share copies of the booklet and brochure with the leadership and section reps during the Council meeting. In addition, Carl Wenning was able to give a talk about the "Illinois model" for high school physics teacher candidate recruitment. His talk included views of the two associated web pages as well.

If you have not yet seen these important materials, you can download PDF versions through the ISAAPT web page. Complete details about the Section's Pipeline Project are available at:

www.phy.ilstu.edu/pipeline

New physics organizations

The American Physical Society (APS) has organized the Prairie Section of the APS, a regional section including Illinois and several surrounding states. An organizing meeting was held in Chicago on Feb. 8 and a slate of interim officers is being formed. Prof. Chris Fasano of Monmouth College is playing a leading role in this formation. Future collaboration with ISAAPT is a possibility.
For instructors of the advanced physics lab at the undergraduate level, an organization called the Advanced Laboratory Physics Association (ALPhA) has been formed, has chosen officers, and held an organizing meeting at the January 2008 AAPT meeting in Baltimore. An open meeting of Advanced Lab Instructors will be held at the APS March Meeting in New Orleans on Tuesday, March 11, from 5:50 - 7:00 pm in the Marriott Bacchus Room. A session (S16) on the Advanced Lab is scheduled for Mon. Apr. 14 at the APS meeting in St. Louis. For more information see this Web page:

www.teachspin.com/signup.shtml

Saturday Physics Honors Program at UIUC

The Saturday Physics Honors Program, an outreach program for high school students, is also open to the general public. The lectures are free of charge and are scheduled from 10:15 a.m. to 11:30 a.m., unless indicated otherwise. Lectures are held in Room 141, Loomis Laboratory of Physics, 1110 West Green Street, Urbana, Illinois. For details see:

www.physics.uiuc.edu/Outreach/Honors/Index.html

Minutes of the Fall 2007 ISAAPT Executive Council Meeting
Saturday, October 13, 2007
Lincoln Land Community College, Springfield, IL

Call to Order: President Troy Gobble called the meeting to order at 7:50 am. Council members present: Past President Bill Hogan, President-Elect Debby Lojkutz, Webmaster Dave Renneke, Secretary/Treasurer Dave Sykes, Newsletter Editor Brian Davies, Doug Brandt, Chris LaRoche, Tom Foster, Rob Mason, Zak Knott, Ann Brandon, Ray Bugayong, Tom Snyder, Ken Mellendorf, and Elizabeth Langford, as well as Rebecca Vieyra, Tom Carter, and Carl Wenning (visitors).

E-Action Items: Four items were acted upon by the ISAAPT Council between the Spring and Fall meetings via the Council List-Serve.

1. A motion to approve the Council Minutes of the Spring Meeting at Western Illinois University was made on 4/13/07. After discussion, corrections, and vote, Troy Gobble e-mailed the council on 4/24/07 that the motion had been approved.

2. The following motion was made by Carl Wenning on 4/13/07: To have the ISAAPT allocate $750 for the production - in possible cooperation with the Illinois Association of Chemistry Teachers (IACT) and the Illinois Association of Science Teachers (ISTA) - of two publications "A Career in Science Teaching" and "Guidelines for Recruiting the Next Generation of Science Teachers." After the vote Troy Gobble e-mailed the council on 4/27/07 that the motion had been approved.

3. The following motion was made by Dave Sykes on 8/16/07: To have the secretary/treasurer of the ISAAPT set up a fund with the National AAPT for the purpose of managing and dispersing money from, or generated by, the donation of $30,000 made to the ISAAPT from Dr. Thomas Rossing. After the vote Troy Gobble e-mailed the council on 8/30/07 that the motion had been approved.

4. Nominations were forwarded to the council by the Distinguished Service Citation Committee (Diana Roth and Dave Sykes) on 10/01/07: Troy Gobble e-mailed the committee on 10/03/07 that a vote of the council had approved of Dr. Bill Hogan as this years recipient.

Secretary-Treasurer Report: Dave Sykes presented the treasurer's report (see attached). A motion to approve the treasurer's report was made by Deb Lojkutz and seconded by Zak Knott. Motion was approved.

Section Representative Report: No section representative report was submitted as section rep Kim Shaw is no longer with the ISAAPT.

High School Representative Report: Ann Brandon reported the following items: 1) The New Teacher Handbook should be published early next year. 2) The AAPT needs a Tech Editor. 3) Work is being done to develop and/or revise a document outlining the AAPT's position on the place for labs in a physics course. 4) The AAPT requires at least 7 sessions and 6 workshops for high schools at national meetings.

Publicity Chair, Section Editor, and Webmaster Report: Dave Renneke reported that all is going well with the Web pages.
Newsletter Report: Brian Davies reported that 130 copies of the Illinois Physics Teacher were printed and distributed at a cost of about $1.00 each.

Outstanding High School Physics Teacher Award: Troy Gobble reported that the nomination forms had been sent out.

Committee for the Distinguished Service Citation Report: Dave Sykes reported that Dr. Bill Hogan was this year’s recipient and the committee is now comprised of Diana Roth (chair), Bill Hogan, and Dave Sykes.

Bylaw Revisions: Bill Hogan reported that work on revising the by-laws has yet to commence.

Current Meeting Update: Dave Sykes reported that 50 people had registered for the meeting. Dave also reported income at the meeting was about $1900 and expenses were projected at about $1800. Overall, Dave estimated at least a $100 net gain for the meeting.

Future Meetings:

Spring, Apr. 4-5, 2008 - University of Illinois, Champaign-Urbana.
Fall, Oct. 10-11, 2008 - Illinois State University, Normal.
Spring, 2009 - Illinois Wesleyan University, Bloomington (tentative).

Carl Wenning reported that the Fall 2008 meeting at ISU will be a joint meeting with the Illinois Association of Chemistry Teachers. No report was made for the upcoming meeting at UIUC.

Nominations: Bill Hogan reported that the slate of nominees for the upcoming elections (to be held at the General Membership Business Meeting this afternoon) was as follows:

President-Elect: Tom Foster
Four Year Representative: Doug Brandt
Two Year Representative: Tom Carter
High School Representative: Don Reid

Discussion ensued concerning the need for a section representative who could consistently attend national meetings. During the last three or four years several members have taken turns to fulfill the duties of the section rep. No solution to the problem was arrived at. Dave Sykes stated that provisions in the constitution require the election of a single person. As a result the council sought a member who could (at least for the next national meeting) take on the position of section representative. Elisabeth Langford volunteered and consequently became the nominee.

Old Business: Rossing Fund: Dave Sykes reported that both Dr. Thomas Rossing and the national AAPT found it acceptable to manage the money donated by Dr. Rossing. Dave hopes that by the end of the semester a process for management and dispersal of monies from the fund will be in place. Since the fund is to be used only for joint meetings involving the ISAAPT, discussion ensued as to how to facilitate such meetings. It was agreed that institutions near state lines would be encouraged to be hosts along with planning on more joint meetings with the Chicago Section.

New Business:

1. Carl Wenning reported that other states have inquired about using the format and text of the Teacher Recruitment Brochures and Booklets. Carl outlined a method by which the ISAAPT (and other associations who contributed financially to the making of the brochures and booklets) could make some money. He then made the following motion: to allow other entities to use the Science Teacher Recruitment Brochure and Booklet “templates” in exchange for a $300 “licensing fee”. Bill Hogan seconded and the motion was approved. The $300 would be split between the state associations that contributed to the creation of the brochures and booklets. The ISAAPT has a 20% financial stake in the brochures and booklets and thus would earn $60 on every licensing-fee transacted.

2. Carl reported that it is now appropriate to initiate a mailing of the brochures and booklets (one booklet and four brochures) to schools throughout the state. Ann Brandon volunteered to facilitate the mailing. It was agreed that the ISAAPT will be responsible for the costs incurred by the mailing.

3. Dave Renneke reported that he had established the domain name illinois-science-teaching.info. Bill Hogan made the following motion: to reimburse Dave Renneke $45 for this Web domain name for three years. Zak Knott seconded and the motion was approved.
4. Troy Gobble initiated a discussion on the importance of the ISAAPT becoming more politically active, especially in its relationship with the Illinois Board of Higher Education (IBHE). After some discussion, Carl made the following motion: to create an ad-hoc committee to investigate the possibility of establishing a relationship with the IHBE, in cooperation with other science teacher organizations, for the purpose of providing a mechanism for effective communication between said organizations. The motion was seconded and approved.

5. Dave Sykes reported that with recent initiatives instigated by the ISAAPT, spending has increased significantly without new revenue. After discussion, Dave made the following motion: to present to the ISAAPT membership at the Business Meeting for their approval, annual ISAAPT dues of $20 for college faculty and $10 for high school faculty. The motion was seconded and approved.

6. Carl Wenning reported the guidebook given to graduates of ISU’s Physics Teacher Education Program would cost approximately $250 this year and that it is the custom and commitment that these be paid for by the ISAAPT.

**Adjournment:** The Council meeting was adjourned at 9:20 am.

**Business meeting:**

The annual business meeting of the ISAAPT was held during lunch, Saturday, October 13. Two items were acted upon:

1. Upon the recommendation of the Council, the following motion was made: to increase the annual ISAAPT dues to $20 for college faculty and $10 for high school faculty. After a second and discussion the motion was approved.

2. Upon the recommendation of the Council, the following motion was made: to elect the slate of nominees as approved by the Council. The motion was seconded and unanimously approved.

Faithfully submitted,  *Dave Sykes*, Secretary/Treasurer

**Treasurer’s Report**

**Fall Section Meeting – 2007**

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Income</th>
<th>Expense</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/14/2007</td>
<td>Balance forward, (Wenning)</td>
<td>3,194.90</td>
<td></td>
<td>$3,194.90</td>
</tr>
<tr>
<td>3/14/2007</td>
<td>Checkbook Cost</td>
<td></td>
<td>(17.10)</td>
<td>3,177.80</td>
</tr>
<tr>
<td>3/22/2007</td>
<td>To Carl Wenning, Plaques</td>
<td></td>
<td>(111.64)</td>
<td>3,066.16</td>
</tr>
<tr>
<td>3/31/2007</td>
<td>Teacher Award, Adamovic</td>
<td></td>
<td>(100.00)</td>
<td>2,966.16</td>
</tr>
<tr>
<td>4/05/2007</td>
<td>WIU Meeting Deposit</td>
<td>1,859.00</td>
<td></td>
<td>4,825.16</td>
</tr>
<tr>
<td>4/11/2007</td>
<td>WIU Speaker, McCullough</td>
<td></td>
<td>(506.45)</td>
<td>4,318.71</td>
</tr>
<tr>
<td>4/11/2007</td>
<td>WIU Speaker, Rigden</td>
<td></td>
<td>(411.99)</td>
<td>3,906.72</td>
</tr>
<tr>
<td>4/11/2007</td>
<td>WIU Speaker, Greenbowe</td>
<td></td>
<td>(361.85)</td>
<td>3,544.87</td>
</tr>
<tr>
<td>4/17/2007</td>
<td>Student Award, O’Connell</td>
<td></td>
<td>(75.00)</td>
<td>3,469.87</td>
</tr>
<tr>
<td>4/17/2007</td>
<td>Student Award, Traynor</td>
<td></td>
<td>(100.00)</td>
<td>3,369.87</td>
</tr>
<tr>
<td>4/17/2007</td>
<td>Student Award, Campbell</td>
<td></td>
<td>(50.00)</td>
<td>3,319.87</td>
</tr>
<tr>
<td>4/18/2007</td>
<td>Late Registration (Wolber)</td>
<td></td>
<td>34.00</td>
<td>3,353.87</td>
</tr>
<tr>
<td>5/11/2007</td>
<td>WIU Meeting, Expenses</td>
<td></td>
<td>(1,404.17)</td>
<td>1,949.70</td>
</tr>
<tr>
<td>8/29/2007</td>
<td>Brochure Pledge, (Wenning)</td>
<td></td>
<td>(750.00)</td>
<td>1,199.70</td>
</tr>
<tr>
<td>9/21/2007</td>
<td>Insurance</td>
<td></td>
<td>(139.00)</td>
<td>1,060.70</td>
</tr>
<tr>
<td>10/3/2007</td>
<td>LLCC Bookstore (supplies)</td>
<td></td>
<td>(105.16)</td>
<td>955.54</td>
</tr>
<tr>
<td>10/4/2007</td>
<td>Spinner Plastics (DSC plaque)</td>
<td></td>
<td>(89.62)</td>
<td>865.92</td>
</tr>
</tbody>
</table>

Subtotals 5,087.90  (4,221.98)  865.92