

December 2009 President's Message

Greetings fellow ISAAPT members!

There are many important items to share with you in this month's president's message:

- ☆ **Local Physical Science Alliance (LPSA) Zone Leaders Meeting Funding**
- ☆ **New/Crossover Teacher Workshop Slated**
- ☆ **ISAAPT Spring Meeting at Carlinville March 26-27**
- ☆ **Summer Opportunity for Physics Teachers**
- ☆ **PTEO Autumn 2009 Issue Now Available**
- ☆ **Recruiting the Next Generation of Physics Teachers**
- ☆ **December AAPT NEWS eNNOUNCER Available**
- ☆ **AAPT Associate Membership a Real Deal!**
- ☆ **Free Publication Available from AAPT**
- ☆ **Moving Ahead with NIPTE**
- ☆ **Year-end Contribution to Your ISAAPT?**
- ☆ **Acknowledgements**

I do hope that you will take time – even during this busy time of year – to review the many benefits and services made available to you by both ISAAPT and AAPT as outlined below. Many ISAAPT members are unaware of the work that goes on during the year in the background; the following items will help dispel the myth that ISAAPT is active only during spring and autumn meetings.

☆ **Local Physical Science Alliance (LPSA) Zone Leaders Meeting Funding**

Ken Wester and I worked diligently on obtaining funds to support a zone leaders meeting here at ISU next spring to inaugurate 12 LPSAs for Illinois. Unfortunately, our proposal was not accepted for funding. Our timetable has been set back a bit as a result, and we don't have access to the resources now that will allow us to extend this project to our friends in IACT. Despite this setback, this hasn't dampened our spirits and we continue to pursue developing ISAAPT-affiliated alliances across the state.

At this time Ken and I envision a local physics alliance (LPA) zone leaders meeting at the spring Section meeting at Carlinville. The focus of this meeting will be to prepare the groundwork for establishing 12 LPAs starting next autumn. I have worked with **Don Reid** at Carlinville to set aside two hours immediately after lunch at the spring meeting for this zone leaders meeting to take place. We will discuss how best to manage LPAs (Ken has lots of experience), and how they might serve as the launching board for educating not only ourselves, but teachers of younger students as well.

ISTA President **Gwen Pollock** will be in attendance at the LPA zone leaders meeting to talk about her vision statement in relation to the LPAs – one that Ken and I both embrace.

We are still looking for additional leaders of LPAs. See the attached list of zones and volunteer leaders. It is most desirable that each zone has more than one leader. Won't you volunteer to lead or assist in leading your zone? If you are at least interested in doing so, please write me off list at wenning@phy.ilstu.edu and I'll add you to the list.

☆ New/Crossover Teacher Workshop Slated

The \$2,000 in funding that Illinois and Chicago Sections jointly received from the AAPT recently will be used (in part) to host the inaugural ISAAPT/CS AAPT New/Crossover Physics Teachers Workshop. The inaugural joint workshop will be held at Joliet Junior College on Saturday, January 16th with **Bill Hogan** serving as host.

The limelight of this workshop will be directed towards AAPT's newly released book *Teaching Physics for the First Time*, as well as <http://www.comPADRE.org>. At this time a trained workshop leader has not been identified, but I continue to work with PTRA's Jim Nelson to recruit such a person.

The AAPT funding will also provide for two additional follow-on workshops (pretty much identical to the first), one at Lincoln Land Community College on Saturday, February 27th and the other in the Chicago area on a date yet to be determined. The hosts of the LLCC workshop will be **Dave Sykes** and **Tom Snyder**. More details will be provided in the January president's message. Ken Wester and I will co-lead the LLCC workshop.

☆ ISAAPT Spring Meeting at Carlinville March 26-27

Make plans now to attend the ISAAPT's spring meeting in Carlinville, IL, March 26-27. Our host, **Don Reid**, is working hard to make this meeting successful. The theme of the meeting will be "Green Physics." Don has already lined up some excellent invited speakers, and there will be Friday morning workshops with a pedagogical orientation that deal with teaching controversial "green" topics. The spring meeting also features the Student Research Symposium.

For those of you who are not familiar with the location of Blackburn College or Carlinville (I have to admit, I had to look up Carlinville's location on a map), please be aware that Carlinville is located about half way from Springfield to Edwardsville. It is readily accessed via I-55. This promises to be a good meeting with a timely topic; you'll not want to miss it. Here is the schedule of events arranged thus far:

Name	Affiliation	Topic	Time
Carl Wenning	ISU	Problem-Based Learning workshop	F. AM
David Marx	ISU	<i>Holes in Al Gore's Global Warming</i>	F. PM
Bill Ratzlaff	SIU-E	<i>Green Roof Systems</i>	
Tom Foster	SIU-E	Vernier workshop	F. AM
Tom Foster	SIU-E	Astrobiology	
Ed Zalisko	Blackburn	Bio-mechanics	S. AM
Mark Armstrong	Blackburn	<i>Green Gluep and Non-Newtonian Fluids</i>	
Panel Discussion,	various	Global Warming	S.
Richard Gelderman,	W Kentucky U	Physics Olympics	S. AM
Ken Wester & Carl Wenning,	ISU	LPA Zone Leader Meeting	S. PM

☆ **Summer Opportunity for Physics Teachers**

Northwestern University is offering a summer Research Experience for Teachers. This program is for physics teachers who might be interested in working with scientists this coming summer. This program carries an \$8,500 stipend and is offered by the Northwestern University Materials Research Center. Science teachers are invited to participate in 8 weeks of laboratory research in the group of one of Northwestern's leading research professors. Research topics include a wide range of materials science, physics and chemistry areas such as polymers, nanoscience, biomaterials, molecular electronics and photonics. The program runs from June 21 through August 13, 2010.

At the end of the 8 weeks, the participants not only write a technical paper based on their research, but also develop a curriculum project that they can use in their classrooms. K-12 teachers and community college professors who have a bachelor's degree in science or engineering are eligible; no prior research experience is necessary. Participants are eligible to receive graduate credits through the National Louis University. The application deadline is March 15, 2010.

For more information, or to apply, please visit the program's website:

http://www.mrsec.northwestern.edu/content/educational_programs/ret.htm

If you have any questions about the RET program, please feel free to contact Martha J. Tanner, project director, via email or phone at mrc@northwestern.edu or 847-491-3606.

☆ **JPTEO Autumn 2009 Issue Now Available**

The latest issue of the *Journal of Physics Teacher Education Online* has just been released. Articles included in this issue are as follows:

- "The New Aristotelianism?", Editorial
- "Scientific epistemology: How scientists know what they know by Carl J. Wenning"
- "Connecting three pivotal concepts in K-12 science state standards and maps of conceptual growth to research in physics education" by Chandralekha Singh & Christian D. Schunn
- "Teaching of heat and temperature by hypothetical inquiry approach: A sample of inquiry teaching" by Manzoor Ali

This issue of JPTEO can be viewed and/or downloaded by visiting the Journal's website at <http://www.phy.ilstu.edu/jpteo/>. This quarter's issue is 64 pages in length and contains what will likely prove to be a controversial editorial as well as interesting and useful articles.

☆ **Recruiting the Next Generation of Physics Teachers**

The ISAAPT's Committee for Recruitment, Preparation, and Retention of High School Physics Teachers prepared two documents during 2006 to help solve the current crisis in high school science teaching. The ISAAPT membership is encouraged to take advantage of these two documents. Both are color, printable PDF files that are accessible through <http://www.ISAAPT.org>.

Thanks to generous financial contributions totaling \$3,750 from four Illinois teacher organizations (ISAAPT, IACT, ISTA and CS AAPT), copies of the brochure and the booklet were printed and distributed to nearly all Illinois high school science teachers through of these organizations during 2007. Two associated web pages, <http://www.isaapt.org/teach> and <http://www.illinois-science-teaching.info>, are also part of this project. Please make use of these resources to promote careers in high school science teaching.

☆ **ISAAPT Guidebook Program**

By action of the Executive Council on October 17, 2009, the ISAAPT Guidebook Program was renewed for three more years. The program provides resource guides to qualifying teacher candidates at the request of an Illinois PTE program administrator. Details about the program can be found at the following URL: <http://helios.augustana.edu/isaapt/guidebook.html>.

☆ **December AAPT NEWS eNNOUNCER Available**

The *AAPT NEWS eNNOUNCER* is published monthly on the AAPT website and is distributed to the membership by email. Each issue appears on or about the 1st of each month. The *AAPT NEWS eNNOUNCER* contains upcoming events and deadlines, member and section news and information, recent news from the worlds of physics and teaching, current promotions and programs, and much more.

Download the last issue of *AAPT NEWS eNNOUNCER* at the following URL: <http://www.aapt.org/aboutaapt/ennouncer/index.cfm>. Better still, consider joining the AAPT and attending its national meeting.

☆ **AAPT Associate Membership a Real Deal!**

Check out AAPT membership benefits and options at <http://www.aapt.org/>. Remember, the ISAAPT receives part of your membership dues if you file for the new associate membership. Information about the Associate membership can be found here: <http://www.aapt.org/Membership/upload/090817-Associate-Membership.pdf>.

The benefits of associate membership are plentiful:

- a. Article Packs of 42 articles from AJP or TPT per year-current and back issues
- b. Physics Today magazine by paper and electronically
- c. AAPT Annual Review by paper and electronically
- d. Access to a password protected AAPT site containing
 - Podcasts of selected AAPT meeting plenary and other sessions
 - Podcasts of interest to physics teachers
- e. AAPT e-NNOUNCER and special e-mailings

- f. Electronic table of contents for each issue of TPT and AJP
- g. Coupon for 50% reduced registration at an AAPT semiannual meeting if the AM converts to full AAPT membership during the first year of their Associate Membership
- h. Discounts for registration at AAPT semi-annual meetings
- i. Discounts for purchases at AAPT Store
- j. Participation in iWEB community activities
- k. Participation in AAPT Area Committee listservs

Please download the required associate membership form from the following URL:
<http://www.aapt.org/Membership/upload/2009-Associate-Application.pdf>.

☆ **Free Publication Available from AAPT**

Download your copy of *The Role, Education, Qualifications, and Professional Development of Secondary School Physics Teachers* from the following website: <http://www.comPADRE.org/>. This publication, written by Beverly Cannon (TX), Patrick Callahan (NJ), Elizabeth Chesick (PA), Joan Mackin (PA), **Shannon Mandel** (IL), and yours truly, **Carl Wenning** (IL), is a useful guide for high school physics teachers, and those responsible for hiring and supervising them. Candidates for secondary school physics teaching positions may be drawn from a variety of sources. Some may have completed an accredited physics or physics teaching program, others may have training in other educational, science, engineering, or business disciplines. Still others may be entering the profession as an alternative or second career. The purpose of this document is to provide some guidance for administrators to gauge a candidate's qualifications to teach physics. See: <http://www.compadre.org/PTEC/items/detail.cfm?id=9447>

☆ **Moving Ahead with NIPTE**

Ken Wester and I recently received a \$5,000 grant from the Illinois State University CeMaST program to support a pre-planning meeting here at ISU benefiting the National Institutes for Physics Teacher Educators (NIPTE). This pre-planning meeting will lay the groundwork for a \$50,000 proposal to the NSF that I am making in cooperation with AAPT to hold a special topics planning meeting in Washington, DC, early next summer. The national planning meeting will address the NIPTE main proposal.

NIPTE calls for a \$3,000,000, five-year targeted MSP grant (ideally a 5-year implementation phase) that would partner faculty of successful physics teacher education (PTE) programs – as well as master high school physics teachers – with less experienced physics teacher educators whose universities' PTE programs show commitment to and potential for programmatic change and growth.

The measurable outcomes will be to significantly increase the competence of up to 120 PTE

coordinators to administer and teach within their PTE programs, to build both quality and quantity of their PTE courses in comparison to specified indicators, and to increase enrollment in those programs within the lifetime of the grant.

Ten invitees will be attending the pre-planning meeting at ISU including PTE leaders from Illinois, Utah, Missouri, Minnesota, and New York (3). **Tom Holbrook, Diane Riendeau, Ken Wester**, and yours truly, **Carl Wenning**, – all members of ISAAPT – likewise will be in attendance. Your ISAAPT leaders are working to make a world of difference.

☆ **Year-end Contribution to Your ISAAPT?**

While ISAAPT is not yet recognized officially as a 501(c)3 non-profit educational corporation, we certainly do the work of such worthy institutions. **Doug Brandt** is currently taking the first steps required for having ISAAPT formally recognized as such. Right now he is looking into the process of incorporation and what this entails. After that, we'll consider the next moves of gaining a tax-exempt status. During the interim I'd like to see the coffers of the ISAAPT grow a bit to support some of our Section's many worthy efforts.

If you are willing to make a non-tax-deductible contribution to the ISAAPT, your contribution would be greatly appreciated. Please send any contribution you'd care to make to our esteemed Secretary/Treasurer, **David Sykes**, at Lincoln Land Community College, 5250 Shepherd Road, Springfield, IL 62794-9256. All contributions will be recognized in the spring edition of the Illinois Science Teacher. Please make your check payable to "ISAAPT".

☆ **Acknowledgements**

In closing, I'd like to say thanks and give a "tip o the hat" to those who work behind the scenes throughout the year to keep ISAAPT running. Just a few of those names appear in this month's President's Message; there are numerous other un-named individuals with whom we cannot do without. Our elected section officers, Council representatives, and various other appointees such as newsletter editor and web master are "sine qua non" for this organization. I would be remiss if I were not to include among this group who work so diligently on our behalf to host our spring and autumn Section meetings and arrange for our workshops and other activities. The next time you encounter one of these individuals, be certain to let them know you appreciate their efforts.

If you see something that the ISAAPT can do to better physics teaching at any level here in Illinois, please let me know. Making ISAAPT work for you, I am

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Addenda (12/08/2009)

A few additional items came to my attention this morning about which the ISAAPT membership should know:

- ☆ **Call for HS Teaching Award Nominations**
- ☆ **AAPT Associate Membership Offer Ends 12/31**
- ☆ **AAPT Washington Meeting Deadline Fast Approaching**
- ☆ **President's Message Archived**

These items are mostly "urgent" in that they include quick-approaching deadlines. Please act on this information as soon as possible if you are interested.

☆ **Call for HS Teaching Award Nominations**

Each school year the Illinois Section of AAPT is pleased to receive nominations of 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](#). 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 year is **December 31**.

ISAAPT webmaster **Dave Renneke** decided to bring the HS Teacher Award link to the top of the [ISAAPT homepage](#) for now because this is the time of the year that both the nominators and the candidates will be looking for the online forms. Past winners of this award can be found on the [Illinois Outstanding High School Physics Teachers web page](#).

☆ **AAPT Associate Membership Offer Ends 12/31**

The American Association of Physics Teachers (AAPT) is conducting a membership drive through the end of 2009. The current National membership across all categories is approximately 10,000, but there are more than 23,000 high school faculty, 2,600 two-year college faculty, 2,700 four-year college faculty, and 6,300 university faculty teaching physics who should be members of AAPT.

Why should you join the national organization of the AAPT?

Professionals in any field should belong to the professional society representing that field. It is a part of being a professional! For physics educational professionals, that society is the American Association of Physics Teachers. AAPT supports physics educators with prestigious peer reviewed journals, world class meetings, electronic archives, web resources and products. The Association is dedicated to "Enhancing the understanding and appreciation of physics through teaching."

There are now two levels of membership available, regular and associate. Regular Membership includes:

- your choice of print journals (The Physics Teacher and/or the American Journal of Physics)
- full access to both online forms of the journals with complete archive files
- additional resources including the newsletter, eNNOUNCER, and Physics Today (print and electronic)
- discounts at the AAPT Physics Store
- discounts to national meetings
- access to online listserv communities where you can share information and ideas with colleagues

Associate Membership (\$36/year) includes:

- full-text access to 42 electronic articles from The Physics Teacher and/or the American Journal of Physics
- purchase additional articles at 50% savings
- additional resources including the newsletter, eNNOUNCER, and Physics Today (print and electronic)
- AAPT Physics Store coupons valued at over \$200
- reduced registration fees for national meetings
- access to online listserv communities where you can share information and ideas with colleagues

If you have never been an AAPT member or your membership has lapsed before or on December 31, 2006, you may join as either an Associate Member or a Regular Member through the "section challenge." Our section will receive 25% of the yearly dues as a grant. If your membership has lapsed more recently, you are still encouraged to rejoin as a regular member.

To join, go online to the AAPT Membership page at the following URL:

<http://www.aapt.org/Membership/joining.cfm>

Under "How to Join or Renew", click on "I am joining AAPT for the first time" and create a web account to fill out the on-line form. If you already have an AAPT account e.g., are a lapsed member, you should keep your original AAPT ID and password. Email membership@aapt.org to obtain it.

☆ **AAPT Washington Early Registration Deadline Fast Approaching**

The early registration deadline for the AAPT joint winter meeting with APS is Friday, December 11. You can register at <http://www.aapt.org/Conferences/wm2010/registration.cfm>

☆ **President's Message Archived**

The ISAAPT President's messages (including addenda) will be archived on the Association's webpage thanks to the assistance of webmaster David Renneke.