

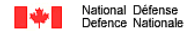
Ontario Association of Physics Teachers

2008 Year Report (OAPT www.oapt.ca)

Submitted by Marina Milner-Bolotin, OAPT Section Representative



Ontario Association of Physics
Teachers



National Défense
Defence Nationale

[Home](#) | [AAPT](#) | [Conference](#) | [Grade 11 Contest](#) | [Links](#) | [Members](#) | [Newsletter](#) | [PER](#) | [Contact](#) | [Log In](#)



Fall planning meeting. Front: Rolly Meisel, John Caranci, Karen Randall, Roberta Tevlin, Marianne Franklin, Glen Wagner, Kevin Li, Dave Doucette. Rear: James Ball, John Pitre, Marina Milner-Bolotin, Jeannette Pitre. Also present: Shawn Brookes; John Atherton, Tetyana Antimirova; Patrick Whippley.

Workshop 2009

Royal Military
College Kingston

Department of Physics

Date: TBA

Keynote Address

Tours

Hands on Workshops



Ontario AAPT Section had a very exciting year of 2008 working on fulfilling our Mission Statement: to advance the teaching of physics in the secondary schools, colleges, and universities of Ontario; and to promote a professional spirit and collegiality among the members of the Association.

This report will briefly outline our achievements as well as describe our challenges and how we are planning to overcome them in the following years. The report will consist of two parts:

- a) 2008 OAPT Section accomplishments.
- b) OAPT Challenges and our approaches for overcoming them.
 - a. Recruiting new members for both OAPT and AAPT.
 - b. Enhancing OAPT-AAPT connections.
 - c. Recruiting younger members to the Executive (continuity).
 - d. Funding sponsors for OAPT activities such as supporting new teachers in attending the National Meetings, becoming AAPT members, attending relevant workshops, etc.
 - e. Extending the influence of the OAPT beyond Toronto. Reaching the entire Province.

Part A: 2008 Some of Ontario Association of Physics Teachers Accomplishments

Ontario Association of Physics Teachers had a very exciting year of 2008. Our major accomplishment is the success of hundreds of Ontario physics students in our high schools, colleges and universities. Below you can find a brief outline of some of the other important accomplishments of our Section. You can find more about us at our current web site:

www.oapt.ca

- 1) Our Section members continue working together as a team of physics educators from high schools, colleges and universities to promote physics teaching in the Province of Ontario. We are very fortunate to have a support of many of the retired physics teachers across the Province, whose contribution to the OAPT cannot be emphasized enough! We have a good representation of members (as well as the Executive Board members) from various institutions across the Province and various stages in their professional careers.
- 2) We continue updating our Section web site that has current and relevant information (Patrick Whippey is constantly working on it).
- 3) We continue running a Grade 11 High School physics contest written by more than 3500 students all across the province (Rolly Meisel is in charge of the Author of the Contest while Nick Keehn is the Contest distributor. Many other Section members help through donating interesting physics problems and reviewing them).
- 4) We continue our collaboration with the Perimeter Institute for Theoretical Physics (Damian Pope is our link to it). Physics Teachers from Ontario actively participate in various activities of the Perimeter Institute (Roberta Tevlin, Dave Doucette, and Diana Hall are a few of the physics teachers and active OAPT members actively involved in it).
- 5) We continue our strong connection with the Greater Toronto District School Board (GTDSB). John Atherton, Supervisor of the Science Department of the GTDSB has been leading our organization in this direction. We took an active part in the Science Teachers events in Toronto to recruit new members and strengthen our influence on the science education in the Province.
- 6) OAPT took an active part in a number of events organized by the Ontario Ministry of Education during the past year and met with their representatives as well as with the representatives of the Ministry of Research and Innovation of Ontario.
- 7) We continue publishing an OAPT Quarterly Newsletter (Marianne Franklin, Ernie McFarland, Glen Wagner and James Ball are in charge of it) that has exciting information for physics teachers across the Province. Our Newsletter is published on the www.oapt.ca web site and is accessible by all physics teachers across Ontario and in the world.

- 8) OAPT started a new area on the web site dedicated to the Physics Education Research. This area will be gradually enhanced by relevant information and resources for physics teachers.
- 9) We had a very successful May Annual OAPT meeting held at Ryerson University and partially sponsored by the Department of Physics at Ryerson University. More than 100 physics educators from many Ontario Universities, colleges and high schools attended it. Tetyana Antimirova (a Physics Professor at Ryerson University and an Executive Board member at large was one of the main liaisons between the OAPT and Ryerson). The May OAPT meeting helped us develop a few important initiatives:
 - a. OAPT members fully supported the letter to the Government of Canada in support of funding of Physics Education. This initiative was very important for the PER in Canada.
 - b. OAPT was able to attract a number of pre-service physics teachers to become OAPT members.
 - c. OAPT members presented very exciting workshops and talks. In addition, we were able to attract top notch scientists to present the plenary talks (see web site).
 - d. OAPT presented two of our most outstanding members Mr. John Caranci and Mr. Elgin Wolfe with the Honorary Life OAPT memberships.
 - e. OAPT invited Dr. David Mason from compADRE to conduct a very successful workshop for the teachers.
 - f. OAPT started collaboration with the West New-York physics teachers from the Buffalo-Rochester area. Dan Mac-Isaac and Kathleen Falconer were two of the special invited presenters at our Annual Meeting. As a result of this collaboration our teachers attended a number of events of the West N-Y Physics Teachers Association.
 - g. OAPT enhanced the connections with the Perimeter Institute and helped organize a few very successful workshops attended by a few dozen of teachers at the Conference.
 - h. OAPT strengthened the high-school-university physics educators' link through organizing a very successful panel. More about it can be found on our web site and a report of it was published in our Newsletter.
- 10) We had a few very successful Executive Board meetings during the year and we were able to provide continuity between the last year and next year's Executive Board members. The exchange of ideas during the meetings was very productive.
- 11) Marina Milner-Bolotin, Ontario Section Representative actively attended two National meetings in 2008 representing our Sections at the National Level. She also filed the Section reports.

- 12) In October we held a very productive OAPT Executive Board Retreat working on the development of the OAPT strategic plan and planning the activities for the 2009 year, including the May meeting in the Royal Military College in Kingston, Ontario. The Retreat was once again hosted by the long time OAPT Executive Board member and a former University of Toronto Physics Teacher John Pitre and his wife. The photograph from this meeting is featured on our web site and is included in this report.
- 13) Rolly Meisel and Patrick Whippey came up with a great idea of featuring OAPT members reading the OAPT Newsletter during their world travel. Carrying the Newsletter with them provided useful to many of our members. The OAPT Newsletter has travelled with our members all across the world: from Taj-Mahal to Beijing, San-Antonio, Jasper Park (AB), Quebec City (QC), Philippines and Europe.

OAPT continues working as a team to promote physics teaching in Ontario. However, as any other Section of the AAPT we face some challenges. The next section of the Report will outline how we were trying to address them in 2008 and what we are planning to implement in the future.

Part B: Some of OAPT Challenges and our approaches for overcoming them

- a) Recruiting new members for both OAPT and AAPT.

One of the biggest challenges of our Section is recruiting new members. Although our membership dues have not changed since 1970s (only 8 dollars a year!), our membership keeps dwindling down. There are many reasons for that in Ontario. One of the main reasons is that the number of teachers considering themselves to be physics teachers has decreased significantly due to a decrease in the student population in Ontario and the number of students taking physics in high schools. Most of the physics teachers are forced to teach another subject and do not specialize in physics teaching. In addition, the teachers have another competing organization to become members of, such as Science Teachers Association of Ontario, NSTA, etc. We have to think how to attract more teachers, especially the new ones to become OAPT members.

- b) Enhancing OAPT-AAPT connections.

This is one of the key issues we have started working on during the October 2008 Executive Board Retreat. For example, the invitation of Dave Mason to the May 2008 OAPT meeting at Ryerson showed our members one of the many benefits of being part of the AAPT, now we have to think how to attract the OAPT members to join the AAPT. In addition, active participation of our Section Representative in the National Meetings helps us influence and

contribute to the work of the AAPT and a world leader in physics education. Unfortunately as of now, many of the teachers who are OAPT members are not AAPT members. We recognize it is a problem and are working on it. During the May 2009 OAPT meeting we will distribute the AAPT trial 6 months membership to the attendees with the hope to attract them to the AAPT. We are also planning to talk to our members about the tremendous benefits of attending the AAPT National Meetings (at least once a year). We are currently working on finding the money to sponsor a few new physics teachers to attend the Summer-2009 AAPT meeting in Ann-Arbor, Michigan. We hope to be able to find continuous sponsors to support our members' attending summer AAPT meetings, especially when they are taking place in the locations, drivable from Ontario.

c) Recruiting younger members to the Executive (continuity).

Our Executive Board consists of an unusually talented and dedicated group of physics educators from all over the Province. In 2008, we continued working hard to provide continuity for the OAPT, via recruiting younger members. We are very grateful for our very dedicated OAPT members (John Pitre, Ernie McFarland, John Caranci, Rolly Meisel and Patrick Whippey to name a few) who have been on the OAPT Executive for years and in addition to doing a significant amount of work for the OAPT are always ready to mentor younger incoming Executive Board members.

d) Funding sponsors for OAPT activities such as supporting new teachers in attending the National Meetings, becoming AAPT members, attending relevant workshops, etc.

This is a very important challenge as for our organization to be sustainable we need financial backing. One of the issues discussed during the last Executive Board Retreat was raising the Membership dues for the OAPT (the dues have been the same since 1970s). However, the increase of the dues (\$20.00 – suggested level) will still leave us short in implementing the new programs we want to implement. We have to be more aggressive in finding the sponsors. Last year we were fortunate that Ryerson University volunteered to sponsor the May Conference. However, this was a one-time sponsorship. We have to think of more sustainable resources to be able to help teachers as well as support outstanding physics students. We want to be able to sponsor new teachers to attend National AAPT meetings as well as relevant physics workshops offered in Canada and the United States. One of the possibilities was to collaborate with the Canadian Association of Physicists but this has to be discussed at the National AAPT level.

e) Extending the influence of the OAPT beyond Toronto. Reaching the entire Province.

With a population of more than 12 million people (almost 40% of the population of Canada – the largest Canadian Province in terms of the population), Ontario has an area of more than 1,000, 000 sq. km (416,000 sq. miles). This represents a big challenge for the OAPT as we have

to figure out how to reach physics teachers in remote areas. Although more than a third of the population of Ontario resides in the Greater Toronto Area (GTA), there are more than 7 million people who live outside of the GTA. We have to find sponsors to help these teachers attend Annual meetings, physics teachers' workshops and other relevant events. Currently most of our members are coming from the GTA, Waterloo, Kitchener, Guelph, London, Kingston and Ottawa. We have to think how we can utilize modern technology to reach the physics teachers in remote areas. This way we can increase our membership and make an impact on the quality of physics teaching across the Province providing all students with equal access to high quality physics education.

In conclusion, the OAPT Section is a vibrant physics education community in Canada and the most active AAPT Section outside of the United States. We have a lot of dedicated members who are devoted to the improving of physics teaching in Ontario. We will keep working on improving our Section and achieving our goals in 2009. We are looking forward to the exciting and productive year.



Report Submitted by Marina Milner-Bolotin (mmilner@ryerson.ca)

OAPT Section Representative, Toronto, ON, Canada

November 20th, 2008