

AAPT-ONTARIO NEWSLETTER

VOLUME 1, NO. 2 JANUARY, 1980

DATES SET FOR 2ND CONFERENCE

June 13 and 14 (Friday-Saturday) have been chosen as the dates for our 2nd annual conference, to be held at Trent University this year. Make a note on your calendar today.

CALL FOR PAPERS

This is a call for papers for our June conference. Papers are invited on any topic pertaining to the teaching of Physics: innovations in teaching methods, new ways to teach old material, interesting tangential topics, etc., etc.

Papers will be 10 minutes in duration, with 5 minutes afterwards for questions. 15 minutes (instead of 10) may be requested by the contributor, to be allotted at the discretion of the Program Chairman. We hope to have at least one poster session; if you are interested in this mode of presentation, please indicate this with your abstract. (In a poster session, each contributor makes a display on his/her topic and the displays are arranged in a room; people who are interested in a particular presentation can then interact personally with the contributor.)

An abstract of about 150 $\underline{\text{words}}$ should be submitted by March 31 to:

Mr. Douglas Fox Belle River D.H.S. 333 South St. Belle River, Ontario NOR 1A0

Please indicate any requirements for audio-visual equipment.

A useful article "How to present a paper at an AAPT meeting" appeared in the November 1978 issue of "The Physics Teacher". If you do not have access to this article and would like a copy, simply request one when you submit your abstract.

GRADE 11 PHYSICS CONTEST

Many thanks go to those who volunteered to participate in the trial run of a Grade 11 Physics contest. The size of the response was gratifying. Those who indicated a willingness to participate in the trial run will be contacted individually in March. If all goes well we hope to hold the contest concurrently with one of the Grade 13 contests to minimize the supervision necessary. In 1981 the contest should be ready for use in all schools in Ontario. Watch for that announcement in this newsletter.

REPORT ON PHYSICS WORKSHOP, SUDBURY

A Physics Workshop was held at Laurentian University on Nov. 26, 1979 from 4 to 9 p.m. Sponsored jointly by the Laurentian University Physics Dept. and AAPT-Ontario, it consisted of two sessions, one on "Forces and Effects in Rotational Frames of Reference" and the other on "Physics in Everday Situations". Each session comprised presentations by participants and films.

AAPT-Ontario is happy to co-sponsor such meetings of Secondary School and University teachers and is willing to assist in whatever way possible. In the future, we hope that various AAPT-Ontario members will be able to offer workshops developed by the National AAPT on topics such as Piaget's Theory of Learning, Introduction to Microcomputers, Building Student Confidence in Physics, etc.

LOGO FOR AAPT-ONTARIO

If you are very observant, you will have noted that the logo at the top left of this newsletter is not the same as that on our first newsletter. The logo on the first newsletter was that of the National AAPT; the one on this newsletter is the National AAPT one surrounded by a circle which represents an "O" for Ontario. Thanks for the idea goes to Erich Barth, Art Director of the Dept. of Information of the University of Guelph.

CONSTITUTION CHANGES

In order to improve the operation of our AAPT Section, the Executive Committee is recommending two changes to the Constitution of AAPT-Ontario. One is the creation of a nominating committee to handle the nomination and election of members of the Executive Committee each year, the other is an increase in the term of office of both the Section Representative (to the National AAPT) and the Secretary-Treasurer from one to three years.

The main functions of the nominating committee will be to solicit nominations from the general membership, and to make nominations itself, especially in the case of insufficient nominations from the membership. The nominating committee will also conduct the election. The committee will consist of the President (chairman of the committee), Past President, and one person from the general membership appointed by the President and Past President. No member of the nominating committee may be nominated for an office. In the case of the office of President or Past President being vacant for whatever reason, the Section Representative will fill the vacant committee position.

The increase in term of office of the Section Representative and the Secretary-Treasurer was sparked by a recent publication by the National AAPT which suggested to Sections that continuity in these offices is important. This change is to be made retroactively, i.e., the terms of our present Section Representative, Dean Gaily, and our present Secretary-Treasurer, Doug Cunningham, will be increased from one to three years. Both Dean and Doug kindly have agreed to donate their time and talents for this additional two years. As a result of this change, the annual election of officers will normally consist of an election of a Member-at-Large and a Vice-President (who will become President after a year, and then Past President). Every third year, a new Section Representative and Secretary-Treasurer will be elected.

According to terms of our Constitution,
"Amendments ... shall be made by a two-thirds
majority of those voting in a mail ballot
conducted by the Executive Committee". The
detailed changes to the Constitution are given
on a separate sheet. Please indicate your approval
or disapproval of the changes in the spaces
provided and return by Jan. 25 to Ernie McFarland.
Thank you for your participation.

NAME AND ADDRESS CORRECT?

Are your name and address correct (including postal code) on the mailing label which brought this newsletter to you? If not, please inform Doug Cunningham, Secretary-Treasurer, AAPT-Ontario, Bruce Peninsula District School, P.O. Box 178, Lion's Head, Ontario NOH 1WO.

MEMBERSHIP & FINANCIAL STATUS

As of January 1, 1980, membership in AAPT-Ontario stands at 250. This number consists of 153 Secondary School teachers, 90 University teachers, 6 at Community Colleges, and 1 miscellaneous. There has been a 25% increase in membership since September, 1979 - not bad, but there are still a lot of teachers hiding in the woodwork.

We have \$320.10 in our bank account (Jan. 1, 1980). With 250 memberships at \$1.00 each, it is obvious that we actually turned a profit at our June conference, even with our low registration fees.

A CINESCOPE OF PHYSICS

"A Cinescope of Physics" is an extremely useful publication by AAPT which gives information on over 1300 Physics films. The book begins with a list of over 100 films under the heading "Films Every Physics Library Should Have", and then lists all 1300 films under subject headings. Finally, there is an alphabetical listing of all the films with a short description for each one: a two-sentence synopsis of the film, plus duration, price, where available, when and where reviewed, etc.

This book is available from the Publications Department, AAPT, Graduate Physics Building, SUNY at Stony Brook, Stony Brook, N.Y. 11794, U.S.A. The price is \$10.00 (U.S.) for members of the National AAPT, \$12.50 (U.S.) for non-members.

CALL FOR PAPERS FOR STAO 80

The biennial conference of STAO (Science Teachers Association of Ontario) will be held Nov. 6-8 at the Skyline Hotel in Toronto. STAO is calling for short papers (10 to 15 minutes, or longer) on teaching innovations, interesting demonstrations, useful techniques or ideas for teaching science, etc.

Subject areas are wide open.....Biology, Environmental Science, Chemisty, Computers, Energy, Earth Sciences, Physics, General Science, etc.

As are levels...... Elementary, Intermediate, Senior

And languages French or English

Please contact Bob Loree at;

Oakville-Trafalgar High School, 291 Reynolds Street, Oakville, Ontario. L6J 3L6

Please provide name, work address, telephone number, occupation, subject area, level, language, paper length, outline of content and audio visual equipment needed.

Deadline for papers: February 15, 1980

SOME AIP BOOKLETS

The American Institute of Physics (AIP) has many interesting publications. Three booklets of particular interest to teachers are listed below:

"Physics: A Career for You" - 12 pages with colour photos containing career information for high school students and University undergraduates.
Single copies free, multiple copies 40¢ each. Publication #R-279 (1977).

"Planning for Graduate Work in Physics" 9 pages with suggestions for the
student considering advanced study
in physics, astronomy, and related
fields. Single copies free, multiple
copies 25¢ each. Publication #R-278
(1977).

(continued in next column)

AIP booklets (continued)

"You Can Help Make a Better World through the Wise Use of Science" - a leaflet to encourage students to take science courses in high school. Publication #R-234 (1970). No price given in AIP Catalogue, therefore assumed free.

To order any of the above, or to obtain an AIP "Current Book and Pamphlet List", write to: American Institute of Physics, 335 East 45th St., New York, N.Y. 10017, U.S.A.

UPCOMING

AAPT-APS Joint Winter Conference, Chicago, Jan. 21-24.

* AAPT-Ontario Conference*, June 13-14, Trent University, Peterborough.

CAP Conference, June 16-19, McMaster University, Hamilton.

AAPT Summer Conference, June 25-27, Troy, New York. STAO 80 Conference, Nov. 6-8, Skyline Hotel, Toronto.

APPARATUS

The December 1974 issue of "The Physics Teacher " was a special issue devoted to apparatus. Reproduced here (with permission) is a sampling of the myriad short notes.

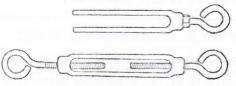
BROWNIAN MOVEMENT

Obtain from the Biology Department half a teaspoon of the red powder known as ""Carmine (Alum Lake)". This dye, which can also be ordered from chemical supply companies, is used for staining slides in histology and cytology. With a dry toothpick or wooden splint, add a very small amount of the powder to a drop of water on a microscope slide. Brownian movement of the pretty red particles can be easily observed with an ordinary microscope with a 10x occular and a 43x objective.

Sister Martha Ryder Clarke College Dubuque, Iowa 52001

INEXPENSIVE TUNING FORKS

Turnbuckles that are readily available in hardware stores (\$.30 and up, depending on size) can be cut to make tuning forks. One eye from the turnbuckle is cut short to become the handle, threaded back in and held tightly with a nut.



The body of the turnbuckle that becomes the vibrating prongs is a hard aluminum alloy with a nice finish, easy to cut and file, and attractive when completed.

These forks are as loud or louder than the regular steel tuning forks, but do not sound for as long after being struck. With so little money invested in them, one feels free to change their frequencies, shortening the prongs to raise, filing at the base to lower the frequency.

Robert H. Johns The Academy of the New Church Bryn Athyn, Pennsylvania 19009