

NEWSLETTER

girep

Groupe International de recherche sur l'enseignement de la physique
International research group on physics teaching
Internationaler Arbeitskreis zur Förderung des Physikunterrichts

N. 21 - January 1989

In this issue of the Newsletter you will find, among other information, a Report on the GIREP Committee Meeting that was held in Munich last September.

Those members who have renewed their GIREP fee recently are also receiving a copy of the December '88 ICPE International Newsletter on Physics Education. We hope that you will appreciate this new aspect of the cooperation between GIREP and ICPE in the direction of improving the level of information to members without producing unnecessary duplicates. After all, the ICPE Newsletter is now edited by GIREP Vice-President George Marx!

So if you do not find the ICPE Newsletter in the envelope please do check your yearfee printed in the upper righthand corner of the label.

In case you find a mistake and for any further enquiry, please contact the GIREP Secretary.

1. GIREP COMMITTEE MEETING

The Committee met in Munich on 13th and 15th September. Discussions were held and decisions were made on the following points.

a) Girep Conference on Energy Alternatives (Risk Education) Lake Balaton (Hungary), 7-13 Sept. 1989

The Committee discussed the opportunity and possibility to offer GIREP members a reduced Conference fee. It turned out that lowering the Conference fee for all attending GIREP members would, if implemented, amount to a large number of ridiculously low sums of money, not enough to really help those who are in need and not enough to make a substantial difference for those who can afford to go to the Conference anyways.

It was decided, instead, to offer about twenty 100 \$ scholarships to school-teacher GIREP members, evenly distributed among the different participating countries. The recipients of the scholarships will, furthermore, be housed in the cheapest possible way (e.g. in private houses, with the evening meal on their own expense).

So: if you have the requisites and wish to apply for a scholarship, please write to the Conference Organizing Committee stating how long you have been a GIREP member and in what kind of school you teach.

The Organizing Committee address is:
ENERGY - Dept of Atomic Physics, Eotvos University
Puskin utca 5-7, BUDAPEST H-1088 (Hungary)
Phone 36-1-187902
Telex 22-5459 atomfh
Bitnet AB231DAHatAWIUNI11

b) Proceedings of the ICPE Conference on "TEACHING MODERN PHYSICS - CONDENSED MATTER"

The Treasurer's report on the financial situation showed that it is possible to send the Proceedings, in their complete form, to all members who have updated their fee until 1988, free of cost. This will still leave enough money to subsidize the Balaton Conference. So it was decided that GIREP would buy 200 copies of the Proceedings.

It is expected that the Proceedings will be available early in 1989. They will be mailed to members directly from the publisher in Singapore. Any leftover copies will be on sale, at half-price for GIREP members (whole price for non-members), at Lake Balaton in September.

c) Further GIREP Conference

The possibility of holding a GIREP Conference in Poland in 1991 was discussed and approved. At the time of the Committee meeting, the realization of this idea needed to be investigated further.

The investigation eventually had a positive outcome, so we can now announce that a GIREP Conference will be held in August 1991 in Poland, on the topic: "TEACHING ABOUT REFERENCE FRAMES (FROM COPERNICUS TO EINSTEIN)". The Conference will be organized by Prof. G. Bialkowski, Institute of Theoretical Physics, University of Warsaw, Hoza 69, 00-681, Poland.

d) Elections

In 1989 the GIREP Committee will expire and the General Assembly of members will elect a new Committee. Due to the fact that it is quite difficult to find willing candidates to the office, it seems that the statutory requirement that the President and Treasurer should belong to the same country puts too heavy a constraint on the choice of the new officers. The Committee therefore decides to ask the General Assembly to change this article of the Statute before the election takes place.

2. TREASURER'S ANNOUNCEMENT: A NEW GIREP "GIRO" ACCOUNT

If members prefer to use GIRO to pay membership fees in sterling, they may now do so.

They should make out the sterling payment, currently 10 £st per year, to "Brian Davies re GIREP".

The account n° is 53 889 4806, and must be quoted. The address to send it to is:

GIROBANK, c/o the Post Office
Eccleston Street B0
LONDON SW 11 9 LS
U. K.

At the same time, please, members should send a postcard directly to the Treasurer at:
The Institute of Physics, 47 Belgrave Sq, LONDON SW1X 8QX, U.K.
confirming how much sterling money they have sent, and when, and for what year(s) the payment was intended.

Thank you,

Brian Davies
Honorary Treasurer

3. REPORTS FROM NATIONAL ASSOCIATIONS

APFA - Asociacion de Profesores de Fisica de Argentina

APFA, the more than 3000-strong Association of Physics Teachers of Argentina, pursues the aim of improving the teaching and learning of Physics in many ways. One is the organisation of National Meetings of Physics Teachers. These Meetings are an important and very well-attended event: 1200 attended the 5th National Meeting in Mar del Plata in September 1987. The Meeting was co-sponsored by CLAF (Centro Latino-Americano de Fisica) and so became the 4th Latin-American Meeting on Education in Physics.

The five days were full of activities ranging from invited lectures (7) to workshops (13), members' papers and contributions (66), round tables (5), provincial and general Members' Assemblies.

At the end of the Meeting the organizing committee distributed a questionnaire to know the participants' opinion on the different activities of the Meeting. The highest rate of interest and favour was earned by the workshops (70%), followed by the Assemblies (58%), the invited lectures (43%), the round tables (38%) and the contributed papers (38%).

APFA's 6th National Meeting will take place in San Carlos de Bariloche, Rio Negro, Argentina in October 1989.

If you are interested in APFA's activities and wish to subscribe to its journal please contact APFA's President, Prof. Hugo R. Tricarico, Jacinto Rosso 367, Temperley (Buenos Aires), Argentina.

AIF - Associazione per l'Insegnamento della Fisica (Italy)

AIF's Annual National Congress hosted an ICASE Europe Research Seminar on "Evaluation of Teaching Effectiveness" last October. Six invited speakers from The Netherlands (K. Kortland and H. Eijkelhof), U.K. (M. Baxter), France (C. Leotta), Federal Republic of Germany (G. Merzyn), and Brunei Darussalam (A. Alvarez) brought their experience on the evaluation of PLON and of its extensions, on the expectations and possible evaluation of the results of the reform that is now taking place in the British school system, on an evaluation project in France, on the evaluation of the effectiveness of textbooks and on the preparation and implementation of an instrument to measure the attitude of primary school teachers towards science teaching.

AIF's contribution to the Seminar was a report on the

results of a national survey on secondary school students' perceptions of and attitude towards physics teaching.

The contributions to the Seminar will be published in two languages (italian and english) in an ICASE booklet edited by Vittorio Zanetti, Dip. di Fisica, Universita' di Trento, 30050 Povo, Italy.

APS/AAPT - American Physical Society / American Association of Physics Teachers

Introductory University Physics Project (IUPP)

This Project began in August 1987. It grew out of a widely shared conviction that a basic reassessment of the introductory physics course was needed. The project is funded by a grant from the National Science Foundation.

A first Newsletter was circulated last summer, giving information on the past and present of physicists' engagement in curricular reform at the introductory level. This started 30 years ago, but many of the problems are yet unsolved.

At this moment, a Steering Committee is at work with the aim of defining one or more models for university-level introductory courses in physics.

For further information you may contact Jack Wilson of the Steering Committee, who also is a GIREP member. His address is: Jack Wilson, Dept. of Physics, University of Maryland, COLLEGE PARK MD 20742, U.S.A.

4. HELP NEEDED

Curzia Marchi Trevisi is beginning to organize a Conference on teaching Particle Physics in upper secondary level schools in Italy. One of the expected outcomes of the Conference is the establishment of a Working Party to develop suitable materials for school teachers. She is now collecting information and would be happy to know of any similar Conferences or Courses for teachers that may have occurred around the world on this theme.

So, if you think you can help her with materials, good ideas or other information about what has been done in your country in this field, please get in touch with her. Her address is:

Prof. Curzia Marchi Trevisi, via Chiudare 8, 40124 BOLOGNA (Italy)

5. OBITUARY (contributed by Eszter Toth, Budapest)

Antonella Bastai Prat was one of those Italian teachers who created a world-wide respect of the Italian physics teaching and of the Association of Italian Physics Teachers. Many of the Italian children and many of us were her students, and she loved her students. She passed away on 20th September 1988. The physics teachers of the world will miss her strong, smiling personality.

6. PUBLICATIONS

IOSTE - International Organization for Science and Technology Education

Proceedings of IOSTE Symposia:

- * Aug. 1979, Halifax, Nova Scotia, Canada: "World Trends in Science Education". Publication available from the Faculty of Education, Univ. of New Brunswick,, Fredericton, Canada, US\$ 30 prepaid, surface postage included.
- * July 1982, Nottingham, U.K.: "Technological Application and Social Relevance of the Science we teach". Publication available from the School of Education, Trent Polytechnic, Burton St, Nottingham NG1 4B0, U.K., £st 13 included surface mail, £st 15.7, included airmail.
- * Dec. 1984, Erisbane, Australia: "Teaching the interactions of Science, Technology and Society". Publication available from Longman Cheshire PO Box 1024, City Rd, South Melbourne, Victoria 3205, Australia, Aus\$ 26, airmail included.
- * Aug. 1987, Kiel, West Germany: "Science and Technology Education and the Quality of Life". Proceedings were expected to be published by the middle of '88 (approx. cost DM 10). Further information from K. Riquarts (editor), IPN, Olshausenstrasse 62, D-2300 Kiel, FRG.

ATEE - Association for Teacher Education in Europe

Dr. F. G. Brinkman, Secretary of the ATEE-Working Group, expects to be able to edit a book on "Preconception-based learning problems and Teaching strategies in science education".

The basis for the publication is formed by the papers that were presented at the ATEE mini-conference in Amsterdam and at the ATEE Conference in Barcelona in 1988 on this same theme. If you are interested please write to:

Dr. Brinkman, Bureau Lerarenopleiding Vrije Universiteit, Postbus 7161, 1007 MC Amsterdam, The Netherlands.

7. AUTUMN SCHOOL IN PHYSICS EDUCATION

A School in Physics Education took place in Borowice (Poland) from 17th to 23rd October 1988 on the subject: "Students' cognition - one of the psychological fundamentals in the didactics of physics"

The School is organized every even year. Those who are interested please contact the organizer: Dr. Stanislaw Jakubowicz, Physics Institute, University of Wroclaw, Cybulskiego 36, 50-205 Wroclaw, Poland.

8. FORTHCOMING CONFERENCES

1) "The Problem of the Interaction between Physics and Mathematics in Physics Education" April 10-14 1989, Gdansk (Poland)

Contact: Dr. Z. Engels, Instytut Fizyki Doswiadczalnej, ul. Wita Stwosza 57, 80-952, Gdansk, Poland.

2) "Interdisciplinary Aspects of Physics Education" July 30 - August 4 1989, Altmuenster (Austria)

Contact: Prof. H. Kuehnelt, Institut fur Theoretische Physik, Boltzmann-gasse 5, A-1090 Wien, Austria.

3) "Conference on Physics Education" Sept. 1989, Biecz (Poland)

Contact: Dr. Andrzej Puch, Physics Institute, Pedagogical University, Rejtana 16a, 35-310 Rzeszow, Poland.

4) "III Congreso Internacional sobre la Didactica de las Ciencias y de las Matematicas" 21-23 Sept. 1989, Santiago de Compostela (Spain)

The theme of the Conference is: LA INVESTIGACION DIDACTICA Y EL TRABAJO EN LA AULA.

Major activity: Workshops in which effective school-room activities will be presented, having their basis on the results of research on education in the sciences and in mathematics, and aimed at all educational levels.

Other activities: Invited lectures, contributed papers, poster session, exhibits of journals and other materials related with the theme of the Conference.

Enrolement: Pre-enrolement before 30th Jan. 1989. Confirmation before 15th May 1989.

Cost: 12.000 pesetas (10.000 pesetas for subscribers to "Ensenanza de las Ciencias").

Contact: Ensenanza de las Ciencias, ICE Universitat Autonoma, 08193 Bellaterra (Barcelona), Spain.

5) 6th World Conference on Co-operative Education Hamilton, Ontario, 26 August - 1 September 1989

Contact: Gordon Partridge, Mohawk College, P.O. Box 2034, Hamilton, Ontario, Canada L8N 3T2.

6) IOSTE 5th International Symposium Dec. 1989, Manila (Philippines)

Contact: J. van Trommel, PO Box 2061, 7500 CB Enschede, The Netherlands.

7) International Symposium on Fieldwork in the Sciences 22-29 April 1990, Flevohof (The Netherlands)

Sponsored by ICASE, Dutch Fieldstudies Council, NVON, KNAG, FEE.

The Symposium aims to acquaint the participants with the different international curricula and developments of fieldwork for the subjects of Geography, Physics, Biology, Chemistry and Science. Fieldwork is a methodology, a didactical approach to science education, in which the pupils are encouraged to learn about the reality of the physical and life world.

The results of the Symposium will be the basis for an ICASE publication.

Contact: Henk Lindeman, Secretary of FISFIS, Fieldstudy Centre, Zuideresweg 10, 9441 TZ Orvelte, The Netherlands. Telephone number 09/31 5934 263.

GENERAL INFORMATION

GIREP COMMITTEE

President Paul Black, Centre for Educational Studies, King's College London (KQC), 552 King's Rd, London SW10 0UA, UK (tel 01/3512489)

Vice-presidents George Marx, Dept Atomic Phys., R.Eotvos Univ., Puskin u. 5, PB 327, 1088 Budapest, Hungary (telex 225459, tel 361/131843)

Piet Lijnse, Rijksuniversiteit, 3508 TA Utrecht, pob 80008, The Netherlands (tel 09/3130531179)

Secretary Silvia Fugliese Jona, via San Nazario 22, 10015 Ivrea (Torino), Italy (tel 0125/49869)

Treasurer Brian Davies, The Institute of Physics, 47 Belgrave Sq, London SW1X 8QX, UK (telex 918453, tel 01/2356111)

FEES

The yearly fee is equivalent to Lst 10.00 at the rate of exchange current at the date of application for membership or renewal of membership. The sender must pay his or her own bank charges and mailing costs. There are five possible methods of payment. Whichever you choose, please make sure that your name is sent with your payment.

1) Fees from Italy must be paid in Italian Lire to Marisa Michelini, Istituto di Fisica dell'Universita', via Campi 213/A, 41100 MODENA.

2) Fees from countries other than Italy must be paid in Lst, in one of these two ways:

* made out to "GIREP account 90301248" and sent to Brian Davies, address at top of page

* made out to "Brian Davies re GIREP" and paid to GIRO Account n. 53 889 4806, and sent to GIROBANK, c/o The Post Office, Eccleston Street 80, London SW11 9LS, U.K. If you choose this method of payment, please send at the same time a note to the Treasurer confirming the sum you have sent and when and for what years.

These are the preferred methods of payment.

3) Fees from countries other than Italy or Great Britain may also be paid in Sw.Fr, preferably through bank and not by cheque, to "GIREP account 376089-91", Credit Suisse, 1002 Lausanne, CH.

4) Fees from countries where the above procedures are very difficult or impossible may be paid directly to George Marx after having agreed on a procedure with him (address at top of page).

Please note: The accounting year runs from January to January but if application forms and fees arrive after the month of September membership will - unless the applicant specifies otherwise - become effective at the beginning of the following year.

APPLICATIONS & NEW MEMBERS

Applicants for membership should please require the application form from the Treasurer.

INQUIRIES - CHANGES OF ADDRESS

Please address inquiries concerning fees to the Treasurer.

Other inquiries may be addressed to the Secretary or to any other member of the Committee.

Please send notice of changes of address to the Secretary.

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