

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. 16 - June 1986

This issue of the Newsletter is primarily concerned with:

- the Treasurer's financial statement,
- final information on the GIREP '86 Conference,
- a commemoration of prof. Robert N. Little.

You will also find here enclosed a slip of paper reminding you of when you last paid your GIREP fee. Some people who have paid the fee to Crédit Suisse in Lausanne may be surprised to see that it has not been acknowledged, owing to the fact that the swiss bank's "avis de crédit" are sometimes anonymous. If this is your case, it would be helpful if you please sent a note to the Treasurer stating your true situation. Please accept our apologies for the inconvenience it might cause you.

1. FROM THE TREASURER

The following financial statement refers to the state of GIREP's accounts since the last published Balance (see Newsletter n° 13 of December '84).

The balance is divided in two parts, referring to two distinct periods. The first part (from 30.7.84 to 16.11.85) has already been audited. The second part (from 17.11.85 to 15.5.86) is an interim account.

The funds of GIREP are kept in three Banks:

- A) Barclay's Bank (London)
- B) Crédit Suisse (Lausanne)
- C) Banca Popolare dell'Emilia (Modena).

A) Barclay's Bank (Est)

from 30.7.84 to 16.11.85

	CREDIT	DEBIT
1. Carried forward from previous balance	776.45	
2. B. Woolnough's final account	109.64	313.31
3. Fees paid in	242.61	
4. Transfer from Crédit Suisse	1279.94	
5. Bank charge		1.51
6. Secretarial/Computer services		42.00
7. Cheque returned unpaid		9.00

Totals 2408.64 365.82

Carried forward Est. 2042.82
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from 17.11.85 to 15.5.86

1. Carried forward	2042.82	
2. Fees paid in	366.03	
3. Interest	54.45	
4. Bank Charges		10.31
5. Unpaid cheque		21.54
6. Secretarial/Computer services		25.50
7. Transfer to Denmark for the GIREP '86 Conference		
		<u>1943.91</u>

Note: The Sterling accounts are two:

- (a) "Cheque Account"=£st. 208.31
 (b) "Higher Rate Deposit"=£st. 253.73

Totals 2463.30 2001.26

Balance £st. 462.04

B) Crédit Suisse (SFr)

CREDIT DEBIT

from 30.7.84 to 16.11.85

1. Carried forward from previous balance	2618.65	
2. Fees paid in	3131.81	
3. Bank Charges		62.91
4. Transferred to Barclay's Bank, London		<u>4000.00</u>

Totals 5750.46 4062.91

Carried forward SFr. 1687.55

from 17.11.85 to 11.3.86

1. Carried forward	1687.91	
2. Fees paid in	832.04	
3. Bank Charges		<u>65.64</u>

Totals 2519.59 65.64

Balance SFr. 2453.95

C) Banca Popolare dell'Emilia (Lit)

CREDIT DEBIT

from 30.7.84 to 16.11.85

1. Carried forward from previous balance	2718459	
2. President's and Treasurer's travel expenses to Utrecht		1264050
3. Newsletter n°12 + Secretarial services		221040
4. Interest	346691	
5. Fees paid in	544201	
6. Bank Charges		130373
7. Newsletters n°13 and n°14		302620
8. Secretary's travel expenses to Balaton-almadi		626000
9. Stationary		225600
10. Postage		<u>42465</u>

Totals 3609351 2812148

Carried forward Lit. 797203

from 17.11.85 to 19.5.86

1. Carried forward	797203	
2. Fees paid in	339230	
3. Interest	121492	
4. Bank Charges		74173
5. Newsletter n°15 + Postage		268780
		<hr/>
	Totals 1257925	342953

Balance £it. 916972
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Sterling summary

England:	Higher Rate Deposit	Est.	253.73
	Cheque Account		208.31
Switzerland:	SFr 2453.95	----->	876.41
Italy:	£it 916972	----->	<u>398.68</u>

Total Sterling equivalent Est. 1737.13
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2. THE 10th GIREP CONFERENCE: COSMOS - AN EDUCATIONAL CHALLENGE
 Elsinore, Denmark 18-23 August 1986

The December Newsletter carried detailed information on the programme of this 10th GIREP Conference. Here is the last up-dating from the Organizing Committee.

125 participants will attend, coming from 21 countries, and there will be 23 accompanying guests. The final circular of the Conference is now being sent to those who declared their interest in time to the Organizing Committee: here are the main points in brief.

The Conference will include:

- Plenary lectures,
- Parallel sessions,
- Workshops,
- Exhibitions of posters and of materials,
- Visits to: Tivoli Gardens, Ole Rømer's excavated observatory Tusculanum, Frederiksborg and Fredensborg castles.

Lecturers at the Plenary lectures include the following: G. Marx, K. Szegő, A. Pedersen, A. Loria, D. Zollman, D. Blackburn, A.E. Roy, D. McNally, D. Clarke, M.T. Brück, H.J. Jodl, J.V. Narlikar, J. Nussbaum, K.A. Thernoe, L. Broman, J.E. Solheim, K.P. Moesgaard, A. Ziggelaar, K. Gyldenkerne, C. Roslund, I.L. Rasmussen, J.M. Knudsen, C. Iwaniszewska.

For further information please contact:

GIREP '86

The Royal Danish School of Educational Studies

Department of Physics

Emdrupvej 115/B

DK-2400 Copenhagen NV

Denmark

3. MEETING OF NATIONAL REPRESENTATIVES - ELSINORE

In occasion of the GIREP '86 Conference a Meeting of National Representatives will be held, in accordance with art.10 of the Statute. The Meeting will discuss, among other issues, the possible activities of the GIREP National Sections. A more detailed agenda will be distributed at the beginning of the Conference.

4. OBITUARY - IN MEMORY OF PROF. R. N. LITTLE

by Poul Thomsen, former President of GIREP

Prof. R.N. Little from Austin, Texas, active member of GIREP for many years, died on May 21, 73 years old. I met Prof. Little for the first time in 1970 at a Conference of Physics Education in Eger, Hungary. He was chairman of a working group in which I participated.

I was very impressed by his way of leading the group. I admired the gentle and patient way in which he ensured that everybody got an opportunity to take part in the discussion. I also remember his own inspiring remarks and his ability to draw general conclusions. Very soon we became close friends.

We met at many GIREP Meetings, and in 1978 I had the pleasure to teach together with him at a Central American course for University teachers. There I immediately noticed how much the participants from the various Central American States honoured and loved him. He was, they told me, the one who had done the most for them in order to help them improve the teaching of physics in Central America.

In 1979 I spent a month with him as a guest lecturer at his University in Austin, and again I was impressed by his way of treating his students. He was an outstanding teacher. In his own country they also knew to appreciate his service. In 1973 the American Association of Physics Teachers awarded him its Distinguished Service Award and the Texas section of the Teachers' Association named him the First Outstanding Contributor to Physics Higher Education.

I had hoped to see Prof. Little in Denmark at the GIREP Meeting in August, but it should not be so. I, and many other GIREP members with me, will miss him at the Conference, but we will always bear in mind his strong opinion on what he considered dull and uninspired teaching, as he expressed it sarcastically in "The Physics Teacher" (April 1982):

Here's how to make physics self-destruct

Rules for University Physics Professors:

1. Let students know that only basic research is a worthwhile activity.
2. Sneer at industrial or applied work.
3. Sneer at Education Courses.
4. Use only the most elegant mathematics to present any topic.
5. Use the largest technical vocabulary possible, inventing new terms for every special case.
6. Avoid contamination with physics in the Secondary School, but complain about the incompetent teacher.

Rules for the Secondary-school teachers:

1. Quit teaching physics: you can make more money as principal or by running the cafeteria.
2. Teach beyond the average student: after all, you are there to identify the best.
3. Never admit there are some topics in physics which you don't understand.
4. Never allow the students to use the lab equipment: they will break it.
5. Sneer at girls taking physics.
6. Avoid showing physics applications: what the students need is theory so they can pass the University course when they get there.

5. TWO I.P.N. PUBLICATIONS

Bibliography: "Students' Alternative Frameworks and Science Education" (H. Pfundt, R. Duit)

A research area which is currently receiving much attention is that of investigation of student's alternative frameworks. The bibliography contains a list of articles in this field, classified according to a number of keywords.

The articles listed in the bibliography are collected at the I.P.N. Colleagues who are working in this field are invited to use the collection when visiting the I.P.N. We regret that it is not possible to mail copies of the articles.

If you would like to receive a copy of the bibliography - free of cost - please write to:

Reinders Duit, I.P.N., University of Kiel, Olshausenstr. 40, D-23 KIEL 1, West Germany

"Aspects of Understanding Electricity" (edited by R. Duit, W. Jung, Ch. v. Rhöneck)

These proceedings of an international workshop survey problems of learning elementary electricity. They have been published in the series "IPN Arbeitsberichte" (n° 59).

If you wish to order the proceedings please send US \$ 6 (no cheques please!) to:

Verlag Schmidt & Klaunig, Ringstr. 9, D-23 KIEL 1, West Germany

6. NEWS FROM TEACHERS ASSOCIATIONS

Some European Teacher's Associations members of ICASE (International Council of Associations for Science Education) are implementing a program that aims to bring the results of research on science education nearer to the school-teachers. This has meant organizing international Symposia on the theme "Science Education and Research" as part of the program of their National Meetings. Up to now two such Symposia have been held. They were organized by the German M.N.U. (Braunschweig, April 1985) and by the British A.S.E. (York, January 1986). Similar events will take place during the National Meetings of N.V.O.N. (Netherlands) in April 1987 and A.I.F. (Italy) in October 1988.

7. FORTHCOMING CONFERENCES

1. 12th International Conference on Improving University Teaching Heidelberg, FRG, 15-18 July 1986

Will any GIREP member participate to this Conference? If you do and feel that it's worthwhile to let other members know something about this event and its relevance to the teaching of physics, please send the GIREP Secretary a report for publishing in the next Newsletter!

2. Two very similar Conferences will be held in Eastern Asia this summer, in very close succession:

A) ICPE-IUPAP International Conference on Trends in Physics Education Sophia University, Tokio, 24-29 August 1986

Registration fee: before 30 June, ¥ 25000; after, ¥ 30000

Contact: Ms Tae Ryu, Faculty of Science and Technology, Sophia Univ., 7-1 Kioi-cho, Chiyoda-ku, Tokio 102, Japan

B) ICPEN-ICPE International Conference on Physics Education

Nanjing Institute of Technology, Nanjing, Jiangsu, 31 August-5 September 1986

Contact: Prof. Yun Ying, Dept. of Physics and Chemistry, Nanjing Institute of Technology, Nanjing, Jiangsu, The People's Republic of China

The main topic of both Conferences is the need to make the most recent results and developments in physics education available for use in the classroom. But, while the first is more pupil-oriented, the second will stress the implications for teacher education and professional development.

3. ATEE 11th Conference on Research in Education and Teacher Training Toulouse, France, 1-5 September 1986

Working languages: english, french and german.

The program includes:

- Three main lectures on the following guiding themes: (1) The Education/Research Gap; (2) Research on Teacher Training in Europe. What is its state and evaluation today? (3) What training in research is offered? What is the situation in Europe today and what are the perspectives for tomorrow?

- Workshops and study groups.

- Working sessions of the permanent working groups of ATEE.

There is no dead-line for inscription, although the first will probably find easier accomodation.

Contact: Mme Francine Vaniscotte, Centre national de formation permanente des formateurs d'instituteurs, Ecole normale, 45 ave. des Etats-Unis, 78000 Versailles, France

4. IXèmes Journées Internationales sur l'Education Scientifique Chamonix, France, 3-5 February 1987

Sponsored by the Universities of Paris VII and Geneva, by CNRS, INRP, Ligue Française de l'Enseignement et de l'Education Permanente, with the participation of the Universities of Louvain-la-Neuve, Québec, Roma, Rouen, Valencia and Barcelona.

The theme of the Journées will be "Models and Simulation". The sub-topics are:

- Spontaneous models in common and children's thinking.
- The roles of simulation in science and technology.
- Model-building and simulation in education and in the transmission of scientific and technological information.

The structure of the Journées foresees Plenary Sessions, Workshops and individual communications.

The language is french.

Deadline for enrolment: 16th October 1986

Inscription fee: Individuals 400 FFr.

Institutions (for 2 persons) 1500 FFr.

The inscription fee entitles the participant to receive the Proceedings (cost 110 FFr) and other materials worth 125 FFr.

Contact: A. Giordan and J.L. Martinand, UER de Didactique des Disciplines, Tour 45-46, 2 place Jussieu, 75005 Paris, France (tel. 43362525)

5. CHAOS IN EDUCATION Balaton, Hungary, May 1987
organized by ICPE-IUPAP and National Centre for Educational Technology (Veszprem)

International workshop on teaching non-linear phenomena (bifurcation, structure formation, chaos, catastrophe, etc.) at school and university level in mathematics, physics, chemistry, biology and economy, with the help of microcomputers.

Contact: Prof. George Marx, Dept. of Atomic Physics, Roland Eötvös Univ., Puskin ut.5, Budapest 1088, Hungary.

6. Inter-American International Conference on Physics Education
Oaxtepec, Mexico, July 1987

Endorsed by AAPT, APS, ICPE, CLAF, UNESCO and the Organization of American States.

The general goal of this Conference is to help to organize regional networks by providing helpful information, opportunities for the exchange of ideas and comparison of experiences, and encouragement of post-conference cooperative efforts in order to produce or improve didactic materials, teacher training and research on physics education. As much practical, "hands-on" experience as possible will be provided by pre-conference workshops, poster sessions, exhibits etc. Dissemination of the results will be by the Conference Proceedings, journal articles and videotapes.

Contact: J. Barojas Weber, Organizing Committee, Inter-American Conference, Departamento de Fisica, UAM-Iztapalapa, 09340 Mexico D.F., Mexico.

7. IIº Congreso Internacional sobre Investigacion en la Didactica de las Ciencias y de las Matematicas Valencia, Spain, 23-25 Sept.1987

Organized by "Enseñanza de las Ciencias".

Main theme: "Teaching/Learning Paradigms and Research in the Didactics of Science and Mathematics".

Structure: Plenary sessions, parallel sessions, workshops on the implications of research in classroom work.

Deadline for pre-inscription and for presenting contributions: 30th January 1987.

Contact: Enseñanza de las Ciencias, ICE Universidad Autonoma de Barcelona, Bellaterra (Barcelona), Spain

8. FROM THE SECRETARY

GIREP Network The up-dating of the 1985 edition of the GIREP Network, previously announced for June 1986, is not ready yet. Therefore, members will receive the up-dated Network in December, together with the next issue of the Newsletter.

General Information

GIREP COMMITTEE

President Paul Black, Centre for Educational Studies, King's College London (KQC), 552 King's Rd, London SW10 OUA, U.K. (t. 01/351 2488)

Vice-presidents George Marx, Dept Atomic Physics, R.Eötvös Univ., Puskin u.5, Budapest 8, PB 327, 1088 Hungary (telex 225459 - t. 361/131-843)

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

Secretary Silvia Pugliese Jona, via San Nazario 22, 10015 Ivrea (Torino), Italy (t. 0125/49869)

Treasurer Brian Davies, The Institute of Physics, 47 Belgrave Sq, London SW1X 8QX, U.K. (telex 918453 - t. 01/2356111)

FEES

The yearly fee is the equivalent of US \$ 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 four possible methods of payment:

- 1) Fees from Italy must be paid in Italian Lire to Marisa Michelini, Istituto di Fisica dell'Università, via Campi 213/A, 41100 Modena.
- 2) Fees from countries other than Italy may be paid in fst, made out to "GIREP account 90301248" and sent to Brian Davies, The Institute of Physics, 47 Belgrave Sq, London SW1X 8QX. This is the preferred method of payment.
- 3) Fees from countries other than Italy or Great Britain may also be paid in Swiss Francs, preferably through bank and not by cheque, to "GIREP account 376089-91", Crédit Suisse, 1002 Lausanne, Switzerland.
- 4) Fees from countries where the above procedures are very difficult or impossible may be paid directly to Prof. G. Marx after having agreed on a procedure with him. His address is: Dept. Atomic Physics, R.Eötvös Univ., Puskin u.5, Budapest 8, PB327, 1088 Hungary.

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 require the application form from the Treasurer.

INQUIRIES - CHANGES OF ADDRESS

Inquiries concerning fees should be addressed to the Treasurer. Other inquiries may be addressed to the Secretary or to any other member of the Committee.

Members are warmly invited to send notice of changes of address to the Secretary.