

International Study Group on the Relations Between HISTORY and PEDAGOGY of MATHEMATICS NEWSLETTER

An Affiliate of the International Commission on Mathematical Instruction

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Message from our Chairperson

To the members of HPM,

I hope that our Newsletter is reaching all the people involved and/or interested in the subject of HPM and also that it answers your expectations. We have now new regional contacts: thanks to all of them.

I'm looking back to the first issue and I'm checking which of the promises I wrote in my address have been kept. Things have changed a bit because I miss the wise presence of John and I now have new responsibilities in my academic work, nevertheless I would like to look at the positive things:

- The newsletter is appearing regularly. About this I have to say to Peter "Thanks for existing". Without our editor Peter Ransom this enterprise would not be possible. As you know the numeration of the issues does not include the number 45 (the editor explained the reason). As researcher in the field of mathematical journals I'm happy to offer matter of study and disputes to the researchers of 22nd century onwards about the 'missing' issue.
- Once again I ask you to send contributions, pieces of information, suggestions. In particular we like to know if there are any local initiatives (conferences, seminars) on the subject about which we are concerned. We need to know things in advance in order to inform our readers.
- As announced in the newsletter in 2002 there are conferences (in mathematics education and in history of mathematics) where HPM members will participate (among others: Morocco conference and Abel conference in June, Crete conference in July). This will

offer occasions for meetings to replace the European Summer University that was not possible to organise. The proceedings of all these conferences will offer a document on how research in our field is proceeding.

- The Newsletter is not enough to make strong and fruitful contacts among researchers. We are working to have our own site. I heartily thank Karen Dee Michalowicz who managed to host us in the HPM America web site, which is now again alive.
- I would like to have a logo for our Group; thus I launch among the readers a logo competition. It has to be simple enough for the computer to cope. An idea could be to use ancient letters H, P, M appearing in old books.

Fulvia Furinghetti

Logo competition

Send your designs to Peter Ransom (contact details above) to arrive before 14 June 2002. He will then process it and forward it to Fulvia. Original artwork, jpeg or gif is acceptable. The prize for the winning design is either a bottle of good red wine (Oltrepò Pavese, Northern Italy) bottled by Fulvia (though the winner has to come to take the bottle in Genoa!) or a mystery book prize.

About the widespread surveyor's formula $\{(a + c)/2\}\{(b + d)/2\}$ for the area of a quadrangular field used since the remotest time. Otherwise the exact area cannot be found from given four sides a, b, c, d (which are not enough to fix or define a quadrilateral uniquely).

Gupta, R. C., 'Addition and the subtraction theorems for the sine and cosine in medieval India'. *Indian Journal of Mathematics Education* (Delhi), Vol. 19, No. 2 (April 2000), Pp 15-29

On various Indian proofs for the usual formulas for $\sin(A \pm B)$ and $\cos(A \pm B)$.

R. C. Gupta
Jhansi, India

In memory of a great scholar

Mr. Abu al-Qasim Qurbani, a pioneer researcher and author in the history and pedagogy of mathematics in Iran passed away on 21 November 2001, at the age of 90. He knew Arabic, English, French, and German, in addition to his mother language (Persian). He was a very honest, humble, and pleasant man, always ready to encourage and help others. His works are important both for the amount of new information and for their excellent underlying methodology. He was a mathematics teacher and he lived in Geneva (Switzerland) from 1962 to 1966 for official academic work. This opportunity enabled him to have access to the most important European sources in history of mathematics besides his deep knowledge of Eastern sources.



Apart from numerous articles on history of mathematics which appeared in Iranian journals, he had published 68 books among which 10 titles were in the field of history of mathematics in Iran and other countries of the Islamic civilisation. The rest were high school mathematical textbooks (composed jointly

with Mr. Hassan Saffari) and books about high school mathematics. He had received the Iranian Yearbook Award four times. An English translation of one of his works *A short history of mathematics in Iran, from ninth to seventh centuries* was published in Iran in 1973 in limited number by Sharif (ex-Aryamehr) University of Technology. His Persian book on the life and works of the Islamic period mathematicians is internationally known as one of the most complete and up-to-date works in the field. He has composed precious monographs on the life and works of some Iranian mathematicians as Biruni, Buzjani, Nasawi, Kashani (al-Kashi), and Farisi.

He had lost his eyesight in the last years of his life, and I had the honour to be one of the few disciples who visited him regularly. I learned much about history of mathematics from his writings and much about methodology by working with him. But above all, he was an excellent sample of a scholar bound to morals, for many of his disciples. There was a plan to offer him an honorary PhD. for his noticeable scientific heritage, in December 2001. But his death changed that plan to memorial gatherings which were held for him in Tehran and Isfahan (Iran).

There is no doubt that not only for appearance of a similar figure, but also for a sufficient appreciation of the importance of his work, we should still wait.

Mohammad Bagheri
Tehran, Iran

Mathematics teachers conference in India

The 36th annual conference of the Association of Mathematics Teachers in India (AMTI) was held in Cochin, Kerala State on December 27 to 29, 2001. It was inaugurated by the Cochin University of Science and Technology (CUSAT) vice-chancellor who pointed out the significant role played by mathematics in the development of society and civilisation in this space era of science and technology.

Prof. R. C. Gupta (AMTI President) whose lecture contained a survey of Some new studies and findings regarding ancient Indian mathematics to about AD 1000 delivered the Presidential Address.

After a short tea break, Prof. George G. Joseph (University of Manchester, UK) gave the AMTI (R. C. Gupta) Endowment Lecture on History of Mathematics. His theme was *The Enormity of Zero*. Two other regularly held memorial lectures (named after past presidents of AMTI) were as follows.