IRISH MATHEMATICAL SOCIETY

SECRETARY'S REPORT 1986

1. EUROMATH PROJECT

The appeal to the Irish third level institutions to make modest contributions towards the preliminary phase of the European Mathematical Council's proposed mathematical database was very successful. We received contributions of £50 each from the mathematics departments of the RTC in Cork, DIT (Kevin St), Maynooth, NIHE (Limerick), Thomond College, TCD, UCC, UCD and UCG, and another £50 from the UCC Statistics department - a total of £500. I understand that a proposal for major funding from the EEC's ESPRIT programme has been prepared and is now being assessed by the EEC.

2. AMERICAN MATHEMATICAL SOCIETY

We now have a reciprocity agreement with the American Mathematical Society. The agreement has been announced in the November issue of the Notices of the American Mathematical Society. It means that members of the IMS can join the AMS at a reduced rate of \$42 (the full rate is \$64 or \$84, depending on your income). Application forms are available from me.

3. REPORT ON MATHEMATICS IN IRELAND

We are all aware that Mathematics is an essential part of the infrastructure of Science and Technology. Some of our members work in areas which are considered "applicable" but those of us who work in "pure" areas may not be as aware as we might be how close our subject is to practical applications. Also, many areas which are considered as being unquestionably "applied" have now become intertwined with very high-powered areas which were considered the core areas of pure mathematics.

There are two US reports which, I think, bring out this unity and significance of present-day mathematical research. These are the David report (reproduced in the Notices of the AMS, August 1984, pages 434-469) and a report produced recently by a committee under the chairmanship of Philip Griffiths (see Notices, AMS, June 1986, pages 462-479).

The David report has had an enormous impact on US Federal policy towards mathematics. The US government has realised, as a result of that report, that Mathematics is the cornerstone of development at the frontiers of Science and Technology. This has been translated into increased Federal funding for Mathematics research (as distinct from Computer Science research).

It has been suggested to me by a number of members that if a report were prepared here in Ireland by one of our most distinguished mathematicians with the aim of elucidating the present and potential role for Mathematics in Irish education and industry, it could form the basis for a new appreciation of the significance of Mathematics. My purpose in writing this is to start a debate on whether we should embark on such a project and how best to go about it.

Richard M. Timoney

IRISH MATHEMATICAL SOCIETY

Ordinary Meeting, December 19, 1986

An ordinary meeting was held at 12.15 pm at the Dublin Institute for Advanced Studies. The meeting began under the temporary chairmanship of Prof. S. Tobin, who handed over the chair to the Vice-President, S. Dineen. The President was unable to attend. There were 13 members present.

- The minutes of the meeting of April 4th, 1986, were approved and signed.
- 2. The Treasurer presented his financial report and also reported on a substantial increase in membership from 181 to 231 since January 1986 (including reciprocity members: 22 via the IMTA and 14 via the new AMS reciprocity agreement). There was also one additional institutional member (UCD).

F. Holland suggested that it might possibly benefit the IMS to be registered as a charity and it was agreed that this might merit investigation.

The Treasurer's report was formally proposed and seconded and then approved unanimously.

3. The Secretary presented his report, divided into three main headings - the appeal for donations towards EUROMATH (the proposed mathematical database), the new reciprocity agreement with the AMS and a suggestion that the IMS consider preparing a report which would identify the optimal future role for mathematics in Ireland. The latter idea was discussed at length and received approval in nonspecific terms. F. Holland relayed the information that EUROMATH had been approved for substantial EEC funding. The idea was raised of instigating further reciprocity

agreements (for example with the Edinburgh Mathematical Society).

T. Laffey reported on his and F. Holland's efforts to ensure that Ireland would be represented at the 1988 International Mathematical Olympiad, which is to be held in Australia. The Government has agreed to this and the Department of Education will provide significant funding for the trip. T. Laffey listed a number of the steps which would be necessary to select and prepare a team. The most suitable group of students would probably be those completing their penultimate year in secondary school, as the timing of the competition would essentially prohibit Leaving Certificate candidates from taking part. The next Mathematics contest is to be used to identify a significant number of suitable students (say 100 of them). This tuition would require the assistance of teachers, but it would also mean the provision of suitable books (which would have to be bought) and perhaps sets of notes on relevant topics. IMS members willing to help in this process by compiling notes or lists of problems are being sought. It might be necessary to have some "summer camps" for groups of these students so that they could receive intensive training and so that a team (maximum of 6 pupils on the team) could be selected. The team would then need an intensive training session prior to their trip.

With a view to the future, the question of soliciting funds to send a team to the 1989 Olympiad was being considered.

Finally, T. Laffey or F. Holland are most anxious to hear from those willing to assist in the preparation of a team.

5. The meeting agreed that the Society would not formally support the Carmen Bueno campaign, which is the successor of the now-defunct Orlov-Scharansky and Massera campaigns (which the Society did support and which achieved their objectives).

6. It was announced that R. Ryan and T. Hurley of UCG would edit the Bulletin, following the April 1987 issue.

The Secretary also announced a plan that the membership list will eventually include electronic addresses for those members who wish to supply them. In addition, it is proposed to ask each Mathematics department to set up a departmental electronic mailbox and organise that it be regularly checked (by a secretary, for example).

7. The following were proposed, seconded and elected unopposed (for two-year terms in each case):

President : S. Dineen (UCD)

Vice-President : F. Gaines (UCD)

Committee : M. Brennan (WRIC)

N. Buttimore (TCD)

B. Goldsmith (DIT, Kevin St)

R. Ryan (UCG)

Richard M. Timoney
(Secretary)

LETTER TO THE EDITOR

Dept of P. & Q. Science, Regional Technical College, Waterford. February 1987

Dear Editor,

In your September 1986 issue Donal Hurley and Martin Stynes reported on the basic mathematical skills of UCC students.

They concluded that students entering third-level colleges do not have "the desired basic skills". In the opinion of the authors third-level mathematics lecturers should "take an interest in and play an active role in designing the mathematics curriculum at first and second levels".

Your third-level readers ought to know that:

- (1) A syllabus committee under the aegis of the Department of Education and composed of three inspectors, three teacher union representatives and three school manager representatives put the finishing touches about a year ago to three new Intermediate Certificate syllabi. The Intermediate Certificate stable door is swinging open and the horse has gone.
- (2) However, a Leaving Certificate Syllabus Committee (for Mathematics) also under the Department's aegis but this time including a representative of the universities (≠ third-level colleges) had its work on three new Leaving Certificate syllabi suspended, also about a year ago. The Leaving Certificate horse is still in the stable.

It is important for the authors of the UCC survey to distinguish between their viewpoint and the grounds for the long-