



NEWSLETTER

NUMBER 3

JULY, 1975

ANNUAL REPORT 1974/75

It is my honour to present, on behalf of Council, the first annual report of the Society.

The aims of the Council during this first year have been to consolidate the Society's position within New Zealand, to establish relations with mathematical societies overseas, and to initiate activities and lines of development which the Society can follow up in the years to come. In the notes below I shall comment briefly on some specific aspects of the Society's activities during the year.

1. Membership

Membership over the year has built up from 58 at the time of the first Council Meeting to a current total of 94. Council resolved that all persons joining the Society during its first year of activity would be deemed foundation members, and of the 94 referred to above 88 are, in fact, foundation members. Council is very pleased that Emeritus Professor H.G. Forder, Emeritus Professor J.T. Campbell, and Professor B.H. Neumann have all accepted its invitations to become Honorary Members of the Society. It is intended that a full membership list should be circulated to members of the Society with the next Newsletter (*i.e. this one*).

2. Relations with Overseas Mathematical Societies

The warm support given to the Society by the Australian Mathematical Society has been of considerable encouragement to Council. A reciprocity agreement with the Australian Society was concluded during the year, which not only offers substantial concessions to individual members of the New Zealand Society, but also provides a framework for the discussion of joint meetings and other joint activities. The Societies exchanged observers at their respective Council meetings, and one consequence of this has been a specific suggestion to the effect that the organizers of the 1978 Mathematics Colloquium be invited to consider the possibility of inviting the Australian Society to hold their 1978 Annual Meeting in New Zealand, jointly with the Colloquium. The possibility of holding a joint summer school in New Zealand is also under active discussion.

The American Mathematical Society is in the process of revoking its existing reciprocity agreements and replacing them by a form of foreign membership. The Society is seeking to ensure that foreign membership preserves the rights formerly extended to reciprocity members, and that at least some kind of informal relationship with the American Society can be established. The London Mathematical Society has provisionally accepted a reciprocity agreement under similar terms to those offered by the Australian Society, but has warned that its reciprocity arrangements are also likely to come under review.

The Society is currently seeking to contact the Japanese Mathematical Society and the South East Asian Mathematical Society (with members chiefly from Singapore, Hong Kong, Malaysia and the Philippines) with a view to establishing formal relationships.

3. Relations with the Mathematical Associations

Council has been persuaded from the outset of the importance of establishing friendly and effective working relations with the local Mathematical Associations. Last October, the Society sent a delegation of three to a joint meeting with representatives of the Associations, at which a variety of possible joint relationships were discussed. The Meeting favoured a form of affiliation to the Society, in which the local associations would retain a considerable degree of autonomy, but would be grouped together on a national basis to form a separate section of the Society with appropriate representation on the Society's Council. This suggestion was forwarded both to the local associations and to the Society for comments. The Council has endorsed the suggestion at its most recent meeting, and will be seeking the support of the AGM to continue negotiations along these lines, with the hope, if the suggestions are also agreeable to the Associations, of preparing the necessary amendments to the constitution in time for consideration at the 1976 AGM.

4. Publications

One of the primary aims of the Society is the establishment of closer links between mathematicians in New Zealand. Council has seen the publication of a regular Newsletter as a key to this aspect of its work. While the Newsletter, in its two issues to date, has concentrated on conveying factual information and Society policy, Council would welcome individual contributions, whether in the form of letters to the editor, articles relating to the interests of particular groups of members within the Society, or articles of general mathematical interest.

Possible ways in which the Society might take some part in the international publishing scene have also been discussed by Council. It is hoped, for example, that the Editors of the various journals published by the Australian Society will feel free to call upon the sources of members of the New Zealand Society to assist in editorial matters whenever this seems appropriate. The publication of a separate journal is not favoured by Council at least as an immediate step, chiefly in view of the heavy financial commitment this would involve; the local membership base is very small, and in the current inflationary climate, overseas libraries, on whom the financial viability of such a venture would largely depend, seem more likely to contract than to expand their current orders. A more viable philosophy, in the Council's view, is to develop local expertise either by expanding the role of the Newsletter, or by participating, if this can be made agreeable to the present publishers, in the publication of the Chronicle and the Mathematics Magazine. Preliminary discussion with the Chronicle Committee have not led to any mutually agreeable arrangements coming forward, but the matter is still under active discussion, and it is hoped that a full meeting between Council and the Chronicle Committee can be arranged later this year. Any question of the Society's participation in the production of the Mathematics Magazine seems better left until the future relationships of the Society with the Associations has been clarified.

5. Council Meetings

Council has met twice during the year, a pattern which has the advantage of bringing together a group of New Zealand mathematicians on at least one occasion in addition to the Colloquium, as well as preventing too great an accumulation of business at any one meeting. In addition, a certain amount of Council business has been conducted by post.

6. Other activities

The Society has instituted an essay competition, concerning which full details will be circulated to Mathematics Departments later this term. The Newsletter has carried regular comments on local news, and overseas visitors. The Council set up a subcommittee to look into vocational opportunities for mathematicians in New Zealand, which has reported once through the Newsletter and will be continuing its activities into the coming year. The Society nominated a New Zealand member to the International Commission on the History of Mathematics. Summer Research Institutes and other specialist meetings have been discussed by Council, and it is hoped that at least one Society-sponsored venture in this field will be held in early 1977. The Council would welcome further suggestions as to activities the Society could and should undertake.

7. Acknowledgements

I should like to pay a very sincere personal tribute to all Council members for their hard work and the enthusiasm which they have devoted to the task of getting the Society under way. In particular I would like to refer to the work of the Treasurer/Membership Secretary Peter Lorimer, and my three colleagues in Wellington: Dr. Wake, the Secretary; Dr. Ansell, the Editor of the Newsletter; and Dr. Malcolm, who has carried the brunt of the negotiations with the Associations. Between them they have transformed the rather forbidding role of President into a real privilege and a pleasure. I would also like to express my thanks to Mr. Christie, our honorary auditor, and to Mr. Bill Armstrong, to whom we are indebted for the Kiwi insignia.

D. Vere-Jones
President.

21/5/75.

PRESIDENT'S NOTES

It is with great pleasure that I assume the role of president. The enthusiastic leadership given by Professor David Vere-Jones has led to some considerable achievements in the one year our society has been in existence, and on behalf of all members I wish to express my warm appreciation for his work.

Like many other areas of activity, Mathematics in New Zealand is handicapped by our geographical isolation and it is of the utmost importance that we strengthen our ties with the international mathematical community. It is, therefore, particularly valuable that reciprocity agreements with other societies have been and are being worked out. I hope that during the coming year further progress can be made in this direction. I also hope that new opportunities will be found for our society to make significant contributions to Mathematical life in New Zealand. We have a small but growing membership of very able mathematicians and we are in an excellent position to make such contributions.

J.C. Butcher.

NOTES FROM MAY COUNCIL AND ANNUAL MEETINGS HELD IN DUNEDIN

A multitude of business was conducted at these two meetings. The Council meeting was held two days before the Annual Meeting and served to prepare the business for the A.G.M. One of the major decisions taken at the Annual Meeting was for us to apply for affiliation with the Royal Society of N.Z. and so to become a member body of that Society. This will facilitate a closer relationship with the International Mathematics Union and other scientific groups in this country. (Our application is now before the Royal Society.) We are in the process of concluding, with the London Mathematical Society, a reciprocity agreement, the permanence of which is in doubt because of the implications for all Societies of the review of such agreements that the American Mathematical Society is undertaking. This review has meant that no progress has been made with any such agreement between N.Z.M.S. and the American Mathematical Society, although we are seeking to establish some form of informal relationship. We are making contact with the Japanese and South-East Asian Mathematical Societies with a view to entering into reciprocity agreements with them.

The decision to launch the essay competition (as described elsewhere in this issue) was ratified and it was agreed that the question of other awards would be left until the essay competition is completed.

The Annual Meeting gave its approval in principle to the proposal for establishing formal relationships with the various Mathematical Associations, as described in the March 1975 Newsletter. Negotiations with the Associations are continuing and it is hoped that these can be finalised at the 1976 A.G.M. A further meeting of representatives of the Associations and the Society will be held in Christchurch on Saturday 26th July. Our representatives are Professors Malcolm, Petersen and Vere-Jones.

The Society has given its support to the proposal to hold a summer school in the area of algebra and logic in Wellington during 1976/77. This has been the only suggestion for a summer school that has been brought to the notice of the Society. It is hoped that there will be interest from Australian mathematicians in this activity.

The Society has yet to decide on its publication policy and is continuing its discussions with the Mathematical Chronicle Committee on this matter. The Newsletter is receiving favourable comment and the possibility of increasing its size and frequency of publication is under review. (Three issues will be published in 1975, the next is due to appear in November.)

The suggestion that it may be possible for the Australian Mathematical Society meeting to be held in New Zealand at the time of the May 1978 colloquium in Christchurch was warmly received. The Canterbury Mathematics Department is considering the suggestion at present. Twelve members of the N.Z.M.S. have applied to join the Australian Society via the existing reciprocity agreement and two members of the Australian Society have joined the N.Z.M.S.

The sub-committee working on employment opportunities is continuing its work and has been asked to consider producing a brochure on this topic for 1976. Dr Wake has been asked to continue as convener of this group.

As members will see from the up-dated by-laws (75-76), we have now included a clause on institutional membership.

The accounts tabled and accepted at the A.G.M. showed the Society to have net cash assets of \$458.09. Membership totalled 105 on 9th June 1975.

OFFICERS FOR 1975-76

President:	Professor John C Butcher
Incoming Vice-President:	Professor Gordon M Petersen
Out-going Vice-President:	Professor David Vere-Jones
Secretary:	Dr Kevin A Broughan
Editor of Newsletter:	Dr Donald C Joyce
Treasurer and Membership Secretary:	Professor Peter J Lorimer
Other Council members:	Dr Robert B Davies
	Professor Wilf G Malcolm
	Professor Desmond B Sawyer

SEMINARS IN THE MATHEMATICS DEPARTMENT AT AUCKLAND UNIVERSITY

Apart from general seminars where visitors speak to the whole department, various subject groups have been conducting series of more specialized seminars.

David Gauld and Robert Frimmel have been heading a study of "The classification of elementary catastrophes of codimension ≤ 5 ", lectures by E C Zeeman, written and revised by D J A Trotman.

Graham Baird has just started an algebra seminar. The two talks given so far have been "Finitely generated commutative semigroups are finitely presented" by Graham, and "Centralizers in Mathieu groups" by John Curran.

In order to strengthen contacts between the theoreticians and the practitioners, the Statistics Unit has invited a number of people from outside the Department to give talks. These have been: "Aspects of Factor Analysis" by M C Corballis, a visitor to the Psychology Department from McGill University; "Use of statistical methods in water supply investigations" by M G Bogle, Department of Theoretical and Applied Mechanics; "Problems in the analysis of medical data" by Miss L L Gilmore, Department of Community Health; "Apple Tasting" by S Tucker, DSIR; "Statistics in education research" by W M Gill, Education Department; "The statistician as experimenter" by R G R Nairn, Psychology Department; "Statistics in geography - problems with real data", by P L Hosking, Geography Department.

In Computational Mathematics the following have been given: "Extrapolation methods for ordinary differential equations" and "Some new methods for ordinary differential equations" by John Butcher who has been organizing the series; "Data structures in programs which exhibit intelligent behaviour" by P J Cox; "On the role of exact and non-exact associative memories in human and machine information processing" by N V Findler; "Linear ℓ_1 and ℓ_∞ approximation" by F D K Roberts; "Interactive graphics for conformal transforms" and "The Bellman-Angel method for partial differential equations" both by G J Tee.

In a different spirit, Chris King has begun some seminars with the overall title of "New directions in mathematics" and he has led off with a few talks on "Mind and brain, the end of a paradigm?" The aim is to explore areas of knowledge outside mathematics and to search for new mathematical models for phenomena in nature, rather than elaborating the mathematics of existing models.

Information on future seminars in any of these series can be obtained from the people mentioned, or in the case of statistics, from Jeff Hunter.

NATIONAL COMMITTEE FOR MATHEMATICS

At its last meeting the National Committee for Mathematics resolved to publish the Minutes of its meetings in the Society's Newsletter. This decision reflects among other things a concern of the Committee that its role on the New Zealand mathematical scene has been the subject of some misunderstanding. As a preface to the Minutes which follow therefore, it may be worthwhile to set out a brief account of the terms of reference of the National Committee.

It has in fact a very specific role in relation to the Royal Society of New Zealand. By statute, the Royal Society is the New Zealand member body of all international organisations belonging to the I.C.S.U. group (International Council of Scientific Unions); in effect all those scientific bodies which come under the wing of U.N.E.S.C.O. National Committees are set up in different subject areas for which appropriate international organisations exist (the International Mathematical Union is the relevant one for mathematics), in order to act as the intermediary between the statutory member bodies and any groups, associations, societies or individuals with a legitimate interest in the subject area concerned.

The Royal Society receives a Government grant to assist delegates from New Zealand to attend business meetings or organisations in the I.C.S.U. group, and will seek the advice of its national committees in appointing the delegates. How much initiative is displayed by the National Committee over and above its specific role in relation to the Royal Society is a matter of the circumstances of the particular subject area and the judgement of the Committee itself. In mathematics the absence until recently of any National Mathematical Society placed the National Committee in a position where, as a matter of professional responsibility, it felt obliged to exercise a wider role. The formation of the New Zealand Mathematical Society, and more particularly its recent decision to affiliate to the Royal Society, will help to regularize this situation and should give mathematicians, for the first time, a direct voice in the affairs of the Royal Society. Nevertheless, there will continue to be some areas - the question of New Zealand membership of the International Committee for Mathematical Instruction (I.C.M.I.) referred to in the Minutes is a recent example - where the initiative of the National Committee will continue to be of value and importance.

It should be emphasised that the National Committee is not an elected body. Its members are appointed by the Council of the Royal Society to represent the various groups within New Zealand concerned with mathematics. Thus there have been representatives of the Education Department and the D.S.I.R. as well as University mathematicians on the National Committee. With the affiliation to the Royal Society of the New Zealand Statistical Association and the New Zealand O.R. Society, there have been recent appointments to include these groups also.

The practice of the Royal Society has been to revise the membership of National Committees every three years, when it recommends that at least 25% of the current members retire. Such a revision is due to take place this year and Professor Hayman, Dr Thompson and Professor Petersen have offered their resignations, the last with the request that he be allowed to remain on the Committee for a further year to complete the negotiations with regard to New Zealand membership of I.C.M.I. The Committee has recommended replacements for these vacancies but recommendations are also sought from the affiliated bodies and Royal Society Council may or may not choose to accept the Committee's recommendations.

Minutes of a meeting of the National Committee for Mathematics held at the University of Otago at 1.15 PM, Wednesday May 21, 1975.

PRESENT Professors Petersen (in the Chair), Davidson, Zulauf, Vere-Jones; Dr Thompson. Professor Neumann (Chairman of the Australian National Committee for Mathematics) attended by invitation of the Chairman.

APOLOGIES Apologies were received from Professor Hayman, Professor Kalman, and Miss Ryan and Mr Kuzmicich.

MINUTES The minutes of the previous meeting had been read and confirmed.

MATTERS ARISING FROM THE MINUTES

(i) Grants Committee Policy on postgraduate studentships

The Secretary reported that notwithstanding the letter (circulated previously) from Mr Broad, the Grants Committee Scholarships Committee at its 1974 meeting had been forced, through lack of funds, to offer scholarships only to first class honours graduates from within New Zealand, and had not been able to consider overseas graduates wishing to study in New Zealand. The policy was being reviewed, however, and it was possible that in future years a small proportion of the funds could be reserved for overseas applicants.

(ii) Royal Society Policy over Fellowships

Correspondence from the Royal Society had previously been circulated. Professor Petersen reported that, although Professor Kerr had been elected a Fellow, the fact that Mathematics shared one section (out of 6) with Physics and all of Engineering mitigated against the possibility of achieving an equitable representation. He pointed out the desirability of the Mathematical Society becoming a Member Body, so that mathematicians had at least a recognized avenue through which they could make recommendations to the Royal Society.

(iii) Publication of Minutes

Professor Vere-Jones reported that varying opinions had been expressed on the desirability of publishing the Minutes of National Committee meetings in the Newsletter of the Mathematical Society. After discussion it was agreed that the edited minutes should be published with explanatory notes where necessary, and that this procedure could replace the practice followed in the previous year of sending copies directly to Departments.

MEMBERSHIP OF INTERNATIONAL COMMITTEE ON MATHEMATICAL INSTRUCTION (ICMI)

The desirability of New Zealand becoming a member of ICMI had been referred to by Professor Petersen in his notes on the IMU meeting. Professor Petersen reported that he had found difficulty in locating the current Chairman, but this information had now been supplied by Professor Neumann so he would take up the matter in the immediate future.

Professor Neumann suggested that it would be desirable for the formal application for New Zealand membership to be lodged with the Secretariat before about September. He also referred to the fact that ICMI would be sponsoring the 3rd International Congress on Mathematical Education in Karlsruhe West Germany from 16-21 August 1976.

After further discussion it was agreed that, if New Zealand was accepted as a member of ICMI, the National Committee should recommend to the Royal Society that a special subcommittee on Mathematical Education be set up with the following composition: 2 members nominated by the National Committee for Mathematics, and representing the Royal Society; 2 members nominated by the NZ Mathematical Society; 2 members nominated by the Mathematical Associations; 1 member nominated by the Education Department.

NOMINATIONS FOR NATIONAL COMMITTEE MEMBERSHIP

Professor Petersen referred to the policy of the Royal Society that no more than $\frac{3}{4}$ of the current members of the National Committee should be reappointed; he added that although the practice had been for those members who had already served for 3 terms to retire, he could not find any explicit ruling to this effect.

The names of Professor Rosser, Professor Tate and Professor Woods were mentioned as possible nominees, and the Secretary undertook to ascertain if they were willing to accept nomination. It was pointed out that Professor Woods would be on leave in 1976, and it was agreed that the Committee should recommend to Council that Professor Petersen remain Chairman of the Committee until such time as Professor Woods returned from leave.

PREPARATION OF RESEARCH TOPICS IN MATHEMATICS

It was agreed that this matter should be handed over to the NZ Mathematical Society at such time as that Society became a member body of the Royal Society.

ROYAL SOCIETY POLICY IN ASSISTANCE FOR TRAVEL

Professor Vere-Jones referred to a copy of the letter sent from the Royal Society to the OR Society, outlining Royal Society policy on travel assistance. First priority went to meetings of International Organizations which were full members of ICSU; second priority to meetings organized by subsections and special committees of ICSU; third priority to meetings sponsored by bodies affiliated to ICSU. Groups not associated in any way with ICSU apparently did not receive consideration.

D Vere-Jones
Secretary

The meeting concluded at 2.20 PM.

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Current membership of the National Committee for Mathematics and the number of terms already served.

Professor G I Petersen	Mathematics Department, Canterbury	3 terms
Professor W Davidson	Mathematics Department, Otago	1 term
Professor B I Hayman	Mathematics Department, Massey	3 terms
Professor J Kalman	Mathematics Department, Auckland	1 term
Ms M M Ryan	Dept of Education, Wellington	2 terms
Dr H R Thompson	Applied Mathematics Division, DSIR	3 terms
Professor E Zulauf	Mathematics Department, Waikato	2 terms
Mr S Kuzmicich	Department of Statistics, Wellington	Just apptd.
Professor D Vere-Jones	Mathematics Department, Victoria	1 term

NEW ZEALAND MATHEMATICAL SOCIETY MEMBERSHIP LIST

(As at 16th July, 1975)

* = foundation member
 S = student member
 H = honorary member
 R = reciprocal member
 C = currently a member of the Council of the Society

- * Dr J H Ansell, Mathematics Department, Victoria University of Wellington.
 * Dr H Barr, Applied Mathematics Division, DSIR.
 * Dr R H T Bates, Electrical Engineering Department, University of Canterbury.
 * Mr A J C Begg, Green Bay High School, Auckland.
 * Dr D R Breach, Mathematics Department, University of Canterbury.
 * Dr R J Brook, Mathematics Department, Massey University
 *C Dr K A Broughan, Mathematics Department, University of Waikato
 * Dr P J Bryant, Mathematics Department, University of Canterbury
 * Dr R A Bull, Mathematics Department, University of Canterbury
 * Mr C W Burden, Mathematics Department, University of Sussex.
 *C Prof. J C Butcher, Mathematics Department, University of Auckland
 * Dr B Calvert, Mathematics Department, University of Auckland
 *H Prof. J T Campbell, 579 Rocks Road, Nelson
 * Mr M R Carter, Mathematics Department, Massey University
 * Dr C P Chang, Mathematics Department, Auckland University
 *S Miss B H Chapman, 25 Caroline Street, Wellington 1
 * Prof. W Davidson, Mathematics Department, University of Otago
 *C Dr R B Davies, Applied Mathematics Division, DSIR
 * Dr B P Dawkins, Mathematics Department, Victoria University of Wellington
 * Mr G F P Deecker, Department of Computer Science, University of
 Canterbury
 * Prof. J J Deely, Mathematics Department, University of Canterbury
 * Dr G D Dixit, Mathematics Department, University of Auckland
 * Mrs Jocelyn Dobbie, Wellington Polytechnic
 * Dr F C Durling, Mathematics Department, University of Waikato
 * Mr T R Felton, Auckland Technical Institute
 *H Prof. H G Forder, University of Auckland
 *S Mr R Fox, Birbeck College, University of London
 Mr A G French, Mathematics Department, University of Waikato
 * Mr F C Gair, Mathematics Department, University of Canterbury
 R Dr J Gani, CSIRO, PO Box 1965, Canberra
 * Mr R A Garden, Department of Education, PO Box 8011, Wellington
 * Ms H J Gardiner, Mathematics Department, University of Waikato
 Dr D B Gauld, Mathematics Department, University of Auckland
 * Miss L L Gilmore, Department of Community Health, University of
 Auckland
 * Dr R I Goldblatt, Mathematics Department, Victoria University of
 Wellington
 Dr P R Hafner, Mathematics Department, University of Auckland
 * Mr W D Halford, Mathematics Department, Massey University
 * Dr J F Harper, Mathematics Department, Victoria University of Wellington.
 * Dr J A Harraway, Mathematics Department, University of Otago
 * Mr D C Harvie, Mathematics Department, Victoria University of Wellington
 * Dr M D Hendy, Mathematics Department, Massey University
 * Mr J Hoe, Mathematics Department, Victoria University of Wellington

- * Ass. Prof. G A Hookings, Mathematics Department, University of Auckland
 * Prof. R J Hosking, Mathematics Department, Waikato University
 *S Mr B A Hutton, Mathematics Department, University of Warwick
 Dr G C Jain, Mathematics Department, University of Otago
 *S Mr J D Jarrett, Mathematics Department, University of Warwick
 Dr M A Jorgensen, Ministry of Agriculture and Fisheries, Wellington
 *C Dr D C Joyce, Mathematics Department, Massey University
 * Prof. J A Kalman, Mathematics Department, University of Auckland
 Dr E Kalnins, Mathematics Department, Waikato University
 * Dr G Karpilovsky, Mathematics Department, University of Sydney
 * Mr A P Kelly, Mathematics Department, Massey University
 R Prof. H O Lancaster, Department of Mathematical Statistics, University
 of Sydney
 * Mr A C Lewis, Agricultural Economics Department, Massey University
 * Dr R A Littler, Mathematics Department, Waikato University
 Mr R S Long, Mathematics Department, University of Canterbury
 *C Ass. Prof. P J Lorimer, Mathematics Department, University of Auckland
 * Mr G B McBride, Water and Soil Division, Ministry of Works and
 Development, Wellington
 * Dr D J McCaughan, Mathematics Department, University of Otago
 *S Mr M E McGregor-Macdonald, 45 Tremewan Street, Linden, Wellington
 * Dr A W McInnes, Mathematics Department, University of Canterbury
 * Prof. A G Mackie, Applied Mathematics Department, University of
 Edinburgh
 * Dr A McNabb, Applied Mathematics Division, DSIR
 * Mr J H Maindonald, Mathematics Department, Victoria University of
 Wellington
 *C Prof. W G Malcolm, Mathematics Department, Victoria University of
 Wellington
 * Mr J B Miller, Auckland Technical Institute
 * Dr A G Morris, Mathematics Department, University of Woolongong
 *S Mr P R Mullins, 2/11 Masons Avenue, Herne Bay, Auckland
 Mr G H Murdoch, Mathematics Department, University of Otago
 *H Prof. B H Neumann, Institute of Advanced Studies, Australian National
 University, Canberra
 S Mr F M Nolan, 16B Barton Tce, Thorndon, Wellington 1
 * Dr G Olive, Mathematics Department, University of Otago
 * Rev. Fr P J O'Neill, St Patrick's College, Wellington
 * Dr I L O'Reilly, Mathematics Department, University of Auckland
 * Dr M F O'Reilly, Mathematics Department, University of Papua, New Guinea
 *C Prof. G M Petersen, Mathematics Department, University of Canterbury
 * Mr K E Pledger, Mathematics Department, Victoria University of
 Wellington
 * Mrs S Pledger, 104 Upland Road, Wellington
 Dr P Ramankutty, Mathematics Department, University of Auckland
 * Mr J C W Rayner, Mathematics Department, University of Otago
 Dr P F Renaud, Mathematics Department, University of Canterbury
 * Mr H S Roberts, Applied Mathematics Division, DSIR
 * Dr D L Roper, Mathematics Department, Victoria University of Wellington
 * Ass. Prof. M S Rosser, Department of Theoretical and Applied Mechanics,
 University of Auckland
 * Miss M M Ryan, Department of Education, PO Box 8011, Wellington
 * Dr R Sandler, 83 Wharf Road, Ostend, Waiheke Island
 * Mr R E Sass, Department of Education, Massey University
 C Prof. D B Sawyer, Mathematics Department, University of Otago
 Dr J L Schiff, Mathematics Department, University of Auckland

- * Dr M Schroder, Mathematics Department, University of Waikato
- * Prof. G A F Seber, Mathematics Department, University of Auckland
- Dr D J Smith, Mathematics Department, University of Auckland
- * Mr B R Stokes, Hamilton Teachers College
- * Mr A Swift, Mathematics Department, Massey University
- * Mr G J Tee, Mathematics Department, University of Auckland
- * Dr K L Teo, Mathematics Department, Massey University
- * Dr H R Thompson, Applied Mathematics Division, DSIR
- * Dr J C Turner, Mathematics Department, University of Waikato
- *S Mr R W Urwin, UCLA
- * Dr M K Vamanamurthy, Mathematics Department, University of Auckland
- *C Prof. D Vere-Jones, Mathematics Department, Victoria University of Wellington
- * Dr G C Wake, Mathematics Department, Victoria University of Wellington
- Mr B W Werry, Christchurch Teachers College
- * Mr B D Whisker, Parkway College, Wainuiomata
- Dr C S Withers, Applied Mathematics Division, DSIR
- * Prof. B A Woods, Mathematics Department, University of Canterbury
- * Prof. A Zulauf, Mathematics Department, University of Waikato

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LOCAL NEWS

Local news and items of interest are included in each Newsletter. Please send any contributions to the Secretary of the Society or the new Editor of the Newsletter (Dr Don Joyce, Massey).

Waikato

After some years in the desert (?) of schoolteaching, Mr W Bolstad took up a temporary lectureship at the beginning of the year. (His fields are statistics and probability, and his A.M., Stanford.) At the start of the second term, we also welcomed Dr E Kalnins to a lectureship. He came from the University of Montreal, and is an enthusiast for Lie groups, and their applications in mathematical physics.

Our "establishment" being now fifteen and two halves, we have passed the first unlucky number unharmed: the next, 111, holds little threat for us at present.
M.S.

Otago

Dr David Hill returned in June from two and a half terms' sabbatical leave spent at the Mathematics Centre, University of Warwick, England.

Dr Helmut Efinger returned in May from a one term refresher leave spent mainly at the Max Planck Institute in Munich.

Professor A Levine of Tulane University, New Orleans, is spending the second term 1975 at the University of Otago working with Professor S P H Mandel on bio-statistical techniques associated with the monitoring of adverse reactions to drugs.

John Harraway proceeds on sabbatical leave to England in August 1975, initially to the University of Reading. He is making a return visit to Khon Kaen University in Thailand en route.

Dr Natalia Zotov is currently spending three months at the Institute for Astronomy, University of Cambridge, before proceeding to take up teaching and research on the West Coast of America.

W.D.

Physics and Engineering Laboratory, DSIR, Gracefield

Graeme McVerry, Engineering Seismology Section, will depart mid-September to take up his NRAC Fellowship at Caltech. While there he will be in the same group as Jim Beck, the Division of Engineering and Applied Science. He hopes to be back at his desk at PEL in about 4(?) years.

PEL is again active in geothermal reservoir modelling and an additional position has recently been advertised. Ian Donaldson has also been given permission to organise an international conference on "The Geothermal Reservoir" under the sponsorship of the New Zealand Energy Research and Development Committee. It is intended that this conference be an invitation-only, live-in conference of the Penrose or Gordon type. It will be held at the Hotel Wairakei in late August, 1976 and will be limited to about 60 participants. Although the conference will be inter-disciplinary it is hoped that we will be able to accommodate up to about 20 scientists of mathematical bent.

I.D.

Massey

The "Introductory Statistics" course (with nearly 400 students) is being taught along the lines of Keller's "Personalised System of Instruction".

Professor Burton W Jones (University of Colorado) visited in March and gave a seminar asking "what is interesting about the four numbers 1, 3, 8, 120?"

Professor S R Searle (Cornell University) visited in May and gave a seminar on "Understanding Covariance".

Dr R P Gupta (Dalhousie University) is here during June, July and August and will move on to AMD.

Because campus facilities are committed to extramural vacation courses during the school holidays, the 1976 Colloquium may have to be held over the weekend May 22/23.

In 1976, the 200-level "Applied Vector Calculus" course is to be replaced by a course entitled "Applied Differential Equations". Also a 200-level "Statistical Methods" course and a 300-level course on "Optimization" are scheduled. D.J.

Auckland: Mathematics Department

Some long term visitors expected in the Mathematics Department in the near future are David Brillinger from Berkeley, Ian Stewart from Warwick, and Les Underhill from Capetown.

Peter Lorimer has been awarded a Fellowship by the Alexander von Humboldt Foundation and will spend 1976 at the University of Trier-Kaiserslautern in Kaiserslautern, West Germany.

Applied Mathematics Division, DSIR, Wellington

Professor R/P Gupta of Dalhousie University will be visiting AMD during August and September. Professor Gupta's major interest is Multivariate Statistics.

Mike Randal, formerly of AMD and now at the University of Illinois, is visiting DSIR Head Office to assist with planning DSIR computing policy.

Robert Trout has joined the Palmerston North substation of AMD.

Canterbury

Professor Roy Kerr has become one of the select group of mathematicians who are Fellows of the Royal Society of New Zealand. He has also been chosen again to represent New Zealand at the Far-Eastern Bridge Championships. Professor John Deely returned recently from study leave at his former university, the University of New Mexico, Albuquerque. He found it to be an unhappy place to work in because of the tension and distrust between the academic staff, the students, and the administrators.

P.J.B.

Victoria

Dr Wilf Malcolm has been appointed to the Chair of Pure Mathematics and Professor Terence Nonweiler will take up the Chair of Applied Mathematics early in August.

Mr J Hutchings has returned from leave at the National Centre for Atmospheric Research, Boulder, Colorado.

Mr Doug Jones has been appointed a junior lecturer.

A successful informal seminar series on Mathematical Geophysics has been held and has drawn on the geophysics interests within the Mathematics Department and various other University and Government Departments.

Dr Alan Schumitsky, University of Southern California, will be a Visiting Professor until mid-September and is giving a seminar series on a uniform treatment of the modern approach to optimization.

LEONID PLYUSHCH - USSR

The New Zealand Mathematical Society was contacted in April 1975 by the N.Z. section of Amnesty International concerning the situation of Leonid Plyushch - a Russian mathematician. Information given to us suggests that Leonid Plyushch is being held in a mental hospital in or near Kiev and being given unnecessary treatment. A Committee set up in France organised an international "Plyushch" day (April 23rd 1975) to focus attention on his plight. Various national Mathematical Societies have made representations to the Soviet authorities on his behalf. In accordance with the decision of the recent Annual General Meeting of the NZMS the Society has written to the Soviet embassy in Wellington enquiring as to the situation of Leonid Plyushch. A copy was also sent direct to the Soviet Union. The letter, written by the acting President, Professor David Vere-Jones, is published in full below and we will publish any reply received.

"17 June 1975

Mr O P Selyaninov
 USSR Ambassador to New Zealand
 57 Messines Road
 Karori
 WELLINGTON

Dear Mr Selyaninov,

I am writing under the instructions of the Annual General Meeting of the New Zealand Mathematical Society to enquire as to the situation of the Soviet mathematician Leonid Plyushch. Representations have been made to the Society, both by Amnesty and by overseas mathematicians whose integrity we cannot lightly dismiss, to the effect that Plyushch is being detained wrongly in a mental hospital, that he is being given unnecessary and inhumane treatment, and that, despite the willingness of overseas mathematical groups to take responsibility for his case, neither he nor his family have been given permission to emigrate.

While we are in no position to judge the truth or otherwise of these representations, they are of concern to us as a Society one specific aim of which is to foster relations with mathematicians overseas. More generally, they are of concern to us as the major group concerned with mathematics within New Zealand.

We would welcome some assurance from yourself, as the official representative of the Soviet State that Plyushch's situation has been ameliorated, or that the representations we have received are not correct. I should add that by agreement of our Council a copy of the present letter will be published in the Society's Newsletter, and that we should be glad to publish similarly any reply which you may care to make.

Yours respectfully,

D Vere-Jones
 Vice-President and Acting President
 New Zealand Mathematical Society"

INAUGURAL ESSAY COMPETITION LAUNCHED !!!

The Inaugural Essay Competition has been launched and the details are given on the notice enclosed with this Newsletter. Please bring this competition to the notice of any possible entrants. The Council hopes this will be a worthwhile competition to mark the founding of the Society.

OPERATIONAL RESEARCH SOCIETY CONFERENCE

This will be held at Victoria University of Wellington on the 21st and 22nd of August, 1975. For further details contact the Secretary, Wellington Branch, NZOR Society, PO Box 904, Wellington.

VICTORIA UNIVERSITY OF WELLINGTON
MATHEMATICS DEPARTMENT

Junior Lectureships

Applications are invited for two junior lectureships in mathematics, salary range \$5638 - \$7007, tenable for two years, possibly extendable to three, from 1st February, 1976. Preference will be given to persons with some teaching or research experience.

For further details apply to the Chairman, Mathematics Department, Victoria University of Wellington, Wellington, New Zealand. Formal applications should be lodged with the Chairman before September 10th, 1975

This Newsletter has been produced for the Council of the New Zealand Mathematical Society by Dr Jim Ansell with the assistance of Shelley Carlisle, Sharon McColl, Dr Graeme Wake and Dr Don Joyce. Our thanks to the many contributors.

STOP PRESS

Saturday July 26th saw the second meeting of representatives from the various Mathematical Associations and the Society. Major outcomes were:

- * agreement to establish a regular meeting (at least annually) of representatives from the Associations and the Society to discuss and develop activities of mutual interest and benefit;
- * recognition that the time was not yet ripe for establishing formal and constitutional relationships between the Associations and the Society;
- * expression of enthusiasm for building up relationships through common interests and activities on an ad hoc basis out of which may grow the appropriate model for formalising the relationships at a later stage.