

COMBINATORICS

Volume 17, Number 1, December 1995

The Newsletter of the Combinatorial Mathematics Society of Australasia

The Combinatorial Mathematics Society of Australasia (CMSA) was formed in 1978, with the aim of promoting combinatorics and its connection with computer science. It disseminates information about combinatorics via this newsletter, conducts an annual conference, publishes the Australasian Journal of Combinatorics, and engages in any activity which furthers the appreciation of combinatorics. Any interested person may join the CMSA. The annual subscription is currently \$10 (Australian), or \$120 (Australian) for a Life Membership. Cheques should be made payable to the CMSA. Please forward all enquiries to the Membership Secretary at the address given below.

Director

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The Australasian Journal of Combinatorics

Those who presented papers at the 21st ACCMCC in Geelong are reminded that there will be no conference proceedings as such. However, those who wish to may submit a paper to the AJC where it will undergo the normal refereeing process. A copy of the issue containing conference papers will be forwarded to all those registered at the conference.

Correspondence relating to manuscripts for this journal should be sent to Anne Street (aps@maths.uq.oz.au) or Neil Williams (nhw@maths.uq.oz.au) at the editorial office at the Centre for Combinatorics, Department of Mathematics, The University of Queensland, Queensland 4072, Australia. The fax number for the office is 61 7 365 1477. All correspondence relating to accounts or subscriptions should be sent to the financial manager, Tony Moran, at the same address.

The Australasian Journal of Combinatorics publishes two volumes per year (approximately March and September). The subscription price is \$30 (Australian), plus postage charges per volume, in Australian dollars as follows:

\$3 for surface postage

\$7 for airmail postage to Oceania (exc. Australia), Indonesia, and Malaysia

\$10 for airmail postage elsewhere

The preferred minimum period of subscription is for one year. This covers two volumes. For such a period a payment of \$60 plus postage (in Australian dollars) is required.

Twenty-second Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (22ACCMCC)

Call for Papers

Dates: Monday, 1 July - Friday, 5 July, 1996

Venue: University of Technology, Sydney which is located about a five minute walk from Sydney's Central Railway Station. In addition to the trains, bus services exist from most parts of Sydney to Railway Square.

Invited Speakers: The following speakers have agreed to give one hour talks:

- Dr James Hirschfeld, University of Sussex
- Professor Donald Kreher, Michigan Technological University
- Dr Mark Lawrence, University of Wisconsin, Madison
- Professor Christine Mynhardt, University of South Africa
- Dr Rei Safavi-Naini, University of Wollongong

Call for Papers: Contributed papers may be offered on any aspect of combinatorics. The time allocated will be 25 minutes for presentation and 5 minutes for discussion. Titles and abstracts of up to 200 words are requested and need to be received by 10 May, 1996. Abstracts can only be accepted on payment of the registration fee.

Registration: The registration fee will be \$AUD220 for members of the Combinatorial Mathematics Society of Australasia in paid employment. The registration fee will be \$AUD120 for members of the Combinatorial Mathematics Society of Australasia not in paid employment Non-members pay

an additional \$AUD20 and this includes membership of the CMSA for the remainder of the year. The registration fee includes the conference dinner on Thursday, 4 July at Hotel Lawson. Registration at the conference will incur an additional fee of \$AUD100.

Accommodation: Because of the central location of UTS, it is possible for delegates to stay just about anywhere in Sydney. Some hotels near UTS offer discounts to delegates to UTS. These include the Country Comfort (1) (\$AUD103 per night, single or double) and the Hotel Lawson (\$AUD100 per night, single or double). State that you are attending a conference at UTS when booking. Another alternative is the Sydney Travellers Rest Hotel (\$AUD89 per night double) which also has apartments that sleep up to 6 for about \$AUD140 per night. For those who prefer college accommodation, bookings can be made with The Women's College, University of Sydney. Single rooms with breakfast are \$AUD50 per night and twin rooms with breakfast are \$AUD90 per night. It takes 15-20 minutes to walk to UTS from Women's College. The organiser regrets that she is unable to arrange accommodation for conference delegates.

Sponsors:

- University of Technology, Sydney
- Institute of Combinatorics and Its Applications
- Combinatorial Mathematics Society of Australasia

① cnr George & Quay
(02) 212 2544

Further information: may be obtained from
Deborah Street
School of Mathematical Sciences
University of Technology, Sydney
PO Box 123
Broadway, NSW 2007
Telephone: (02) 330 2251
Fax: (02) 330 2248
email: deborah@maths.uts.edu.au

② 383 Bulwara Rd
(02) 211 1499
\$100

FUTURE CONFERENCES

Eighth Quadrennial International Conference on Graph Theory, Combinatorics, Algorithms And Applications

Western Michigan University

3–7 June 1996

Western Michigan University will host the Eighth International Conference on Graph Theory, Combinatorics, Algorithms and Applications 3–7 June, 1996. The University commenced these quadrennial international conferences in 1968, with the last one in 1992. Proceedings of the past seven conferences have been published by Springer-Verlag and by Wiley-Interscience.

The eighth conference, expected to attract participants from all over the world, will include five days of principal, invited and contributed lectures. Presentations will be given at the Western Michigan University Conference Facility, the Fetzer Center. The conference will include several special events: Sunday and Monday evening receptions, a special conference banquet on Thursday.

The directors of the conference are Yousef Alavi and Allen J. Schwenk of Western Michigan University, and Ronald L. Graham of AT&T Laboratories. For further information, write to:

The Directors
The Eighth International Conference
Department of Mathematics and Statistics
Western Michigan University
Kalamazoo, MI 49008–5152, U.S.A.
Phones: (616) 387-4531, 387-4591, 387-4532
Fax: (616) 387-4530
Email: GTC8@wmich.edu

A Combinatorics and Graph Theory Conference

in honor of

Herb Wilf's 65th Birthday

**University of Pennsylvania
Philadelphia, PA USA**

12–15 June, 1996

Invited talks will be given in the areas of combinatorial identities and enumeration, combinatorial structures, and graph theory, with roughly one day devoted to each of these areas. Every evening a group dinner and social event will be organised.

More information, frequently updated, is available at:

<http://www.mcs.drexel.edu/~eschmutz/HWconference.html>

Fan Chung, University of Pennsylvania and Joan Hutchinson, Macelester College, are co-chairs. To be placed on the information and registration mailing list, send your name and address to the latter, St. Paul, MN 55105, email: hutchinson@macalstr.edu.

Minutes of the Annual General Meeting of the Combinatorial Mathematics Society of Australasia

held on

Thursday 13 July 1995
at the 21st Australasian Conference on
Combinatorial Mathematics and Combinatorial Computing
at Deakin University, Geelong, Australia

The meeting commenced at 4 p.m.

[Tabled documents appear elsewhere in this newsletter.]

Present: Kevin McAvaney (Chair), Peter Gibbons (Secretary), plus 19 other members.

1. Apologies

Bernhard Neumann, Derek Holton, Sharon Boswell, Ingrid Rinsma-Melchert, Deborah Street, John Moon, Helen Gustafson.

2. Minutes of 1994 AGM

Circulated in December 1994 Newsletter of CMSA.

Confirmed: Billington/Caccetta

3. Director's Report 1995

Kevin McAvaney presented a written report.

Report received: Street/Ellingham

4. Membership Report

A written report provided by Helen Gustafson was received with thanks.

McKay/Rodger

The meeting requested that the Membership Secretary maintain the membership list by emailing the list to all members, with requests that corrections and updates be forwarded to her.

5. Financial Reports

Ed Dawson presented a financial statement for CMSA for year ended 30/6/95.

Peter Gibbons presented a summary of the accounts for the 20th ACCMCC held at Auckland.

Statements accepted with thanks of meeting.

Seberry/Morely

**TWENTIETH AUSTRALASIAN CONFERENCE ON COMBINATORIAL
MATHEMATICS AND COMBINATORIAL COMPUTING
University of Auckland, 5-9 December 1994**

FINANCIAL SUMMARY (NZ\$)

Inflows:

Com Sci Dept.	3,000.00
ICA	1,500.00
Maths Dept	3,000.00
NZMS	500.00
Registration	17,178.10
Royal Society	1,102.55
Total Inflows	\$26,280.65

Outflows:

Bank Fees	403.08
CMSA Membership	772.91
Dinner	3,005.52
Excursion	2,940.00
Journals	2,953.66
Lecture Rooms	400.00
Metro Magazine	150.00
ORorke Accom	7,339.00
Postage, Copying	812.00
Refreshments	1,624.98
Satchells	70.00
Invited Speakers	5,491.58
Sundries	117.92
Survivors Party	200.00
Total Outflows	\$26,280.65

OVERALL TOTAL **0**

Peter Gibbons
Director, 20 ACCMCC

6. Membership Subscriptions – 1996

Fees set as follows:

A\$10 annual

A\$120 life

Dawson/Seberry

7. Future Meetings

1. 1996. 22ACCMCC 1–5 July, University of Technology, Sydney with Deborah Street as convenor. *Caccetta/McKay*
2. 1997. 3rd Int. Conference on CM & CC, University of Melbourne. Nick Wormald convenor.

O'Keefe/Street

Precise dates not yet specified. Wormald agreed to being host provided help was available.

8. Officers – 1996

Elected unopposed:

Director: Deborah Street

Hoffman/Caccetta

Treasurer: Ed Dawson

O'Keefe/Billington

Membership Sec.: Helen Gustafson

Dawson/O'Keefe

9. Constitution

Anne Street presented a Draft Constitution for CMSA (Inc.) which had been checked by a lawyer since last AGM on 6 December 1994.

[A copy may be obtained from Prof. Anne Street at the address on the front of this newsletter.]

The following motions were passed.

1. "Association" replaced by "Society" throughout. *Seberry/McKay*
2. "Chairperson" replaced by "Chair" throughout. *Seberry/McKay*
3. "Their" replaced by "his/her" for the singular throughout. *Seberry/McKay*
4. In Clause 9(3) insert "not" before "successful". *Seberry/McKay*
5. In Clause 11(1) insert a comma before "Secretary". *Seberry/McKay*
6. In Clause 15(5) replace "is interested" with "has an interest". *Seberry/McKay*
7. In Clause 17 insert "bona fide" after "done". *Seberry/McKay*
8. In Clause 24(8) replace "falling" with "failing" and replace "19" by "the year".
Seberry/McKay
9. Insert "5" in Clause 5(3). *McKay/Street*
10. Insert "10" in Clause 11(3)(b). *McKay/Ellingham*

11. Alter Clause 11(3)(e) to

"Nominations for any position on Council may be taken from the floor at the annual general meeting."
McKay/Rodgers
12. Alter Clause 28(4) to:

"Initially all amount of 50 dollars or over shall be paid by cheque signed by any two of the president, vice-president, secretary, treasurer authorised from time to time by the Council. This amount may be changed at any annual or special general meeting on the recommendation of Council."
Seberry/Billington
13. Insert "31 May" in Clause 30. *Seberry/Morely*
14. Remove Clause 32 and renumber the following clauses. *Seberry/O'Keefe*
15. That Prof. Anne Street seek legal advice on the transitional steps required to move to an incorporated society. *Seberry/Hoffman*
16. That the Combinatorial Mathematics Society of Australasia incorporate under the provisions of the associations Incorporation Act (Qld.)

Passed unanimously. *Street/Seberry*
17. That the name of the incorporated association be the Combinatorial Mathematics Society of Australasia Incorporated. *O'Keefe/Morely*
18. That the rules of the incorporated society be those headed draft and Combinatorial Mathematics Society of Australasia Incorporated, with the amendments resolved by this meeting of the CMSA. *Street/Seberry*
19. That Prof. Anne Street be appointed to prepare the application for incorporation. *Seberry/Caccetta*
20. That Prof. Anne Street be authorised to make any necessary changes to the proposed rules in consultation with the society's solicitor and after approval by the Council of the Society where alteration is required or desirable to secure registration of the society under the Associations Incorporation Act or to secure registration as a community purpose body under the Collections Act or to secure tax exempt status. *Seberry/Caccetta*

10. General Business

- (a) The meeting thanked Anne Street and Derrek Breach for the work they have done on preparing the draft constitution. *Seberry/Gibbons*
- (b) Ian Roberts foreshadowed a possible conference in Darwin in July 1988, bearing in mind the possibility of the 23rd ACCMCC being held in Dunedin in December 1998. This would depend on sufficient interest from members.
- (c) The meeting thanked Kevin McAvaney and other members of the organising committee for work in putting on such a smooth running and successfully conference. *O'Keefe/Gibbons*

Meeting closed at 5:40 p.m.

Director's Report – July 1995

The primary activity this year has been the organisation of 21ACCMCC. My thanks go to many people for their support and hard work. In particular, secretarial staff Lorraine Ridgway, Bette Collings and Judy Jamieson, research student Carreen Anbeek, computer science student Christopher McAvaney, have given invaluable service in registration, word-processing, computing, and fixing loose ends. The professional support of Conference Manager Noreen Nicholson and her Campus Facilities staff is also greatly appreciated. The conference enjoyed generous financial contributions from the Institute of Combinatorics and its Applications, and the School of Computing and Mathematics at Deakin University. This support has, amongst other things, allowed significant subsidies for student conferees.

Congratulations to all speakers at the conference, both invited and contributed, for their carefully prepared and presented talks. 21ACCMCC hosted some 50 delegates and heard some 40 talks. The calibre of papers at CMSA conferences has been consistently high over the years and 21ACCMCC has been no exception. Thank you particularly to ICA speaker Henda Swart and her research student Vivienne Smithdorf for hopping across the Indian Ocean to represent South Africa for the first time in the series.

Organisation of the conference was done almost exclusively by email. A casualty of this policy was the non-production of the newsletter "Combinatorics" so far this year. An edition will however be produced later in the year reporting to the general membership on 21ACCMCC, detailing this AGM and containing various news items.

Kevin McAvaney
Director

p.s. The 21ACCMCC program, speakers, titles, abstracts, and other information are available at the web site: <http://www.cm.deakin.edu.au/~kevin/accmcc>

Eighth SIAM Conference on Discrete Mathematics

**John Hopkins University
Baltimore, Maryland, U.S.A.**

17–20 June 96

The purpose of this conference is to highlight the major theoretical developments in discrete mathematics and its most significant new applications in industry and commerce.

Invited speakers:

Bonnie Berger, Massachusetts Institute of Technology, *Computational Biology*

Lászlo Lovász, Eötvös Lóránd University, Hungary, *Combinatorial Optimization*

Peter Shor, AT&T Bell Laboratories, *Quantum Computing*

Roberto Tamassia, Brown University, *Graph Drawing*

Richard J. Lipton, Princeton University, *Silicon versus Carbon Computers: Which is Fastest?*

Paul D. Seymour, Bellcore, *Graph Theory*

Rodica Simion, George Washington University, *Convex Polytopes and Enumeration*

Carsten Thomassen, Technical University of Denmark, Denmark, *Graph Embedding*

For more information:

<http://www.siam.org>

email: meetings@siam.org

Membership Report – July 1995

1. Membership numbers according to subscriptions

Life Members	32
1995	57
1994	64
1993	10
1992	12
1991	10
No subs.	27
Total	212

2. Electronic mail contact

Number of names on e-mail list: 158

Number of members not contactable via e-mail:

Life members	2
1994/5	15

3. Upkeep of membership information

A letter (6-7-'95) has been sent to 58 of the 59 members whose latest subscriptions are prior to 1994, to determine whether they wish to continue as members of the Society. Paul Erdos was not sent the letter since he is being considered for Honorary Membership. Of these, 28 were contactable via e-mail, a further 16 were contacted through other members and letters were posted to the remaining 14.

4. I was directed (from the previous Annual General Meeting) (1) to discontinue the Members-address-list on ftp; and (2) that members could obtain access to the membership list' only by request'.

- (1) I have removed the address from ftp – yet this ftp address is still available for storage of any information.
- (2) I request some direction on the updating of members' addresses: for updating of information the membership list could be e-mailed to those on the e-mail list, in%"cmsa@qut.edu.au", every quarter. At this stage the membership list will only be sent to members upon their request.

5. Any honorary members decided at the meeting will be given the status of 'Hon. Member'.

Helen Gustafson
Membership Secretary

COMBINATORIAL MATHEMATICS SOCIETY OF AUSTRALASIA

STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 30 JUNE 1995

Balance – 1 July 1994		\$
Petty cash on hand		39.25
Credit Union cashable deposit		3038.58
Cash at bank		<u>4509.81</u>
		7587.64
Add Receipts		
Membership	1555.00	
Interest	185.28	
1993 Conference balance	1888.50	
Donation B. Neumann	<u>45.00</u>	<u>3673.78</u>
		11261.42
Less Payments		
Nil		<u>0</u>
BALANCE AS AT 30 JUNE 1995		\$11261.42
		<hr/>
Represented by		
Petty cash on hand		39.25
Credit Union cashable deposit		5115.17
Credit access account		<u>6107.00</u>
CLOSING BALANCE AS AT 30 JUNE 1995		\$11261.42
		<hr/>

Auditor's Report

In my opinion the above statement of income and expenditure for the year ended 30th June 1995 has been properly drawn up so as to have a true and fair view of the state of affairs of the society for the period ended 30th June 1995.

Signed: Peter J. Jorgensen, CPA
10/7/1995