

## ANNUAL REPORT 1978

### Membership

Membership in the various categories at the end of 1978 is shown below. The figures in parenthesis represent the corresponding figures for 1977

Honorary members :	3 (3)
Ordinary members :	
Institution	16 (14)
Individual	181 (201)
Junior members :	13 (30)

### Officials

The officials of the Society for 1978 were:

President :	Prof. Chew Kim Lin
Vice-Presidents :	Mr. Chan Kai Yau Prof. P. H. Diananda
Secretary :	Dr. Peng Tsu Ann
Editor :	Dr. Chong Chi Tat
Treasurer :	Dr. Leong Yu Kiang
Assistant Editors :	Dr. S. J. Wilson Dr. Cheng Kai Nah Mr. Ho Soo Thong
Committee Members :	Dr. Koh Khee Meng Dr. Shee Sze Chin Prof. M. J. Wicks Dr. Yap Hian Poh
Librarian :	Dr. Woo Kai Yuen

### Activities of the Society during the year

(I) Lectures. The following lectures were organized during the financial year 78 — 79:

	Date	Title	Speaker
(1)	16.3.78	What is a star?*	Prof. K.K. Sen Univ. of Singapore
(2)	6.6.78	Counting infinite sets.	Prof. L. Hay Univ. of Illinois Chicago Circle U.S.A.
(3)	27.7.78	Applications of control theory in management science	Prof. A. Bensoussan European Inst. for Advanced Studies in Management
(4)	23.11.78	A combinatorial problem involving electrical circuits	Dr. D. Rogers Univ. of Oxford and Univ. of Western Australia
(5)	21.12.78	Design and use of nonlinear optimization software	Prof. L. Lasdon Univ. of Texas U.S.A.
(6)	16.1.79	Fourier transforms of smooth functions	Dr. W. Bloom Murdoch Univ. Australia
(7)	22.2.79	Tolerance regions for the difference of two random variables	Dr. S. Rinco Univ. of New Brunswick, Canada and Univ. of Singapore

\* Presidential address.

(2) — (7) were organized in conjunction with the Department of Mathematics, University of Singapore.

(3) and (5) were also organized in conjunction with the Operational Research Society of Singapore.

(4) was hold jointly with the Department of Mathematics, Nanyang University.

(II) **Publications.** Two issues of the Mathematical Medley were published.

(III) **Inter-school Mathematical Competition.** The Society held its 1978 Inter-school Mathematical Competition on July 1, 1978 at Hwa Chong Junior College. A total of 148 students from 27 secondary schools and junior colleges took part in the Competition. Drs. Chong Chi Tat, Leong Yu Kiang and Peng Tsu Ann formed the Competition Subcommittee. The Competition problems were set by members of the main Committee. The results were as follows:

#### Team Results

Position	School	Team members
1	Anglo-Chinese Junior College	Chan Shih Ping Tan Beng Hee Lee How Sheng
2	Hwa-Chong Junior College	Tan Yong Nang Tan Chay Gek Ng Yat Chung
3	Temasek Junior College	Cheng Shoong Tat Lee Hian Kiat Tan Pong Heng

Anglo-Chinese Junior College was awarded the Singapore Mathematical Society Challenge Shield for sending in the winning team. Each member of the above three teams received a book prize.

#### Individual Results

Position	Competitor	School
1	Chan Shih Ping	Anglo-Chinese Junior College
2	Tan Pong Heng Tan Ser Peow Ng Yat Chung	Temasek Junior College Raffles Institution Hwa Chong Junior College
3	Koh Mui Chew Chia Soon Chew	Catholic Junior College Raffles Institution

Tan Pong Heng of Temasek Junior College and Tan Ser Peow of Raffles Institution had the best performance in Part 1 of the Competition. Yap Weng Yin of Catholic Junior College had the best performance in Part 2 of the Competition.

Chan Shih Ping received the Southeast Asian Mathematical Society Prize of US\$100.00. Tan Pong Heng, Tan Ser Peow and Ng Yat Chung each received S\$75.00. Koh Mui Chew and Chia Soon Chew each received S\$50.00. Each of the above competitors also received a book prize. Tan Pong Heng, Tan Ser Peow and Yap Weng Yin each received S\$25.00 for their results.

Mr. Chan Kai Yau, The Director of Education and Vice-President of the Society, gave away the prizes during the Prize-giving Ceremony held at Hwa Chong Junior College on Tuesday, August 9, 1978.

**(IV) Seminar on Group Theory and related topics**

The Seminar was held on 1-2 September, 1978, in New Lecture Theatre No. 2 at the University of Singapore — Nanyang University — Joint Campus. It was jointly organized by the Society together with the Department of Mathematics, University of Singapore and the Lee Kong Chian Institute of Mathematics and Computer Science, Nanyang University.

Professor B. H. Neumann of the Australian National University gave two one-hour lectures ("Some new rumours in Group Theory" and "On a problem of Ian D. MacDonald"). The following were other papers presented at the Seminar:

- (1) Prof. M.J. Wicks, University of Singapore:  
Whitehead's first theorem for free groups.
- (2) Dr. Leong Yu Kiang, University of Singapore:  
Finite 2-groups of class two with cyclic centre.
- (3) Prof. Teh Hoon Heng, Nanyang University:  
Groups and graphs.
- (4) Dr. Peng Tsu Ann, University of Singapore:  
Some results on metanilpotent groups.
- (5) Dr. Tan Sie Keng, Nanyang University:  
Group objects in a category with finite products.

About 35 people from Malaysia, Singapore, Australia and Taiwan attended the Seminar.

**(V) Eighth General Assembly of the International Mathematical Union.**

The General Assembly was held on August 10 and 11, 1978, in Helsinki, Finland. Dr. Chong Chi Tat, the Secretary of the Society attended the meeting as the delegate from Singapore.

**(VI) Talks to school.** The Society organized nine mathematical talks to pre-university students. The talks were given by lecturers from the two universities.

Speaker	Title	Place
Dr. C. T. Chong	Mathematicians of today	Hwa Chong Junior College 30/9/78
Prof. H. H. Teh	Great mathematicians and their contributions	Hwa Chong Junior College 2/10/78
Dr. C. T. Chong	What is mathematical research?	Anglo-Chinese Junior College 3/10/78
Prof. P. Y. Lee	Mathematical modeling	Temasek Junior College 4/10/78
Prof. P. Y. Lee	Summing series by diagrams	Anglo-Chinese Junior College 10/10/78
Dr. Y. K. Leong	Intuition and counter-intuition in mathematics	Temasek Junior College 11/10/78
Dr. K. M. Koh	Some stories about prime numbers	National Junior College 12/10/78
Dr. C. C. Chen	What is a graph?	Catholic Junior College 13/10/78
Dr. K. N. Cheng	Mathematical discoveries	Catholic Junior College 20/10/78

**Grants**

The Society received as financial support \$4000 from Lee Foundation through the Lee Kong Chian Institute of Mathematics and Computer Science.

**Library** The Library continued to receive publications from the mathematical societies of Australia and New Zealand.