Singapore Mathematical Society
Annual Report 1988

I Membership

Membership in the various categories at the end of 1988 is shown below. The figures in parentheses represent the corresponding figures for 1987:

Honorary :	6	(6)
Individual :	176	(163)
Institution :	30	(27)
Junior :	34	(32)
Reciprocal :	2	(2)

II Officials

The officials of the Society for 1988 were:

President :	Prof Louis Chen Hsiao Yun
Vice-Presidents :	Prof Chen Chuan Chong
	Prof Lam Lay Yong
	Prof Peng Tsu Ann
Hon. Secretary :	Prof Koh Khee Meng
Hon. Treasurer :	Dr Chew Tuan Seng
Editor :	Dr Tay Tiong Seng
Assist. Secretary :	Dr Leong Yu Kiang
Assist. Editors :	Dr B T McInnes
	Dr Tay Yong Chiang
Committee Members :	Ms Chan Bee Bee
	Dr Chow Yoong Ming
	Mr Leuar Boon Char
	Dr Tan Sie Keng

III Activities of the Society during the year 1988

1. Publications

Two issues of Mathematical Medley were published : Volume 16, Number 1 (June 1988) and Number 2 (December 1988).

The proceedings of the following conferences were published:

(i)   Analysis Conference Singapore 1986,

(ii) Singapore Group Theory Conference 1987,

(iii) International Conference on Numerical Mathematics, Singapore 1988.

Their respective publishers were North Holland, Walter de Gruyter and Birkhäuser.

2. Lectures

The following six lectures were organized during the year. The Presidential Address (item (a)) was delivered at the Society's 21st Annual General Meeting and Professor E Hewitt gave the lecture (item (e)) at the prize-giving ceremony of the Interschool Mathematical Competition. The lecture by Prof Smale (item (c)) was organized jointly with Singapore National Academy of Science and the Department of Mathematics of the National University of Singapore. The remaining three lectures were organized jointly with the Department of Mathematics of the National University of Singapore.

Date	Title	Speaker
(a) 9-3-88	The Right-angled Triangle	Prof Peng Tsu Ann National University of Singapore
(b) 30-3-88	Mathematical Induction	Prof J A Bather University of Sussex
(c) 28-5-88	Newton's Contribution and the Computer Revolution	Prof S Smale University of California
(d) 2-6-88	Classical Analysis and Teichmüller Spaces	Prof O Lehto University of Helsinki
(e) 30-8-88	The Riddle of the Primes	Prof E Hewitt University of Washington
(f) 7-11-88	Hermitian Metrics and Diophantine Equations	Prof C Soulé University of Paris VII

3. Conference

The International Conference on Numerical Mathematics, Singapore 1988, was held from 31 May to 4 June 1988 at the National University of Singapore. It was jointly organized by the Department of Mathematics of

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the National University of Singapore and the Society in conjunction with the Singapore National Academy of Science, and was sponsored by the Southeast Asian Mathematical Society (SEAMS).

The Conference was attended by 161 participants from 30 countries. The Ministry of Education sponsored 19 from junior colleges and various educational institutes in Singapore.

The opening lecture was delivered by a 1966 Fields medalist S Smale, who was invited to Singapore as a Third World Academy of Sciences Lecturer. The other invited speakers were U M Ascher, C T H Baker, I Babuska, C Brezinski, R Bulirsch, J C Butcher, M M Chawla, L Collatz, C Elliot (sponsored by the British Council), L Gatteschi, T N T Goodman, D Greenspan, G V Milovanovic, R D Grigorieff, P C Hansen, A Iserles, H Kawarada, R Kress, J P Lambert, S L Lee, R M M Mattheij, G H Meyer, J H Miller, M Mori, D W Niethammer, G M Phillips, L B Rall, R D Russell, P Shivakumar, I H Sloan, H J Stetter, K L Teo, V Thomee, E H Twizell, P J van der Houwen, R Wait, C K Yuen, A Zaretti together with two JSPS visitors H Okamoto and T Yamamoto. Altogether 8 one-hour and 36 half-hour lectures and 38 twenty-minute contributed papers were delivered at the Conference.

The topics covered included numerical solutions of ordinary and partial differential equations, mathematical modeling, discrete mathematics, optimization, extrapolation processes, complexity theory, numerical solution of polynomial and transcendental equations, linear algebra, finite element method, parallel processing, applied mathematics in engineering problems and fluid mechanics.

The proceedings of the Conference has been published by Birkhäuser Verlag in the ISNM series.

4. Talks at schools and junior colleges and workshop for teachers

Details will appear in item VI below.

IV Interschool Mathematical Competition 1988

The annual Interschool Mathematical Competition organized by the Society was held on 25 June 1988 at the Faculty of Science, National University of Singapore. A total of 300 students from 12 junior colleges and 41 secondary schools took part in the competition. The results were as follows :

Team Results

Position	School	Team Members
1	Hwa Chong Junior College	Ngan Ngiap Teng Ng Kien Ming Lim Jing Yee
2	National Junior College	Chan Ying Yin Cheong Kok Wui Loh Ngai Seng
3	Raffles Junior College	Ng Lup Keen Lee Mun Yew Yeoh Yong Yeow
4	Victoria Junior College	Low Teng Yong Tan Kee Sian Soo Sai Shyong

Individual Results

Position	Competitor	School
1	Cheong Kok Wui	National Junior College
1	Yeoh Yong Yeow	Raffles Junior College
3	Ngan Ngiap Teng	Hwa Chong Junior College
3	Ng Kien Ming	Hwa Chong Junior College
5	Lim Jing Yee	Hwa Chong Junior College

The Singapore Mathematical Society Challenge Shield was won by Hwa Chong Junior College. Cheong Kok Wui and Yeoh Yong Yeow were jointly awarded the Southeast Asian Mathematical Society Prize. Yan Weide of the Chinese High School, Yu Changkai of Dunman High School and Xie Zhiqun of Raffles Institution were awarded a prize each for being the best competitors from the secondary schools.

The prize-giving ceremony was held on 30 August 1988 at Lecture Theatre 21, Faculty of Science, National University of Singapore. Professor E Hewitt of the University of Washington gave away the prizes.

The Competition Subcommittee consisted of Dr Tay Tiong Seng (Chairman), Dr Fred Leung Pui Fai (Secretary), Dr Choi Kwok Pui, Dr Roger Poh Kheng Siong and Dr Tang Wai Shing.

A grant of $1800 was received from the Ministry of Education for the Competition.

V International Mathematical Olympiad (IMO) 1988

Singapore was invited to send a team to take part in the 29th IMO held in Canberra, Australia, during the period 9 - 21 July 1988. The Singapore team consisted of Prof Chen Chuan Chong (Leader), Dr Tay Yong Chiang (Deputy Leader) and the following six students : Chan Hock Peng, Cheong Kok Wui, Deng Shaokun, Lim Jing Yee, Ngan Ngiap Teng and Yeoh Yong Yeow. The team members Ngan Ngiap Teng and Yeoh Yong Yeow won a silver medal each, and Chan Hock Peng and Cheong Kok Wui won a bronze medal each. The Singapore team was ranked 18 among 49 teams participating in the competition.

The Singapore Mathematical Olympiad Training Committee (1988) consisted of Prof Chen Chuan Chong (Chairman), Mrs Chang Swee Tong (Secretary), Miss Chan Bee Bee, Mr. Ho Foo Him, Prof Koh Khee Meng, Dr Leong Yu Kiang, Mr Leuar Boon Char, Dr Fred Leung Pui Fai, Dr T R Nanda, Dr Tay Tiong Seng, Dr Tay Yong Chiang and Mr Yeo Kwee Poo.

VI School Teachers Subcommittee

Members of the subcommittee were : Mr Leuar Boon Char (Chairman), Miss Chung Yam Yoke (Treasurer), Miss Chan Bee Bee, Mr Ho Foo Him and Mrs Lim Wei Chuang.

During the year the following activities were organized :

1. Talks at schools and junior colleges

Speaker	Title	School/Junior College
Prof Louis H Y Chen	Empirical and Mathematical Induction	National Junior College
Prof Koh Khee Meng	The Fibonacci Sequence and the Golden Section	Dunman Secondary School
Dr Leong Yu Kiang	Evariste Galois (1811-1832)	Victoria Junior College & National Junior College

2. Workshop on Algebraic Structures

The one-day workshop held on 5 September 1988 was jointly organized with the Department of Mathematics of the National University of Singapore. The invited speakers were Dr Cheng Kai Nah, Dr Leong

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Yu Kiang, Prof Teh Hoon Heng and Prof M J Wicks. There were 126 participants most of whom were teachers from junior colleges.

VII Finance

This item is dealt with in the Treasurer's report. The Society wishes to record its thanks to the Honorary Auditor, Dr Chan Yiu Man, for scrutinizing the accounts.

VIII Acknowledgements

The Committee of the Society wishes to express its thanks to the Lee Kong Chian Centre for Mathematical Research for its continued financial support; to the Ministry of Education for its grant to the Interschool Mathematical Competition; to Southeast Asian Mathematical Society for the SEAMS prize for the Interschool Mathematical Competition; to Bukit Turf Club, UNESCO, Singapore National Academy of Science, Shell Eastern Petroleum (Pte) Ltd and World Scientific Publishing Company for their grants to the International Conference on Numerical Mathematics, Singapore 1988; and to the Department of Mathematics of the National University of Singapore for its unfailing support and cooperation.

Koh Khee Meng
Hon Secretary