

# SINGAPORE MATHEMATICAL SOCIETY

## ANNUAL REPORT 1984

### I. Membership

Membership in the various categories at the end of 1984 is shown below. The figures in parentheses represent the corresponding figures for 1983.

Honorary Members:	5 (4)
Ordinary Members:	
Institution:	18 (17)
Individual:	114 (124)
Junior:	5 (11)
Reciprocal:	2 (2)

### II. Officials

The Officials of the Society for 1984 were:

President:	Prof Louis Chen Hsiao Yun
Vice-Presidents:	Mr Chan Kai Yau Prof Lam Lay Yong Prof Malcolm Wicks
Secretary:	Dr Leong Yu Kiang
Treasurer:	Dr Lim Keng Suan
Editor:	Prof Chen Chuan Chong
Assistant Secretary:	Dr Chong Chi Tat
Assistant Editors:	Dr Koh Khee Meng Dr Shee Sze Chin
Committee Members:	Dr Jon Berrick Prof Chew Kim Lin Prof Peng Tsu Ann Prof Leonard Yap Yau Hock

Dr R. C. Gupta was the Honorary Auditor.

### III. Activities of the Society during the year 1984

#### 1. Publications

Two issues of Mathematical Medley were published: Volume 11, Number 2 (December 1983) and Volume 12, Number 1 (June 1984).

## 2. Lectures

The Presidential Address [(d)] was delivered on 22 March 1984 instead of, as is traditionally the case, at the Annual General Meeting. Prof. K. K. Sen gave a lecture [(i)] at the prize-giving ceremony of the Interschool Mathematical Competition (see § 3 below). Seven other lectures were jointly organised with the Department of Mathematics, National University of Singapore.

Date	Title	Speaker
(a) 13 January 1984	Can we beat lotteries? The Massachusetts experience.	Prof Herman Chernoff Massachusetts Institute of Technology, USA
(b) 23 February 1984	Solving algebraic equations in commutative rings.	Prof Hideyuki Matsumura Nagoya University, Japan
(c) 19 March 1984	How to factor a number.	Prof Richard K Guy University of Calgary, Canada
(d) 22 March 1984	Fuzzy mathematics.	Prof Chew Kim Lin National University of Singapore
(e) 27 March 1984	What is life?	Prof Richard K Guy University of Calgary, Canada
(f) 10 April 1984	Graphs, polymers, society-critical effects in some bonding models.	Prof Peter Whittle, FRS University of Cambridge, England
(g) 3 May 1984	Plant spirals and Fibonacci numbers: A mathematical goldmine.	Dr Irving Adler Vermont, USA
(h) 26 September 1984	Applied mathematics in the eighties.	Prof Harold Levine Stanford University, USA
(i) 22 October 1984	From proto-stars to black holes.	Prof K K Sen Calcutta, India

## 3. Interschool Mathematical Competition 1984

The Competition was held on 21 July 1984 at Hwa Chong Junior College. A total of 295 students from 9 junior colleges and 45 secondary schools took part in the competition.

The results of the Competition were as follows:

#### Team Results

Position	School	Team Members
1	Raffles Junior College	Hock Kai Meng Derrick Heng Mok Kwee Terence Sim Mong Cheng
2	Temasek Junior College	Lam Tao Kai Tan Kok Huan Ong Hock Ling
3	Hwa Chong Junior College	Chew Kia Khang Ng Boon Gay Ng Kok Onn

#### Individual Results

Position	Competitor	School
1	Lam Tao Kai	Temasek Junior College
2	Derrick Heng Mok Kwee	Raffles Junior College
3	Ng Kok Onn	Hwa Chong Junior College
4	Hock Kai Meng	Raffles Junior College
5	Teo Chung Piaw	National Junior College

Raffles Junior College was awarded the Singapore Mathematical Society Challenge Shield. Lam Tao Kai was awarded the Southeast Asian Mathematical Society Prize. Successful individual candidates (ranking 1 to 5) received cash prizes and book vouchers. Members of the successful teams (ranking 1 to 3) received book vouchers.

The prize-giving ceremony was held on 22 October 1984 at Lecture Theatre 20, Faculty of Science, National University of Singapore. Prof K. K. Sen, Honorary Member of the Society and Visiting Professor at the National University of Singapore, gave away the prizes and delivered a lecture (see 2(i)).

The Competition Subcommittee consisted of the following: Dr Shee Sze Chin (Chairman), Dr Quek Tong Seng (Secretary), Prof Chen Chuan Chong, Dr Koh Khee Meng and Dr Brett T. McInnes.

#### IV. Fourth SNAS Congress

The Singapore National Academy of Science (SNAS) held its Fourth Congress at the National University of Singapore from 28 to 30 May 1984 on the theme "Science for national development". As part of the Congress programme, the Society held a Mathematical Symposium on "The use of computers in mathematical research and education" on 28 May 1984.

Four one-hour lectures were given by the following invited speakers: Prof Teh Hoon Heng (NUS), Prof Peng Tsu Ann (NUS), Dr Kho Tek Hong (CDIS) and Mr Ho Soo Thong (CDIS). One short talk was given by Dr Peter Tung Chi Tung (NUS).

Thirty-seven participants registered for the Symposium. The talks were also attended by other Congress participants. Seven participants from and five guests of the Society attended the Congress Dinner in Pavilion Inter-Continental Singapore Hotel on 28 May 1984.

The Symposium Subcommittee comprised Prof Chew Kim Lin, Dr Leong Yu Kiang and Dr Quek Tong Seng.

#### V. Workshop on "Time Series and its Applications"

The Department of Mathematics, National University of Singapore, and the Society jointly organized a workshop on "Time series and its applications" at the National University of Singapore from 24 to 26 October 1984. The workshop was recognized by the Bernoulli Society as one of its regional meetings.

One-hour lectures were given by the following invited speakers: Prof Hirotugu Akaike (The Institute of Statistical Mathematics, Tokyo, Japan), Prof Roberto S. Mariano (University of Pennsylvania, USA), Prof M. B. Priestley (The University of Manchester Institute of Science and Technology, England), Prof George C. Tiao (University of Chicago, USA) and Prof Howell Tong (The Chinese University of Hong Kong, Hong Kong). Eight short talks of 20 minutes' duration were also given by other participants.

The Workshop was attended by 74 participants from Australia, Hong Kong, Indonesia, Japan, Malaysia, New Zealand, Singapore, Thailand, United Kingdom and United States.

A Workshop Buffet Dinner was held at Tanah Merah Country Club on 25 October 1984.

The Workshop received financial support from the Lee Kong Chian Centre for Mathematical Research, Southeast Asian Mathematical Society (SEAMS) and British Council. The fund from SEAMS was provided by Unesco and was used as travel grants for participants from member countries of SEAMS.

The Organizing Committee of the Workshop comprised the following: Prof Louis Chen Hsiao Yun (Chairman), Dr Lim Keng Suan (Secretary), Dr Chang Boon Chong (Treasurer), Dr Leong Yu Kiang, Dr Ling Kiong Doong, Dr Shee Sze Chin and Dr Yap Kim Yew.

#### VI. International Commission on Mathematical Instruction (ICMI)

Mr Lim Chee Lin of Curriculum Development Institute of Singapore attended, on behalf of the Society, the General Assembly of ICMI at the Fifth International Congress on Mathematical Education in Adelaide, Australia, which was held from 24 to 30 August 1984.

#### VII. Election of Prof Richard K. Guy as Honorary Member

Prof Richard K. Guy of the University of Calgary, Canada, was elected as an Honorary Member of the Society for his contributions to the Society as founder-member, secretary and editor during its formative years as the then Malayan Mathematical Society.

#### VIII. Finance

This item is dealt with in the Treasurer's "Statement of Income and Expenditure". The Society wishes to record its thanks to the Honorary Auditor, Dr R. C. Gupta, for scrutinizing the accounts.

#### IX. Future activities

##### 1. Topology Conference and Workshop.

The Department of Mathematics, National University of Singapore and the Society will be jointly organizing a topology workshop from 4 to 8 June 1985 and a topology conference from 10 to 15 June 1985. The workshop will offer introductory course on cohomology of groups and algebraic K-theory. The theme of the conference will be on applications of topology to algebra. The Organizing Committee comprises Prof Malcolm Wicks (Chairman), Dr Jon Berrick (Secretary), Dr Thomas Bier, Dr Fred Leung Pui Fai and Dr Ng Tze Beng.

##### 2. School Subcommittee

A School Subcommittee comprising school teachers has been proposed to coordinate activities for the schools in 1985. This should also help to meet the requirements of our members from the schools.

#### X. 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

Southeast Asian Mathematical Society for donating the SEAMS Prize for the Competition and for making available its Unesco fund for the travel of some of our workshop participants; to the British Council for the travel grant of an invited speaker; to Hwa Chong Junior College for the use of its school facilities for the Competition and to the Department of Mathematics, National University of Singapore, for its help and cooperation.

The Society would also like to thank all those who have participated in our activities and all those who have made suggestions on improving and expanding our activities.

Leong Yu Kiang  
Honorary Secretary