# Singapore Mathematical Society Annual Report 2004

#### **I Membership**

Membership in the various categories at the end of 2004 is shown below. The figures in parentheses represent the corresponding figures for 2003:

Honorary	:9	(9)
Life	:44	(43)
Ordinary	: 158	(155)
Institution	:63	(82)
Junior	:72	(74)
TOTAL	: 346	(363)

## **II Officials**

The officials of the Society for 2004 were: President : A/P Tan Eng Chye

Vice-Presidents :	Mr. Hang Kim Hoo
	A/P Lim-Teo Suat Khoh
	A/P Ling San
Hon Secretary :	Dr. Tang Wee Kee
Hon Treasurer :	A/P Zhang De-Qi
Editor :	Dr. Wong Yan Loi
Asst Secretary :	A/P Helmer Aslaksen
Asst Editors :	A/P Victor Tan
	Mr. Chia Yew Loon
Committee Members :	Mr. Ang Mia Lee
	Dr. Teo Kok Ming
	Mrs. Lim Kian Huat
	Mr. Tan Soon Yong

## **III Activities**

(a) Publications

Two issues (Volume 31, Numbers 1 & 2) of the Mathematical Medley were published.

(b) Lectures, Workshops and Conferences (see also (c) Distinguished Visitor Programme)

### (i) Lectures

- 1. "Mathematics, God, and Nintendo" by A/P Peter Pang on 28 February 2004.
- 2. "The romance of hidden components" by Professor David Donoho on 25 August 2004, jointly organized by the Institute for Mathematical Sciences, the Department of Mathematics and the Department of Statistics and Applied Probability, NUS and the Singapore Mathematical Society.

## (ii) Workshops

- 1. "Setting Olympiad-Type Mathematics Questions" by Mr. Hang Kim Hoo at The Chinese High School on 15 October 2004.
- 2. "Rabbits, Foxes and Mathematical Modelling" by A/P Peter Pang on 24 July 2004.

#### (iii) Camps

- 1. IMS Mathematics Camp led by William Abikoff (University of Connecticut, USA), Zindine Djadli (University of Cergy–'D0Pontoise, France), Andrea Malchiodi (Institute for Advanced Study, Italy) and
  - Frank Pacard (Universit'e Paris XII, France) on 8 June 2004 at IMS Auditorium,
  - jointly organized by the Institute for Mathematical Sciences, NUS and
  - the Singapore Mathematical Society.

## (c) Distinguished Visitor Programme

The Singapore Mathematical Society, in collaboration with the US National Committee for Mathematics, hosted Professor Jack Cowan from the University of Chicago as its 2004 Distinguished Visitor. Other collaborating organizations were the Association of Mathematics Educators, the Department of Mathematics and the Institute for Mathematical Sciences, National University of Singapore. During his visit in February 2004, Professor Cowan delivered a public lecture entitled "Some Mathematical Aspects of Large Scale Brain Activity". He also conducted a workshop for teachers and gave a more specialized lecture at the NUS Mathematics Department.

## (d) SMS Mathematical Competitions

This year, the Society decided to discontinue the Singapore Secondary School Mathematical Competition (Junior and Senior Sections). The Society conducted the Singapore Mathematical Olympiad (Junior, Senior and Open Sections) in June 2004. More than 7400 students from 124 secondary schools and junior colleges participated in various sections of the Olympiad. For the first time, schools from regional countries were invited to participate in the Olympiad. An overwhelming total of 642 students from 27 schools in Malaysia, India, Indonesia, Thailand and Vietnam sat for the Junior and Senior sections of the Olympiad. The Prize Presentation Ceremony was held on 4 September 2004 at The Chinese High School Auditorium. The Guest-of-Honour was Professor David Donoho from the Statistics Department at Stanford University. The results of the competitions are attached.

The Mathematical Competition Subcommittee 2004 consisted of

A/P Helmer Aslaksen (Chairman), Mr. Hang Kim Hoo (Deputy Chairman), A/P Victor Tan (Junior Section Coordinator), A/P To Wing Keung (Senior Section Coordinator), A/P Tay Tiong Seng (Open Section Coordinator), Ms Stella Pang (Operations Coordinator), Mr. Melvin Soh (IT Coordinator), A/P Yang Yue, Dr. Tan Ban Pin, A/P Chew Tuan Seng, Dr. Ng Kah Loon, Mr. Ng Wee Seng, Dr. Tay Eng Guan, Dr. Toh Tin Lam, Dr. Lee Tuo Yeong, Mr. Hang Kim Hoo (Clementi Town Sec), Mr. Chia Yew Loon (Nan Hua Sec), Mr. David Chia (Pioneer JC), Mr. Ho Fu Chew (Clementi Town Sec), Mrs. Grace Chua (Nanyang Girls' High), Dr. Teo Kok Ming, Dr. Tan Kai Meng, A/P Tang Wai Shing, Dr. Wong Yan Loi, A/P Chua Seng Kee, A/P Denny Leung and Dr. Roger Poh.

(e) International Mathematical Competition 45th International Mathematical Olympiad

The 45th International Mathematical Olympiad was held in Athens, Greece from 6 to 18 July 2004. A total of 486 contestants from 85 countries or regions participated in this IMO.

The Singapore National Team to the 45th International Mathematical Olympiad consisted of the following: Dr. Wong Yan Loi (National University of Singapore, Team Leader), Mr. Teo Teck Kian, Thomas (Victoria Junior College, Deputy Leader), Mr. TanWeiyu, Colin (Former Contestant, Observer), Anand B. Rajagopalan (Raffles Junior College), Chen Chongli, Daniel (Hwa Chong Junior College) Kueh Ju Lui, Andre (Raffles Junior College), Sia Jia Min, Charmaine (Raffles Junior College), Tay Jingyi, Kenneth (Anglo-Chinese Junior College), Tay Wei En, Joel (Raffles Junior College).

Kueh Ju Lui Andre, Tay Jingyi Kenneth and Tay Wei En Joel received Silver medals. Anand B. Rajagopalan, Chen Chongli Daniel and Sia Jia Min Charmaine received Bronze medals. Unofficially, the team ranked 18. A total of 45 gold, 78 silver and 120 bronze medals were awarded at the closing ceremony held at Athens Concert Hall.

The Singapore International Mathematical Olympiad Committee 2004 consists of

A/P Tay Tiong Seng (Chairman),
Dr. Wong Yan Loi (Deputy Chairman),
Ms. Tan Hwee Chiat June,
Ms. Lee Sharon,
Dr. Chua Seng Kee,
A/P Chua Seng Kiat,
A/P Lang Mong Long,
A/P Denny Leung,
A/P Leung Ka Hin and
Dr. Roger Poh.

#### (f) Singapore Mathematics Project Festival

The Singapore Mathematics Project Festival 2004 was held on 18 March 2004 at River Valley High School. Five teams each from the Junior and Senior Sections were invited to make presentations and be interviewed by a panel of judges.

The judges for the Festival were

Dr. Lee Tuo Yeong (NIE), Dr. Toh Tin Lam (NIE) and A/P Yap Sook Fwe (NIE) for the Senior Section; A/P Chew Tuan Seng (NUS), Mr. Lawrence Neo (Nanyang JC) and A/P Denny Leung (NUS) for the Junior Section.

The results of the Festival are attached.

## (g) Enrichment Programmes in Mathematics

From March to December 2004, the Society conducted the Primary Mathematics Olympiad Programme (PMOP) for 6 groups of students at NUS and at 5 primary schools (Unity, De La Salle, Yew Tee, Kranji and South View). Altogether 305 students from 30 primary schools took part. The Enrichment Programme for secondary school students remains active.

## **IV SMS Prizes in Mathematics**

The Singapore Mathematical Society Gold Medal and Book Prize 2004 at NUS was awarded to Chen Dihua, a student in Mathematics with First Class Honours and best overall performance in Mathematics in her undergraduate studies. The Singapore Mathematical Society Book Prize at NIE was awarded to Leo Chin Choon, the students with best overall scores in mathematics who graduated with a Bachelor of Science with Diploma in Education. The Singapore Mathematical Society Book Prize for Engineering Mathematics at Temasek Polytechnic was awarded to Ms. Liu Chang , the graduating Temasek Polytechnic Engineering School student with the best average score for Engineering Mathematics 1, 2 and 3.

## **V** Finance

This is dealt with in the Treasurer's report. The Society wishes to record its thanks to the Honorary Auditor, A/P Tang Wai Shing, for auditing the accounts.

## **VI Acknowledgements**

The Committee wishes to express its thanks to

the Lee Foundation, the Ministry of Education, and Singapore National Academy of Sciences for their financial support;

to the Southeast Asian Mathematical Society for donating the SEAMS prize for the Singapore Mathematical Olympiad;

to the 82 secondary schools that hosted the SMS Mathematical Competitions,

to River Valley High School for their assistance in the organization of the Singapore Mathematics Project Festival,

to the Chinese High School for their assistance in the organization of the Prize Presentation Ceremony; and to the Department of Mathematics and the Mathematics Society of the National University of Singapore, Mathematics and Mathematics Education Academic Group of the National Institute of Education, as well as members and friends for their support and cooperation.

Tang Wee Kee Honorary Secretary February 2005