

Singapore Mathematical Society Annual Report 2005



I Membership

Membership in the various categories at the end of 2005 is shown below. The figures in parentheses represent the corresponding figures for 2004:

Honorary	:	9	(9)
Life	:	44	(44)
Ordinary	:	164	(158)
Institution	:	64	(63)
Junior	:	73	(72)
TOTAL	:	354	(346)

II Officials

The officials of the Society for 2005 were:

President	:	Professor Tan Eng Chye
Vice-Presidents	:	Mr. Hang Kim Hoo Professor Zhu Chengbo Professor Ling San
Hon Secretary	:	Dr. Tang Wee Kee
Hon Treasurer	:	A/P Zhang De-Qi
Editor	:	A/P Leung Ka Hin
Asst Secretary	:	A/P Victor Tan
Asst Editors	:	A/P Helmer Aslaksen Dr. Toh Tin Lam
Committee Members	:	Mr. Ang Mia Lee Mr. Chia Yew Loon Mrs. Grace Chua Dr. Tay Eng Guan

III Activities

(a) Publications

Two issues (Volume 32, Numbers 1 & 2) of the *Mathematical Medley* were published.



(b) Lectures, Workshops and Conferences

(i) Lectures

1. "The mathematics of scientific computation" by Eitan Tadmor, University of Maryland, on 12 January 2005, organized by Institute for Mathematical Sciences, NUS, in conjunction with the Department of Mathematics, NUS, and Singapore Mathematical Society.
2. "What Makes a Good Mathematics Project?" by Goh Say Song, NUS, on 16 March 2005 at the Singapore Mathematics Project Festival held in River Valley High School.
3. "Logic and Computation" by Ted Slaman, University of California, Berkeley, on 1 Aug 2005, organized by Institute for Mathematical Sciences, NUS, in conjunction with the Department of Mathematics, NUS, and Singapore Mathematical Society.
4. "Analysis, Models and Simulations" by Pierre-Louis Lions, Collège de France and École Polytechnique, on 20 September 2005, jointly organized by Institute for Mathematical Sciences, NUS, Department of Mathematics, NUS, and Singapore Mathematical Society.

(ii) Workshops

1. "Teaching of Graph Theory for H3 Math" by Prof Koh Khee Meng, NUS, on 18 October 2005 at NUS.
2. "Proposing, Supervising and Assessing Student Research Projects in Mathematics" by Helmer Aslaksen, NUS, on 16 November at Raffles Girls' School (Secondary).

(c) Asian Mathematical Conference 2005

AMC2005 in Singapore was held on the campus of the National University of Singapore from 20 to 23 July. During the conference, 8 plenary lectures, over 60 invited talks and more than 100 contributed talks in as many as 16 areas of mathematical sciences were delivered. There were close to 400 participants from more than 20 countries at this conference.

A 2-day pre-conference workshop on four selected topics (Combinatorial Methods in Genomics, Numerical Methods in Finance, Coding Theory and Applications, Wavelets and Applications) was also organized on 18 and 19 July. About 80 participants attended the workshop.

Many participants, especially those from the poorer regional countries, attended the conference for the first time, because of generous support from the conference's sponsors. Participants from most ASEAN member countries were also granted registration fee waiver to encourage attendance. Notably, these measures helped to attract many graduate students who came together

with their lecturers. It not only was an eye-opener for them, but it also provided an excellent opportunity to establish contact with prominent figures in the academia.

(d) SMS Mathematical Competitions

The Society conducted the Singapore Mathematical Olympiad (Junior, Senior and Open Sections) in May/June 2005. More than 8000 students from 129 secondary schools and junior colleges participated in various sections of the Olympiad. In addition, schools from regional countries were invited to participate in the Olympiad. A total of 478 contestants from 15 schools in Malaysia, India, Indonesia, Thailand, Vietnam and Hong Kong sat for two of the competitions, SMO (Junior) and SMO (Senior).

The Prize Presentation Ceremony was held on September 3, at the Nanyang Girls' High School Auditorium. The Permanent Secretary for Education, LG(NS) Lim Chuan Poh, was the Guest-of-Honor for the event.

The Mathematical Competition Subcommittee 2005 consisted of A/P Helmer Aslaksen (Chairman), Mr. Hang Kim Hoo (Deputy Chairman), A/P Yang Yue (Junior Section Coordinator), A/P To Wing Keung (Senior Section Coordinator), A/P Tay Tiong Seng (Open Section Coordinator), Miss Chan Lai Chee (Operations Coordinator), Mr. Melvin Soh (IT Coordinator), A/P Chew Tuan Seng, A/P Leung Ka Hin, Dr. Roger Poh, Mr. Ng Wee Seng, Dr. Tan Ban Pin, Dr. Toh Tin Lam, Dr. Lee Tuo Yeong, Mr. Ho Foo Him, Mrs. Grace Chua, Mr. Chua Boon Liang, Mr. David Chia Meng Hwee, Mdm Teo Soh Wah, Mr. Thomas Teo Teck Kian, A/P Denny Leung, Dr. Wong Yan Loi, Dr. Teo Kok Ming, Dr. Tan Kai Meng, Dr. Tay Eng Guan, Dr. Dong Feng Ming, and Dr Ng Wee Leng.

(e) International Mathematical Competition

46th International Mathematical Olympiad

The 46th International Mathematical Olympiad was held in Mexico, Yucatan, Merida from 8th to 19th July 2005. A total of 513 competitors from 91 competing countries participated in this IMO, making this the largest IMO ever. The Singapore National Team to the 46th International Mathematical Olympiad consisted of the following: Dr Tay Tiong Seng (National University of Singapore, Team Leader), Mr Koh Yi-Huak (Hwa Chong Junior College, Deputy Leader), Mr Lin Zhiwei, Calvin (Former Contestant, Observer), Mr Tan Kiat Chuan (Former Contestant, Observer), Mr Poh Wei Quan, Julius (Former Contestant, Observer), Chen Chongli, Daniel (Hwa Chong Junior College), Sia Jia Min, Charmaine (Raffles Junior College), Soh Yong Sheng (Raffles Junior College), Tay Jingyi, Kenneth (Anglo-Chinese Junior College), Wu Jiawei (Raffles Junior College), Zhao Yan (Raffles Junior College).

Daniel Chen Chongli, Soh Yongsheng, Kenneth Tay Jingyi and Zhao Yan received silver



medals, while Charmaine Sia Jia Min and Wu Jiawei received bronze medals, making this the 2nd year in which all 6 of our members received medals. Unofficially, the team was ranked 14th with a total of 145 points, making this our best result at the IMO so far. A total of 42 Gold, 79 Silver and 128 Bronze medals were given out at the closing ceremony.

The Singapore International Mathematical Olympiad Committee 2005 consisted of A/P Tay Tiong Seng (Chairman), Dr. Wong Yan Loi (Deputy Chairman), Mr. David Chan, Mr. Poon Fook Weng, Prof. Koh Khee Meng, Prof. Tay Yong Chiang, Dr. Chin Chee Whye, Dr. Chua Seng Kiat, A/P Chua Seng Kee, A/P Lang Mong Long, A/P Denny Leung, A/P Leung Ka Hin, Dr. Roger Poh, Mr. Koh Yi Huak, Mr. Lim Bock Boon.

(f) Singapore Mathematics Project Festival

The Singapore Mathematics Project Festival 2005 was held on 16 March 2005 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. A special talk for teachers and students entitled "What Makes a Good Mathematics Project?" by Assoc. Prof. Goh Say Song was given preceding the project presentations. After the project presentation, the teams were interviewed by the judges to probe further into their understanding of the project material. The judges for the Festival were Dr. Teo Kok Ming (NIE), Dr. Toh Tin Lam (NIE) and A/P Zhao Dongsheng (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 2005, the Society conducted the Primary Mathematics Olympiad Programme (PMOP) for 12 groups of students at NUS and at four primary schools (De La Salle, Jurong West, Unity and Xinmin). Altogether 489 students from 45 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 2005 at NUS was awarded to Lim Kay Jin, a student in Mathematics with First Class Honours and best overall performance in Mathematics in his undergraduate studies. The Singapore Mathematical Society Book Prize at NIE was awarded to Toh Kai Wee, the students with best overall scores in mathematics who graduated with a Bachelor of Science (Education). The Singapore Mathematical Society Book

Prize for Engineering Mathematics at Temasek Polytechnic was awarded to Yuan Ran Dong, 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 Yang Yue, for auditing the accounts.

VI Acknowledgements

The Committee wishes to express its thanks to 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 River Valley High School for their assistance in the organization of the Singapore Mathematics Project Festival, to the Nanyang Girls' 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 2006