

Singapore Mathematical Society Annual Report 2019

1. Membership

Membership in the various categories at the end of 2019 is shown below.

Membership	2019 figures	2018 figures
Honorary	9	9
Life	98	98
Ordinary	32	40
Institution	57	59
Junior	16	21
TOTAL	212	227

2. Officials

The officials of the Society for 2019 were:

President :	A/P Victor Tan	Asst. Treasurer:	Dr Soon Wan Mei
Vice-Presidents :	A/P Chan Song Heng Prof Gan Wee Teck Dr Hang Kim Hoo	Asst Editors :	Dr Gwee Hwee Ngee A/P Yap Von Bing
Hon Secretary :	Dr Tang Wee Kee	Committee Members :	Dr Chen Weiqiang Dr Toh Pee Choon Dr Wong Wei Pin
Hon Treasurer :	Mr Wang Haibin		
Editor :	A/P Toh Tin Lam		
Asst Secretary :	Dr Wang Fei		

3. Activities

a. Publications

The Society published two issues (Volume 45, Numbers 1, 2) of the Mathematical Medley, and the SMO 2019 solution book (edited by Dr Ku Cheng Yeaw, A/P Tay Tiong Seng, Dr Toh Pee Choon and A/P Toh Tin Lam).

b. Distinguished Visitor Programme

The Distinguished Visitor for 2019 was Michael Röckner from Bielefeld University. During his visit, Professor Röckner conducted a Public Lecture entitled *Finding Order in Disorder: Mathematics is Everywhere* on 30th of August, and two colloquia talks at NUS and NTU on 28th and 29th respectively. Professor Röckner was also the Guest-of-Honor of the Society's Annual Prize Presentation which was held on 31st August 2019.

c. Lectures

SMS Lecture Series "Turning Uncertainty into Certainty" by Professor Nicolas Privault (NTU) was held on March 12 2019 at LT33, NUS.

d. Workshops

An SMS workshop for teachers "Student Preparation for Mathematical Olympiads" by Dr Hang Kim Hoo and Mr. Wang Haibin was held on 1 October 2019 at NUS Centre for Quantum Technology Seminar Room. The workshop was well-attended by more than 30 teachers and had received positive feedbacks from the participants. The Society will continue conduct such workshops to engage teachers' interest in mathematical problem solving approaches.

e. Singapore Mathematical Olympiad

- The Society conducted the Singapore Mathematical Olympiad (Junior, Senior and Open Sections) in June 2019. A total of 7572 students from 110 secondary schools and junior colleges participated in the various sections of the Olympiad.
- For Junior Section, there were 3375 participants from 85 schools. For Senior Section, there were 2354 participants from 85 schools. For Open Section, there were 1843 participants from 71 schools. In addition, there were 291 participants from China, Malaysia, Indonesia and Vietnam.
- The SMO Subcommittee 2019 consists of
 - Ku Cheng Yeaw (Chairman)
 - Hang Kim Hoo (Deputy Chairman/Administration)
 - Toh Pee Choon (Junior Section Coordinator)
 - Ku Cheng Yeaw (Senior Section Coordinator)
 - Toh Tin Lam (Open Section Coordinator)
 - Tay Tiong Seng (Second Round Coordinator)
- The following were contributors of competition problems:
Tay Tiong Seng, Wong Yan Loi, Toh Tin Lam, Dong Fengming, Ku Cheng Yeaw, Ngan Ngiap Teng, Toh Pee Choon, Ho Foo Him, Wang Fei

f. International Mathematical Olympiad

- The 60th International Mathematical Olympiad (IMO) was held in Bath, United Kingdom from 11 to 22 July 2019. A total of 676 contestants from 112 countries or regions participated in this IMO.
- The Singapore National Team to the 60th International Mathematical Olympiad consisted of the following members:

Team Leader: Pang Chin How, Jeffrey (National University of Singapore)

Deputy Team Leader: Chen Zhenhui (Hwa Chong Institution)

Contestants: Ng Yu Peng (Hwa Chong Institution)
Boo Tse Yang, Lucas (Raffles Institution)
Tan Wee Kean (Raffles Institution)
Toh Hui Kai (Raffles Institution)
Ng Yangyi (Raffles Institution)
Tan Xu Chen (Raffles Institution)

Observers: Tay Tiong Seng (Observer A sponsored by MOE)
Teo Teck Kian, Thomas (Raffles Institution)
Tan Kieren, Sheldon (Observer B sponsored by MOE)
Lim Wei An, Glen (Observer B sponsored by SMS)
Liu Yi Jia (Observer B sponsored by SMS)

- Ng Yu Peng and Boo Tse Yang, Lucas received gold medals. Tan Wee Kean, Toh Hui Kai, Ng Yangyi, and Tan Xu Chen received silver medals.
- The team attained a total score of 174.
- The Singapore team was ranked 8th among 112 countries.
- The Singapore International Mathematical Olympiad Committee 2019 consists of the following members and trainers:
Wong Yan Loi (Chairman), Tay Tiong Seng, Barry Chia (MOE), Chua Seng Kee, Chua Seng Kiat, Denny Leung, Tay Yong Chiang, Jeffrey Pang Chin How, Wang Fei, Lu Shang-Yi, Thomas Teo Teck Kian, Wang Haibin, Zong Lixing, Ai Xinghuan, Wu Jiawei, Vladimir Barzov, David Lin Kewei.

g. China Western Mathematics Invitational

- The China Western Mathematics Invitational 2019 was held in Zunyi, Guizhou Province, China, from 12 to 16 August 2019.
- The Singapore National Team consisted of:
Team Leaders: Mr Lu Shangyi and Ms Megan Chia
Contestants: Hu Xinghui (Raffles Girls' School)
Chen Leiyu (Raffles Institution)
Wang Yuxuan (Raffles Institution)
Ang Boon Han, Nathaniel (Anglo-Chinese School(I))
Jamie Lim (NUS High)
Shevonne Chia (NUS High)
Lai Pengchong (Raffles Institution)
Wang Yunrui (Raffles Institution)
- Results:
Gold – Hu Xinghui, Wang Yuxuan, Ang Boon Han Nathaniel
Silver – Chen Leiyu, Jamie Lim, Shevonne Chia, Lai Pengchong, Wang Yunrui

h. China Mathematical Olympiad

- The 35th China Mathematical Olympiad was held in Wuhan, Hubei Province, China from 24 to 30 November 2019. 6 students were selected to represent Singapore and accompanied by 3 teachers as team leaders.
- The Singapore National Team consisted of:
Team Leaders: Mr Lu Shangyi (Raffles Institution) and Ms Tan Yen Fen (MOE CPDD)
Contestants: Ng Yangyi, Aloysius (Raffles Institution)
Toh Hui Kai, David (Raffles Institution)
Tan Wee Kean (Raffles Institution)
Benson Lin (Hwa Chong Institution)
Timothy Ho (NUS High)
Chen Xinyi (Raffles Institution)
- Results:
Gold – Ng Yangyi, Aloysius
Silver – Toh Hui Kai David, Tan Wee Kean, Benson Lin, Timothy Ho
Bronze - Chen Xinyi

i. Singapore Mathematics Symposium

- The 10th Singapore Mathematics Symposium was held on 27th September 2019 at the School of Physical and Mathematical Sciences, NTU
- The symposium featured 3 speakers – Vincent Tan (NUS ECE & NUS Math), Wu Guohua (NTU SPMS) and Lim Nengli (SUTD ESD)
- There was also a poster competition opened to graduate students. Nixie Sapphira Lesmana and Ye Zi from NTU School of Physical and Mathematical Sciences were selected by the panel of judges to be the winners of the poster competition.
- The organizing committee for the Tenth Singapore Mathematics Symposium were Nicolas Privault (Chair) (NTU SPMS), Gan Wee Teck (NUS Math) and Ng Keng Meng (NTU SPMS).

j. Singapore Mathematical Project Festival

- The Singapore Mathematics Project Festival 2019 attracted a total of 39 projects. Judging panels, made up of mathematicians and school teachers, were formed to grade the presentation of each team. The grades were used as a reference for short-listing the projects for the final round. Consequently, 6 teams from the Junior Section and 5 teams from the Senior Section were invited to the Festival Congress held at NUS on 30 March 2019.
- The judges for the Festival were Ku Cheng Yeaw (NTU), Cheong Kang Hao (SUTD), Wang Fei (NUS), Teo Kok Ming, Zhao Dongsheng, Toh Pee Choon (NIE)

k. SMS Essay Competition 2019

- The Society organized the 9th SMS essay competition with the theme “Mathematics and Economics”. The competition aimed to introduce the students to the different branches of economics, such as microeconomics, macroeconomics, game theory and finance, and to let the students understand how mathematics is applied in them. The competition was officially launched on 12 March 2019 during a lecture of the SMS Lecture Series titled “Turning Uncertainty into Certainty” by Professor Nicolas Privault from NTU.
- The Society received a total of 65 entries from 17 schools with 28 entries for Category A (secondary 1 & 2 or equivalent), 21 for Category B (Secondary 3 & 4 or equivalent), and 16 for Category C (JC or equivalent).
- The judges for the competition were:
Category A: Ai Xinghuan (MOE), Christian Ong Go (NUS).
Category B: Gong Zheng (NUS)
Category C: Ho Weng Kin (NIE), Douglas Streeter Rolph (SUTD)

l. Mathematics Teachers Conference 2019

- About 650 participants, mostly local mathematics teachers, attended the Mathematics Teachers Conference 2019 which took place on 7 June 2019 at Nanyang Technological University/National Institute of Education (NIE).
- The event was co-organized by the Mathematics & Mathematics Education Academic Group of NIE and the Association of Mathematics Educators, and supported by SMS. Several SMS members were invited to deliver lectures and workshops for the teachers.

m. Annual Prize Presentation Ceremony

- The Prize Presentation Ceremony was held on 31 August 2019, at University Town @ Stephen Riady Centre. The Guest of Honour was Michael Röckner (Bielefeld University), Singapore Mathematical Society Distinguished Visitor 2019.
- The following prizes were given out at the ceremony:
- The following prizes were given out at the ceremony:
 - 6 prizes for the Singapore Mathematics Project Festival (Junior Section)
 - 5 prizes for the Singapore Mathematics Project Festival (Senior Section)
 - 9 prizes for the SMS Essay Competition (3 each in categories A, B and C)
 - 30 individual prizes for the Singapore Mathematical Olympiad (Junior section)
 - 30 individual prizes for the Singapore Mathematical Olympiad (Senior section)
 - 30 individual prizes for the Singapore Mathematical Olympiad (Open section)
 - 42 School Awards for the Singapore Mathematical Olympiad (Category 1)
 - 26 School Awards for the Singapore Mathematical Olympiad (Category 2)
 - Awards to the Singapore Team to the 60th International Mathematical Olympiad

n. **SEAMS**

- SMS's President attended the SEAMS Council Meeting at Yogyakarta on 29 July 2019.

o. **Enrichment Programmes in Mathematics**

- **Primary Mathematics Olympiad Programme (PMOP)**
SMS conducted the programme in June and November at NUS respectively. Altogether 249 students attended the programme.
- **Secondary Enrichment Programme**
SMS conducted 6 sessions for MOE gifted programme, and 14 sessions for 6 schools: Catholic High School, Temasek Junior College, CHIJ Saint Nicholas Girls' School, Paya Lebar Methodist Girls' School, Unity Secondary School, River Valley High School.

4. **SMS Prizes in Mathematics**

- The **Singapore Mathematical Society Challenge Trophy** for Junior Section (Team) of the Singapore Mathematical Olympiad 2019 was won by NUS High School of Mathematics and Science.
- The **Singapore Mathematical Society Challenge Trophy** for Senior Section (Team) of the Singapore Mathematical Olympiad 2019 was won by Raffles Institution.
- The **Singapore Mathematical Society Challenge Trophy** for Open Section (Team) of the Singapore Mathematical Olympiad 2019 was won by Raffles Institution.
- The **Singapore Mathematical Society Prize** for Open Section (Individual) of the Singapore Mathematical Olympiad 2019 was awarded to Boo Tze Yang Lucas of Raffles Institution.
- The **Singapore Mathematical Society Gold Medal and Book Prize** 2019 at NUS was awarded to Ang Yan Sheng, a student in Mathematics with First Class Honours and best overall performance in Mathematics.
- The **Singapore Mathematical Society Gold Medal and Book Prize** 2019 at NTU was awarded to Xiao Fengtong, a student in the School of Physical and Mathematical Sciences with First Class Honours and best overall performance in Mathematical Sciences.
- The **Singapore Mathematical Society Medal in Mathematical Sciences** 2019 at NTU is awarded to Peng Mengjiao, a graduate student with the best PhD thesis in Mathematical Sciences in NTU.
- The **Singapore Mathematical Society Book Prize for Engineering Mathematics** 2019 at Temasek Polytechnic was awarded to Guo Lingjun, the best Mathematics student from Engineering School.

5. **Finance**

This is dealt with in the Treasurer's report. The Society wishes to record its thanks to the Honorary Auditor, Chew Tuan Seng, for auditing the accounts.

6. **Acknowledgements**

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Tang Wee Kee
Honorary Secretary

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