Singapose Mathematics Profeet Festival 2002

a report by

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The Singapore Mathematics Project Festival 2002 attracted forty-one teams of participants from twenty-one secondary schools. Five teams from each of the Junior and Senior Sections were invited to participate at the Festival Congress held at River Valley High School on 13 March 2002. Over a hundred teachers and students from various secondary schools attended the Festival Congress to watch the invited teams made presentations on their projects. Afterwards, the teams were interviewed by the judges to probe further into their understanding of the project material. The judges for the Festival were Assoc Prof Helmer Aslaksen (NUS), Assoc Prof Chua Seng Kee (NUS) and Dr Tay Eng Guan (NIE) for the Senior Section; Dr Cheng Kai Nah (NUS), Miss Tan Ke-Xin (Temasek JC) and Dr Teo Kok Ming (NIE) and for the Junior Section. Some of the projects submitted to the Festival are available at the website:

http://www.math.nus.edu.sg/~smsweb/students/festival2002results.html .

The Society expresses its sincere gratitude to River Valley High School for allowing the use of its facilities to host the Festival Congress, the members of the teacher subcommittee at River Valley High School who did a wonderful job of organizing the Congress, the judges for their time and effort, and to all participating teams, supervising teachers and their schools for the support they have shown to the Festival.

• Iunior Section •

| Project | Team | School | Supervisor | Award |
|---|--|--------------------------------------|-------------------------------|---|
| The Mouldy Chocolate Bar | Ch'ng Hui Yen Melissa Sia Jia Min Charmaine | Raffles Girls' School (Secondary) | Mrs Sia Wai Leng | Foo Kean Pew Memorial Prize |
| | | Raffles Girls' School (Secondary) | | Singapore Mathematical Society Shield |
| Mathemagic | Mohammad Hidayat, Fong Wen Yi Jocelyn, Mohammad Ismail, Mohammad Nazzarudin | Bowen Secondary School | Mrs Padma Ramachandran | Silver Prize |
| Probabilities of Poker | Emmett Wong Tsz Yeung, Ho Jun Wei, Lin Min, Chen Weijun | The Chinese High School | Mrs Chung-Lim Hwee Kheng | Silver Prize |
| Networking with Graph Theory | Yap Pei Yi Phyllis, Wang Xiaohui, Qiu Liming, Tan Miao Ying Sheena | Nanyang Girls' High School | Ms Ng Soo Ling | Silver Prize |
| The Mouldy Chocolate Bar | Ch'ng Hui Yen Melissa, Sia Jia Min Charmaine | Raffles Girls' School (Secondary) | Mrs Sia Wai Leng | Silver Prize |
| Is It Worth Working? | Loh Ying Bei, Tan Sin Sin, Lim Min Hwee, Wong Qian Ling | River Valley High School | Mr Ang Mia Lee | Silver Prize |
| Maximising the Area of Four- sided Polygons | Chua Zheng Ning, Tan Thong Ler, Muhammad Asyrul Bin Zainal | Clementi Town Secondary School | Mrs Ho Fu Chew | Bronze Prize |
| VOCEFFE | Chia Ying Cong, Ho Zhen Qin, Lim Xiu Hui, Ong Yu Fang | Nan Chiau High School | Ho Yong Song, Tan Yih Tyan | Bronze Prize |
| Fast Food Restaurants | Huang Meili, Zhang Chenyin, Li Huiling, Doo Sutiean | Nan Hua Secondary School | Mr Chia Yew Loon | Bronze Prize |
| Can the Tables and Chairs in a Classroom be Arranged in a Better and More Interesting Way? | Gan Teck Wang, Lim Yun Xiao, Nang Suwai, Chua Jingyi | River Valley High School | Ms Audrea Cheang | Bronze Prize |
| Is It Worth Working? | Loh Ying Bei, Tan Sin Sin, Lim Min Hwee, Wong Qian Ling | River Valley High School | Mr Ang Mia Lee | Special Prize in Applicability & Relevance |

• Senior Section •

| Project | Team | School | Supervisor | Award |
|--|---|--------------------------------------|-------------------|---|
| Use of Mathematics in Cryptography | Ang Wee Howe, Tan Yanxi, Wong Jing Song | River Valley High School | Mr Ang Mia Lee | Foo Kean Pew Memorial Prize |
| | | River Valley High School | | Singapore Mathematical Society Shield |
| Fault-free Tiling | Lee Hui Ling, Joanne Lai Jia Hui, Chee Rong Can | Commonwealth Secondary School | Mr Jeoffrey Wong | Silver Prize |
| Use of Mathematics in Cryptography | Ang Wee Howe, Tan Yanxi, Wong Jing Song | River Valley High School | Mr Ang Mia Lee | Silver Prize |
| The Divine Proportion | Loi Pooi Ling, Chua Sze Ling, Fan Shufen, Ho Shu Chun Isabel | Commonwealth Secondary School | Chua I-Lin | Bronze Prize |
| The Travelling Salesman Problem | Hu Yilan, Lee Min Wai Serene, Dinh Thi Theu | Raffles Girls' School (Secondary) | Mrs Vasantha Bala | Bronze Prize |
| Use of Mathematics in Cryptography | Ang Wee Howe, Tan Yanxi, Wong Jing Song | River Valley High School | Mr Ang Mia Lee | Special Prize in Applicability & Relevance |
| Fault-free Tiling | Lee Hui Ling, Joanne Lai Jia Hui, Chee Rong Can | Commonwealth Secondary School | Mr Jeoffrey Wong | Special Prize in Overall Presentation |