SINGAPORE NATIONAL ACADEMY OF SCIENCE

45thAnnual Report of the Academy 2020/2021

CONTENTS

- 1 Officials
- 2 Membership
- 3 Activities
- 4 Young Scientist Awards
- 5 Publications & Research
- 6. Proceedings of the Singapore National Academy of Science
- 7. SNAS Awards
- 8. Relations with international bodies
- 9. SNAS ASEAN Fellowship Programme
- 10. SG Academies South-East Asia Fellowship Programme
- 11. Acknowledgements

Official Address

c/o Science Centre Singapore 15 Science Centre Road Singapore 609081

Tel : 6425 2500 Fax : 6565 9533

1 **OFFICIALS**

1.1 Council

The following members were the representatives of the constituent societies of the Academy during the year under review:

President : A/Prof Lim Tit Meng SIBiol, SAAS

Vice President : Prof Ling San SMS

Imm. Past President: Prof Andrew Wee IPS

Hon. Secretary : Dr Leong Lai Peng SNIC

Hon. Treasurer : Dr Edmund Lui SSBMB

Members : Prof Tan Choon Hong SNIC

A/P Zhao Yu **SNIC** Mr Jay Mahardale **STAS** Mr Ng Kok Wing **STAS** Dr Jani Tanzil **SIBiol** Dr Toh Tai Chong **SIBiol** Prof Christian Kurtsiefer **IPS** Prof Dario Poletti **IPS** Dr Anne Dhanarai **SAAS** Dr R Subramaniam SAAS Mr Ng Kwan Kee SIS Mr Alfred Koh SIS A/P Victor Tan **SMS** Dr Tang Wee Kee **SMS** A/P Justin Chu **SSMB** Dr Dave Ow **SSMB** A/P Yew Wen Shan **SSBMB** Dr Yap Lai Lai **SSBMB** Prof B Tim White MRS-S

MRS-S

CCS

CCS

1.2 **Fellows**

Prof Bertil Andersson (Nanyang Technological University)

Prof Ariff Bongso (National University of Singapore)

Prof Hardy Chan Sze On (National University of Singapore)

Emeritus Professor Louis Chen Hsiao Yun (National University of Singapore)

A/P S. M. Piramanayagam

Prof Pierce Chow

A/P Mahesh Choolani

Prof Chong Chi Tat (National University of Singapore)

Prof Chou Loke Ming (National University of Singapore)

Prof Ding Jeak Ling (National University of Singapore)

Prof Artur Ekert (National University of Singapore)

Prof Gan Wee Teck (National University of Singapore)

Prof Andy Hor Tzi Sum (National University of Singapore)

Prof Birgit Lane (National University of Singapore)

Prof Sir David Lane (National University of Singapore)

Prof Lee Hian Kee (National University of Singapore)

(Retired) Professor Gloria Lim (Nanyang Technological University)

Prof Lim Hock (National University of Singapore)

A/Prof Lim Tit Meng (Science Centre Singapore /National University of Singapore)

Prof Ling San (Nanyang Technological University)

Prof Loh Teck Peng (Nanyang Technological University)

Prof Lui Pao Chuen (Nanyang Technological University & National University of Singapore)

Prof Ooi Beng Chin (National University of Singapore)

Prof Phua Kok Khoo (Nanyang Technological University and National University of Singapore)

Prof Shen Zuowei (National University of Singapore)

(Retired) Professor Sim Keng Yeow (National University of Singapore)

Prof Sun Yeneng (National University of Singapore)

Prof James Tam (Nanyang Technological University)

Prof Tan Chorh Chuan (National University of Singapore)

Prof Tan Eng Chye (National University of Singapore)

Prof Bernard Tan Tiong Gie (National University of Singapore)

Prof Leo Tan Wee Hin (National University of Singapore)

Prof Andrew Wee Thye Shen (National University of Singapore)

Prof Wong Tien Yin (Singapore National Eye Centre / National University of Singapore)

Prof Xu Guo Qin (National University of Singapore)

Prof Jackie Ying (Institute of Bioengineering and Nanotechnology, A*STAR)

Prof Zhu Chengbo (National University of Singapore)

Prof Antonio Castro Neto (National University of Singapore)

Prof Barry Halliwell (Biomedical Research Council, A*STAR)

Prof Lim Chwee Teck (National University of Singapore)

Prof Liu Bin (National University of Singapore)

Prof Ng Huck Hui (Biomedical Research Council, A*STAR)

Prof Sow Chorng Haur (National University of Singapore)

Prof Tan Choon Hong (Nanyang Technological University)

Prof Yu Hao (National University of Singapore)

1.3 **Honorary Fellows**

Prof Anthony Cheetham (Fellow of Royal Society / University of Cambridge)

Prof Chua Nam Hai (The Rockfeller University)

Professor Tung Yau Shing (Harvard University)

2 **Membership**

The following constituent societies are members of the Academy:

Institute of Physics Singapore	(IPS)
Singapore Institute of Biology	(SIBiol)
Science Teachers' Association of Singapore	(STAS)
Singapore Association for the Advancement of Science	(SAAS)
Singapore Institute of Statistics	(SIS)

Singapore Mathematical Society	(SMS)
Singapore National Institute of Chemistry	(SNIC)
Singapore Society for Biochemistry & Molecular Biology	(SSBMB)
Singapore Society for Microbiology & Biotechnology	(SSMB)
Materials Research Society-Singapore	(MRS-S)
College of Clinician-Scientists, Academy of Medicine	(CCS)

3 Activities

3.1 The various constituent societies of the Academy continued to be very active throughout the year. A summary of the various activities of the constituent societies follows.

3.2 Singapore National Institute of Chemistry

- 3.2.1 The IUPAC Global Women's Breakfast (GWB2021) was organised and held online by the SNIC Women Chapter on 9 Feb 2021, together with NTU and NUS. It aims to promote diversity in chemistry and its professions to students via an interactive event. A total of 6 speakers and about 40 participants attended this event.
- 3.2.2 The Singapore Junior Chemistry Olympiad (SjChO-11) was held on 30 June 2021 (Round 1). The second date (Round 2) has yet to be decided.
- 3.2.3 The Chemical National Meeting 4 is to be held virtually on 15 September 2021.
- 3.2.4 The SICC-11 has been postponed to 2022.
- 3.2.5 The Golden Jubilee School Project aims to make donations to secondary and high schools to enable them to recognize and encourage students who excel in Chemistry. A total of 12 schools have agreed to join this project and the tenure of all the prizes is for 50 years.

3.3 Singapore Association for the Advancement of Science

- 3.3.1 The Young Scientist Badge scheme, organised by the Association, the Science Teachers' Association of Singapore, the Science Centre Singapore and the Singapore National Academy of Science, continued to attract participants. A total of 3, 079 badges were awarded to students from more than 40 schools in 2020. A total of 1, 079, 907 badges have so far been awarded since the inception of the Scheme in 1982.
- 3.3.2 The Questa Club scheme aims to stimulate interest in science among secondary students and to encourage them to work independently in the areas of science and mathematics. In 2020, a total of 1,171 badges (752 Silver and 419 Gold) was awarded to students from secondary schools. Since the inception of the Scheme in 1988, a total of 118,213 badges have been awarded.
- 3.3.3 For the SAAS Award for best NIE Trainee Teacher 2019/20, two awards were given to the best trainee teachers in sciences and mathematics (Primary and Secondary categories) graduating from the National Institute of Education in 2020. Each received a cash prize of \$500.

- 3.3.4 The Association was invited by the Ministry of Education to sponsor special awards at the Singapore Science and Engineering Fair (SSEF) 2020, held from 11-12 March. Twenty awards were selected from 320 posters for Science Communication. SSEF is an annual competition organised by the Ministry of Education, A*STAR and Science Centre Singapore, for students aged 15 to 20 years old. SSEF is an affiliate fair of the Regeneron International Science and Engineering Fair (ISEF), which is considered the Olympics equivalent of Science fairs internationally.
- 3.3.5 The Association supported a brand new event called UNTAME. This inaugural event is the first STEM+ Festival organised in Singapore to create awareness of the possibilities of STEM applications to both students and the public and was organised by Science Centre Singapore. The Festival featured 22 vodcast partners with 50,000 vodcast views and 9,780 participants with almost 3,000 STEM kits being taken up by schools and families.
- 3.3.6 The SAAS AGM was held on 26 March 2021.

3.4 Science Teachers Association of Singapore

- 3.4.1 While 115 teams from over 60 primary and secondary schools signed up for the 2020 Singapore Youth Science Fair (SYSF), it had to be postponed due to the COVID-19 pandemic. The 2021 SYSF, which will be held online during the Award Ceremony in August, saw a revived interest with a total of 124 teams from over 60 primary and secondary schools registering to participate.
- 3.4.2 The results for the 2021 OSTA will be announced soon. There were no winners for the 2020 OSTA as it had to be postponed to 2021 due to COVID-19. Starting from 2020, a STAS EXCO member will be appointed as the chaperon for the Outstanding Science Teachers' Award (OSTA) awardees and accompany them for their overseas learning journey.
- 3.4.3 The award ceremony of the 2021 SYSF and 2021 OSTA would be held on 27 Aug 2021, while the 2021 Singapore International Science Teachers' Conference has been postponed to 2022.

3.5 Singapore Institute for Biology

- 3.5.1 The 46th AGM was held online on 12 September 2020, followed by the SIBiol Public Forum, which was jointly organised with the Science Centre Singapore.
- 3.5.2 The Singapore Biology Olympiad 2020 Theory Round was held online on 21 November 2020, with the participation of 345 students from over 22 local schools. Selected top 27 students from seven schools participated in the Practical Round, held between 2 to 4 December 2020. Eight Golds, 12 Silvers, 8 Bronzes and 1 Certificate of Merit were awarded. The top nine students from two schools were selected for team training, in preparation for the International Biology Olympiad (IBO) 2021. Five students from two schools were eventually selected to participate in IBO 2021.
- 3.5.3 The SIBiol book prize was awarded to selected top Biology students from institutions, including NUS, NIE, RP, SP.

- 3.5.4 For the SIBiol Research Trust Fund (RTF), no grant calls were announced in 2020 due to the COVID-19 pandemic. A project previously awarded to Dr. Ow Yan Xiang from the National University of Singapore was completed on 31 May 2021. While a grant call was made earlier in Q1 of 2021, there were no applicants. As of 2021, the RTF grant will accept proposal submissions for consideration throughout the year.
- 3.5.5 The St. John's Island National Marine Laboratory (SJINML), in partnership with SIBiol, organized the 2nd Young Marine Scientist Symposium, which was held virtually on 11 June 2021. The YMSS brought together marine science researchers and students, serving as a platform for the young researchers to share their research findings with the wider community. There was a total of about 500 attendees for the YMSS, including 200 local pre-university students invited through the Biology Olympiads platforms (i.e. IBO, SBO, SJBO). The full YMSS programme can be found online at: https://sjinml.nus.edu.sg/young-marine-scientist-symposium/.
- 3.5.6 The Singapore Junior Biology Olympiad (SJBO) Theory Round was held online on 21 July 2021. This year, SJBO was held in two modes, either as a Competition or as a Challenge. A total of 1841 participants from over 75 schools have signed up for the SJBO 2021.

3.6 Singapore Mathematical Society

- 3.6.1 SMS organized the Singapore Mathematical Projects Festival (SMPF), SMS Essay Competition (SMSEC), and the Singapore Mathematical Olympiad (SMO) in various months of 2020. A total of 5810 students from 86 secondary schools and junior colleges participated in the various sections of the Olympiad.
- 3.6.2 The Mathematical Olympiad team did well at the 61st International Mathematical Olympiad (IMO) in 2020. The team won 4 Silver and 2 Bronze medals. Singapore came in 16th out of 105 participating countries.
- 3.6.3 The 54th SMS Annual General Meeting was held virtually on 11 March 2021. This was in conjunction with the SMS Lecture Series, which had over 200 attendees.

3.7 Singapore Society for Microbiology and Biotechnology

- 3.7.1 The 47th SSMB Annual General Meeting was held virtually on 24 August 2020.
- 3.7.2 SSMB sponsored a Special award in Microbiology for deserving students during the annual Singapore Science & Engineering Fair (SSEF). There were a total of 12 competitive presentations. Three students were awarded a 3-year student membership to SSMB. SSMB has also challenged NUS undergraduates to write an essay on topics of interest related to microbiology. Nine selected pieces have been published on the SSMB webpage. Authors have been granted a 1-year membership to SSMB as a token of appreciation.
- 3.7.3 A seminar on Soleris Ng Rapid Microbial Testing System "Microbiology at the speed of Light" was jointly organised by Singapore Society for Microbiology and Biotechnology (SSMB), Neogen (USA) and Chokim Scientific (S) Pte Ltd on 23

April 2021. The talk had over 40 participants from Malaysia, Indonesia, Philippines and Korea.

3.8 **Institute of Physics Singapore**

- 3.8.1 Selection rounds of the Singapore Young Physics Tournament (SYPT) 2020 were held on 9 and 18 Nov 2019. A total of 18 teams participated for Category B (Sec) and 13 teams participated for Category A (JC). In all, 16 teams and 11 teams advanced to the Category B and Category A Finals respectively. The Category B Finals was held on 1 February 2020, while the Category A Finals was postponed to 29 February 2020 and reformatted into an online competition due to COVID-19. The events were hosted by St. Joseph's Institution (SJI). There was one overall winner for Category B. Due to the change in format for the Category A Finals, there was no overall winner; two teams won gold medals.
- 3.8.2 The Annual IPS Astronomy retreat, originally planned for June 2020, was cancelled due to COVID-19 related restrictions.
- 3.8.3 The 13th Singapore Junior Physics Olympiad (SJPO) 2020 was held online on 3 July 2020 with about 1800 participants from 74 schools. About 112 students (16 schools) were selected for the special round held in their own schools on 16 July 2020. A total of 41 gold, 77 silver, 193 bronze medals and 635 Honourable mentions were awarded.
- 3.8.4 The 4th European Physics Olympiad (EuPhO) was held online from 20 to 26 July 2020 due to COVID-19 outbreak. A total of 260 students from 53 countries participated. The five team members who represented Singapore won 1 Bronze and 4 Honourable Mentions.
- 3.8.5 The 33rd Singapore Physics Olympiad (SPhO) 2020 took place on 13 October (Theoretical) and 19 November 2020 (Experimental). The theoretical round was held at the individual participating schools. The experimental round was hosted at the National University of Singapore, and 52 students took part.
- 3.8.6 The International distributed Physics Olympiad (IdPhO) was replaced by the first international distributed physics Olympiad held online due to COVID-19. This IdPhO was organized by the Moscow Institute for Physics and Technology. The theory competition took place on 8 December 2020 and the experimental competition took place on 10 December 2020, both at NIE. The five participating Singapore students won 3 Golds and 2 Silvers.
- 3.8.7 The IPS 11th Annual Meeting 2020 was held on 21 December 2020, in a hybrid (physical and virtual) manner. It was hosted both in NUS UTown and on Zoom. The recipients of the IPS Awards and Medals were announced.

3.9 Materials Research Society-Singapore

- 3.9.1 The 9th MRS-S Conference on Advanced Materials (AMC) 2020 was held virtually from 25 to 27 Nov 2020.
- 3.9.2 MRS-S has been hosting the IUMRS Headquarters Office with effect from 1 Jan 2021.

3.9.3 The International Conference on Materials for Humanity 2021 (MH 21) was held virtually from 6 to 9 July 2021. The conference had a total of 6 themes, 18 symposia, and over 800 participants from 33 countries worldwide.

3.10 College of Clinician Scientists

- 3.10.1 The 4th Annual General Meeting (AGM) of the College of Clinician Scientists was held virtually on 22 May 2020. A total of 20 Fellows attended the meeting.
- 3.10.2 The Academy of Medicine, Singapore and College of Clinician Scientists launched the Seah Cheng Siang Memorial Research Award in August 2020. The Seah Cheng Siang Memorial Research Award 2020 has been awarded to Dr Maria Noviani.
- 3.10.3 The College delivered a two-day webinar "What is the Future for Healthcare under COVID-19" on 12 and 13 November 2020. The 2-day webinar was organised by Professor Tina Wong, Assistant Professor Wan-Yee Teo and Assistant Professor Catherine Ong. It was attended by 598 participants.

3.11 Singapore Society for Biochemistry and Molecular Biology

- 3.11.1 The Young Scientists' Symposium 2021 was cancelled due to the developing COVID-19 situation.
- 3.11.2 SSBMB Prizes/Medals were presented to students from Singapore Polytechnic, Ngee Ann Polytechnic and National University of Singapore.
- 3.11.3 SSBMB co-organised the 9th International Singapore Lipid Symposium (ISLS), held virtually from 1 to 5 March 2021, with the NUS Singapore Lipidomics Incubator (SLING).
- 3.11.4 SSBMB participated in the 2021 International Conference of the Korean Society for Biotechnology and Bioengineering. It was represented by Dr Yew Wen Shan, who was the Keynote Speaker for Protein and Enzyme Engineering for Therapeutic Applications Session on 15 April 2021.

4 Young Scientist Awards

- 4.1 The Academy instituted the above in 1997, with the support of the Agency for Science, Technology and Research (A*STAR).
- 4.2 The Young Scientist Award carries a cash prize of \$10,000, a Trophy and a Certificate.
- 4.3 The winners of the awards for 2020 were:

Physical, Engineering & Information Sciences

DR JOHN HO

Assistant Professor, Department of Electrical and Computer Engineering, Faculty of Engineering, National University of Singapore

For his research in bioelectronics technologies in fundamental innovations in electromagnetics and materials, as well as device and system integration for translational applications.

Biological & Biomedical Sciences

DR TAN SI HUI

Research Scientist, Epithelial Stem Cells, Institute of Medical Biology, Singapore

For her research in the development of AI-based diagnostic platform for the classification and diagnoses of cancers according to each tumor's dysregulated signaling pathways profile.

DR CHEW WEI LEONG

Senior Research Scientist, Genome Institute of Singapore, Singapore

For his research in the development of safe and efficacious genome-editing therapy.

5. Publications and Research

5.1 Members have been very active in research and continued to publish their findings in leading scientific journals.

6. Proceedings of the Singapore National Academy of Science

- 6.1 Four issues were published in 2020 and 2021:
 - Cell Signalling and Diseases (Guest Editor: Low Boon Chuan)
 - Henstock integration: Theory and applications (Guest Editors: Toh Tin Lam and Chew Tuan Seng)
 - Non-coding RNAs in Health and Disease (Guest Editor: Tay Mei Sian, Yvonne)
 - STEM education (Guest Editors: Leo Tan Wee Hin and R. Subramaniam)
- 6.2 Work on two more issues of PSNAS are in progress:
 - Mathematics education (Guest Editor: Toh Tin Lam)
 - Energy and Environment (Guest Editors: Koh Wee Shing and Victor Nian)
- 6.3 The list of issues which have been published so far are:
 - Volume 1, No. 1 (May 2005) on Statistics & Applied Probability
 - Volume 2, No. 1 (May 2006) on Quantum Information
 - Volume 3, No. 1 (Nov 2007) on Nanoscience & Nanotechnology 1
 - Volume 4, No. 1 (May 2008) on Selected Modern Applications of Chemistry
 - Volume 4, No. 2 (Nov 2008) on Nanoscience & Nanotechnology 2
 - Volume 5, No. 1 (May 2009) on Materials Science & Engineering 1
 - Volume 6, No. 1 (May 2010) on Introduced Species in Singapore
 - Volume 6, No. 2 (Dec 2010) on Chemistry of Nanomaterials
 - Volume 7, No. 1 (Jun 2011) on Materials for Advanced Technologies
 - Volume 8, No. 1 (Jun 2012) on Biomedical Applications of Coordination Complexes
 - Volume 8, No. 2 (Jun 2013) on Science Education
 - Volume 9, No. 1 (Dec 2013) on Molecular Spectroscopy and Microscopy
 - Volume 10, No. 1 (Dec 2014) on Cellular delivery of drugs and nucleic acids.

Volume 11, No. 1 (Dec 2015) on Food Security

Volume 12, No. 1 (Dec 2017) on Climate Change

Volume 13, No. 1 (Dec 2019) on Biotechnology for the Asian Century

Volume 14, No. 1 (Sep 2020) on Cell Signalling and Diseases

Volume 14, No. 2 (Dec 2020) on Henstock integration: Theory and applications

Volume 15, No. 1 (Mar 2021) on Non-coding RNAs in Health and Disease

Volume 15, No. 2 (Sep 2021) on STEM education

7. SNAS Awards

7.1 The winners of the awards for 2020 are:

Nanyang Technological University

Biological Sciences HO ZHENG HAO MALCOLM

Chemistry & Biological Chemistry NG ZI XUAN

Physics & Applied Physics ALVIN HENG JUN REN

Mathematical Sciences TI TZE HONG

7.2 The winners of the awards for 2021 are:

National University of Singapore

Chemistry POH YONG RUI

Biological Sciences NG KAIQUAN, KENNETH

Mathematics PANG JIA HAO

Statistics JOEL TAN WAN RONG Physics KANG JOON KIAT

Nanyang Technological University

Biological Sciences FREDERICK REINHART TANOTO

Chemistry & Biological Chemistry LIN MIN HTOO

Physics & Applied Physics HSU CHUNG CHUAN Mathematical Sciences FANG XIAOWEI

National Institute of Education, NTU

Biology KUNG KAI WEN, DARREN

Physics N/A

Chemistry TAN HWEE LING SHARON Mathematics LIM JING QI BRENDA

7.3 In the past, the students were presented with the awards during the SNAS AGM. However, as this year's AGM will be held online owing to the Covid-19 situation, a separate function will be organized to honor the recipients.

8. Relations with international bodies

8.1 The Academy is a member of the International Science Council (ISC) and the Inter-Academies Partnership (IAP). Under the IAP, there are many regional associations; SNAS belongs to the Association of Academies and Societies of Sciences in Asia (AASSA).

8.2 The Academy continues to be invited to participate in ASEAN and international scientific conferences and fora. This includes the following conferences and events.

8.2.1 **Open Science**

At the 40th UNESCO General Conference, the member states agreed to develop Recommendation on Open Science. This meeting was tasked to finalise the draft text of the UNESCO Recommendation on Open Science. This final recommendation is tabled for adoption at the next General Conference in Nov 2021. All member states are obliged to adhere to the provisions in the Recommendation once it has been approved, and MCCY is responsible for Open Science implementation in Singapore.

At the meeting, the Singapore team did what we could to help ensure that the document remained a 'soft' document with sufficient space for Singapore to manoeuvre per AGC's advice, to be suitable for adoption.

The provisional adopted draft text of the UNESCO recommendation on Open Science (as of 11 May 2021) is appended.

8.2.2 Commonwealth Science Conference Joint Alliance

The Academy attended the 2021 Commonwealth Science Conference, which offered key recommendations for joint action on a sustainable and resilient recovery. Thereafter, a joint academy letter was signed.

8.2.3 ASEAN Foresight Alliance (AFA) Workshop 2021

The Academy took part in the AFA Workshop 2021 and participated actively in the group discussions.

8.2.4 EDUtech Asia

The Academy will be participating in the 2021 EDUtech Asia. It is a free event that will take place virtually on 9-11 Nov 2021, with over 150 inspirational speakers from across the region invited to discuss and debate various topics. The event will feature a virtual exhibition showcasing some of the latest solutions and innovations, and hopes to provide a platform for teachers, lecturers and ed-tech coaches to share best practices, practical innovations and personal insights into teaching with technology.

8.2.5 World Organisation for Science Literacy (WOSL)

SNAS has been invited by the WOSL to join the Preparatory Committee. The Academy will be represented by its President, A/Prof Lim.

9. SNAS ASEAN Fellowship Programme

- 9.1 In 2020, the National Research Foundation (NRF) agreed to fund the SNAS ASEAN Fellowship Programme, which aims to attract bright postdoctoral researchers (or would-be faculty members) from ASEAN countries to Singapore universities for a 2-year postdoctoral fellowship.
- 9.2 Under this programme, administered by SNAS, applicants would be required to find a willing host in a local university (NUS, NTU or SUTD) on an agreed field of research, preferably in science, medicine, engineering, and computer science.

- 9.3 SNAS would form a review panel consisting of members of the academy to review and recommend the award to the applicants. The academic records, essays, letters of recommendation, the application itself, and other appropriate materials would be used as the basis for determining the extent to which candidates meet the eligibility requirements and the positive factors for selection. The quality of the plan of study or research, the bibliography, the appropriateness of the proposed fellowship activities, the choice of host institution, and the potential for career enhancement would also be carefully reviewed.
- 9.4 The candidates may propose any field of research done in Singapore universities. For all batches, preference will be given to candidates working on infectious diseases. Up to 10 Fellowships will be offered each year, starting with about 5 in the first batch offered in 2020.
- 9.5 The SNAS ASEAN Fellowship has been offered to:

Kong Xin Ying (NTU) Nguyen Nguyen Ngan (NUS) Ng Mei Li (NTU) Isom Hilmi (SUTD) Le Thien Thi Thanh (SUTD)

- 9.6 Nguyen Nguyen Ngan has since rejected the offer due to personal reasons. Subsequently, Isom Hilmi and Ng Mei Li have also withdrawn from the Fellowship due to an unfortunate and unexpected delay in the start of candidature as a result of the COVID-19 pandemic.
- 9.7 Kong Xin Ying has arrived in Singapore since early May and has started her research work after her SHN.Le Thien Thi Thanh has not yet arrived due to unexpected issues with her passport.

10. SG Academies South-East Asia Fellowship Programme

- 10.1 In 2021, the SNAS ASEAN Fellowship Programme has been renamed to the SG Academies South-East Asia Fellowship (SASEAF) Programme under the NRF RIE2025 plan.
- 10.2 With this revision, the new programme will be opened to applicants from all South-East Asian countries and will involve all local universities and institutions. It will also be collectively administered by three academies SNAS, the Academy of Medicine Singapore (AMS), and the Academy of Engineering Singapore (SAEng). The approved fields of research, application and evaluation process will remain the same.
- 10.3 Applications for the SASEAF Programme is now under-way.

11. Acknowledgements

11.1 The Academy thanks the National Research Foundation, the National University of Singapore, the Nanyang Technological University, all universities and institutions participating in the SASEAF Programme, and the Science Centre Singapore for their strong support and encouragement towards the Academy's mission objectives.

Chairman	Date