

# RECSAM News

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## SEAMEO RECSAM 50<sup>th</sup> Governing Board Meeting



Governing Board Members & Delegates at the 50<sup>th</sup> GBM

**SEAMEO RECSAM** Governing Board Members of the eleven SEAMEO Member Countries and the SEAMEO Secretariat convened the 50<sup>th</sup> Governing Board Meeting (GBM) at Kuala Lumpur, Malaysia from 24 to 26 September 2019. The Governing Board Members and Representatives in attendance were Mr. Haji Shamsulbahri bin Haji Muhammad (Brunei Darussalam), Mrs. Ma. Gemma M. Ledesma (Philippines), Mr. Chua Chor Huat (Singapore), Dr. Phuriwat Khamaikawin (Thailand), Mr. Somphay Sengvilaysack (representing Mr. Khambay Khamsy from Lao PDR), Mr. Mazlan Bin Samsudin (representing YBhg. Dato' Sulaiman Bin Wak from Malaysia), Mr. Lim Sotharith (representing Mr. Or Siem of Cambodia) and Dr. Wahyudi Yososutikno (Ex-Officio representing Dr. Ethel Agnes Pascua-Valenzuela, Director of SEAMEO Secretariat).

Dr. Suhaidah Tahir, the Centre Director of RECSAM thanked the Governing Board members, representatives and observers for attending the meeting despite their busy schedules and expressed her hope to have a successful meeting that could drive the Centre to greater heights.

Mr. Haji Shamsulbahri bin Haji Muhammad, the Chairman of the Governing Board, expressed his sincere appreciation to all the former Board members for their contributions and dedications. He also complimented their contributions which had enabled the last GBM to pass resolutions needed in the operation and development of SEAMEO RECSAM. He also welcomed all honorary members and the representatives of the Board, the representative from SEAMEO Secretariat, the observers and all that were present in the meeting and hoped to have a very resourceful meeting to produce resolutions that can transform RECSAM into an excellent Centre following its mandated programmes and activities.

Dr. Wahyudi Yososutikno, representing the Director of SEAMEO Secretariat noted several achievements and successes of SEAMEO RECSAM in the past fiscal year and acknowledged the Centre's involvement in SEAMEO Education Standards and Student Networking project, one of the 12 initiatives by SEAMEO Secretariat under the Golden SEAMEO (2011-2020). He also expressed his gratitude to the Governing Board Members who always generously provided precious and valuable technical inputs and professional advice to the Centre as well as the Government of Malaysia for its continuous support to SEAMEO RECSAM.

Mr. Haji Shamsulbahri bin Haji Muhammad, the Governing Board Member from Brunei Darussalam was elected as the Chairman of RECSAM's Governing Board while Mr. Mazlan Bin Samsudin (representing YBhg. Dato' Sulaiman Bin Wak) from Malaysia was elected as the Vice-Chairman of the Governing Board for F.Y. 2019/2020 – F.Y. 2020/2021.

In this year's Governing Board Meeting, the Centre highlighted a total of eight (8) working papers and six (6) information papers for the deliberation of the board members. Among other key working papers submitted for considerations were: (i) Matters Arising from the Resolutions of the 49<sup>th</sup> Governing Board Meeting 2018, (ii) Strategic and Operational Plans, Programmes and Proposed Budgets for Three Fiscal Years 2020/2021, 2021/2022 and 2022/2023 and Personnel Strength Budget for Fiscal Year Ending 30<sup>th</sup> June 2021, (iii) Proposed SEAMEO RECSAM 11<sup>th</sup> Five-Year Development Plan for F.Y. 2020/2021 - F.Y. 2024/2025, and (iv) Proposed Amendment to the Staff Rules and Regulations 1995 (Revised – September 2015). After lengthy deliberations, the working papers were adopted with recommendations that RECSAM continues to keep its programmes flexible and relevant to the changing times and devise ways to increase the impact of its programmes and activities in the region.

Other information papers reported the updates of the (i) Survey Research Report on RECSAM's Regular Courses for F.Y. 2017/2018 and F.Y. 2018/2019 (Batch 1), (ii) Report of the RECSAM SEASO (SEAMEO Science Olympiad) 2019, (iii) Report on the 8<sup>th</sup> International Conference on Science and Mathematics Education (CoSMEd) 2019 and TIMSS International Symposium 2019, (iv) Update on the 12<sup>th</sup> Regional Congress on SEAMEO Search for Young Scientists Plus (SSYS<sup>+</sup>) 2020, (v) Report on Southeast Asia Basic Education Standards (SEA-BES) Phase 2, and (vi) Report on SEAMEO Learning Science and Mathematics Together (LeSMaT) in a Borderless World.

The annual Governing Board Meeting is an important platform for Governing Board Members nominated by the eleven SEAMEO Member Countries to discuss the policy, management and administration of SEAMEO RECSAM, as well as to review the Centre's achievements in the last fiscal year and planned future activities and programmes. The 51<sup>st</sup> SEAMEO RECSAM Governing Board Meeting next year will be held from 29 September to 1 October 2020 in Phuket, Thailand.

## 42<sup>nd</sup> SEAMEO High Officials Meeting



**THE 42<sup>ND</sup> SEAMEO HIGH OFFICIALS MEETING (HOM)** is the forerunner of the regular SEAMEO Council Conference organised by the SEAMEO Secretariat. The 42<sup>nd</sup> HOM this year was conducted from 26 to 28 November 2019 at Berkeley Hotel, Bangkok, Thailand. The meeting was presided by H. E. Mr. Nataphol Teepsuwan, Minister of Education, Ministry of Education, Thailand. This year's meeting saw a participation of more than one hundred high education officials and representatives from various Ministries of Education of SEAMEO Member States, representatives from SEAMEO Associate Members and Affiliate Members, and observers from partner organisations of SEAMEO with the purpose of discussing the educational, scientific and cultural directions and development in Southeast Asian nations. Dr. Suhaidah Tahir, Centre Director attended the meeting and presented two proposal papers, namely: (i) Proposal on the 11<sup>th</sup> Five-Year Development Plan of SEAMEO RECSAM for Fiscal Year 2020/2021-2024/2025 and (ii) Update on SEAMEO Basic Education Standards (SEA-BES) Phase 2 - Teaching to Transform: 21<sup>st</sup> Century Skills and Design Thinking in STEM Contexts.

## 8<sup>th</sup> International Conference on Science and Mathematics Education (CoSMEd 2019)



**TEACHERS**, educators, and researchers from different parts of the world gathered last 11 to 15 November 2019 at SEAMEO RECSAM to discuss and address issues on improving science and mathematics instructions for the 21<sup>st</sup> century during the “8<sup>th</sup> International Conference on Science & Mathematics Education (CoSMEd 2019)” which was held alongside with the “TIMSS International Symposium 2019”. The themes for the two events were “Aligning STEM Education with Education 4.0 and Sustainable Development Goals” and “TIMSS@20: Hindsight, Insights & Foresights”, respectively.

With more than 120 paper presenters and researchers who gave presentation on topics that emphasised science and mathematics education for the 21<sup>st</sup> Century in the Southeast Asia. The Conference brought educators and researchers from across the globe together to discuss and deliberate on important issues pertaining to the educational development and reforms in science, technology and mathematics education in the Southeast Asian region and beyond, in relation to STEM education and Sustainable Development Goals.

The conference was officiated by H.E. Dato' Ir. Hj. Ahmad Zakiyuddin bin Abdul Rahman, Penang Deputy Chief Minister I, the representative of Chief Minister of Penang. Professor Zsolt Lavicza from Linz School of Education, STEM Education Centre, Johannes Kepler University, Linz, Austria commenced the first keynote address of the 8<sup>th</sup> CoSMEd 2019 on “Exploring STEAM Education Approaches to Foster Creativities and Innovations in Schools” while Professor Donna King from Queensland University of Technology, Australia delivered her keynote address on “Contexts, Emotions and Integration: A Decade of Research on Practical STEM Education”.

Professor Dr. Ismail bin Abdul Rahman from Universiti Tun Hussein Onn Malaysia, Malaysia delivered his keynote address on “Malaysian Technical University Network (MTUN) in National TVET Agenda” while Dr. Wan Wardatul Amani binti Wan Salim from International Islamic University of Malaysia, Malaysia gave her address on “SporeSat: Lab-on-chip for Study of Single Cell in Space”. The fifth keynote speaker, Mr. Aidan McCarthy from Microsoft, Singapore shared his expertise on “Digital Transformation in Education”.

The keynote speakers for the TIMSS International Symposium were Professor Frederick K.S Leung from University of Hong Kong and Associate Professor Dr. Nor Idayu Mahat from Universiti Utara Malaysia. Professor Frederick K.S. Leung delivered a keynote address on “TIMSS@20: Significance of TIMSS for Southeast Asian Countries” while Professor Dr. Nor Idayu Mahat gave her address on “How Data Analytics Benefitting Education?”

The 8<sup>th</sup> CoSMEd 2019 was attended by 224 delegates from 14 countries (i.e.; Austria, Australia, Bangladesh, Brunei Darussalam, Hong Kong, India, Japan, Kazakhstan, Kyrgyz Republic, Malaysia, Philippines, Singapore, South Africa and Syria).



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A total of seven (7) keynote addresses, four (4) parallel sessions with 119 presentations, a symposium and twelve (12) poster presentation sessions were held during this Conference. Wide arrays of topics with the following strands were presented during CoSMEd 2019: *Teaching and Learning Innovation, Continuous Professional Development, Alternative Assessment/TIMSS, Technology as a Pedagogical Enabler and STEM Education and Career Development.*

A series of 15 workshops were also held within the Conference as follows:

- *User Science: Hands-On Experience Design in Education* by Idyawati Hussein
- *Teaching and Learning Innovation: Optical Lens Animation* by GSP by Benny Kong Tze Loong
- *Recreational Mathematics and Running a Math Club in Schools* by Santhanam Sundaram Ramachandran
- *Developing Secondary School Students' Mathematical Reasoning Using Classwiz Scientific Calculator* by Norjoharuddeen Mohd Nor & Leong Kwan Eu
- *Mathematics, Modelling and the New Taxonomy of Educational Objectives* by David Nutchey
- *Creating Holographic Images in a Makerspace Environment* by Gillian Kidman, Hazel Tan, Roland Gesthuizen & Dominador Mangao
- *Exploring STEAM Education Approaches to Foster Creativities and Innovation in Schools* by Professor Zsolt Lavicza
- *Alchemy Experiments in the School Laboratory* by Hiroshi Onishi
- *Developing Secondary Students' Mathematical Modelling using Technology* by Leong Kwan Eu & Norjoharuddeen Mohd Nor
- *Connectivity of STEM Agenda from School to University: Relevancy of STEM Contents, Effective and Creative Delivery and Assessment* by Professor Dr. Ismail bin Abdul Rahman
- *Using Engineering as a Context for STEM Integration in the Primary Years* by Professor Donna King
- *Inspired to Transform Learning in a Makerspace* by Roland Gesthuizen, Gillian Kidman, Hazel Tan & Dominador Mangao
- *Characterisation of Electrochemical Transducers for Biosensor Applications* by Dr. Wan Wardatul Amani Wan Salim @Amani Salim
- *PCET Calculator Workshop* by Peter Chew
- *An Overview of Global Citizenship* by Dr. Suhaidah Tahir



Facilitators & participants having knowledgeable yet fun-filled sessions during CoSMEd 2019

## RECSAM Inks MoU (Memorandum of Understanding) with Thepsatri Rajabhat University



MoU signing Ceremony: Partnership goes on

RECSAM recently inked a Memorandum of Understanding (MoU) with Thepsatri Rajabhat University, Thailand. The signing ceremony was held at SEAMEO RECSAM, Penang on 19<sup>th</sup> November 2019. The objective of this MoU signing ceremony aims to collaborate on joint research and educational projects; training programmes; exchange of publications, academic materials, and other information; exchange of academic, researchers, technical and administrative staff; and to promote any other co-operation of mutual interest. The MoU document was signed

by the Centre Director, Dr. Suhaidah Tahir and Asst. Prof. Chintana Vechmee, President of Thepsatri Rajabhat University and was witnessed by Ms. Teh Kim Hong, Acting Deputy Director (Training Programme) of SEAMEO RECSAM and Asst. Prof. Dr. Kanya Kongsoongnoen. Also present in the signing ceremony were the management and professional staff of RECSAM.

## RECSAM Joins Hands with Guimaras State College



MoU signed & sealed session

SEAMEO RECSAM and Guimaras State College sealed their partnership through a Memorandum of Understanding (MoU) signed on 26 October 2019 at Guimaras State College, Buenavista, Guimaras, Philippines. The MoU was signed by Dr. Suhaidah Tahir, Centre Director of SEAMEO RECSAM and Dr. Rogelio T. Artajo, College President. Signing as witnesses were Mr. Dominador D. Mangao, Acting Deputy Director (Research & Development) and Dr. Ruby D. Catalan, Vice-President for Academic Affairs. Establishing a partnership through a MoU allows the two institutions to collaborate on programmes and projects that interest both parties such as the sharing of expertise, best practices, and knowledge in the field of science and mathematics education.

## RECSAM Teams Up with Iloilo Science and Technology University



MoU signing in progress for future partnership

**SEAMEO RECSAM** and Iloilo Science and Technology University (ISATU), Philippines recently signed a Memorandum of Understanding (MoU) to facilitate academic cooperation between the two institutions. The MoU was signed by Dr. Suhaidah Tahir, Centre Director of SEAMEO RECSAM and Dr. Raul F. Muyong, the University President on 28 October 2019 at Iloilo Science and Technology University, La Paz, Iloilo City, Philippines. Through this partnership, both institutions will conduct joint educational-related research activities, training programmes, staff exchange programmes, partnership on implementation of joint programmes and activities as well as other educational projects in areas of mutual interest. The signing ceremony

was witnessed by Mr. Dominador D. Mangao, Acting Deputy Director (Research & Development) and Dr. Nemias H. Mabaquiao, Director (National and International Affairs) of ISATU. Also present at the event were the academic and administrative staff of Iloilo Science and Technology University, Philippines.

## In-Country Training Course for Cambodian High School Teachers



One for the album

**THE IN-COUNTRY TRAINING COURSE** on “Promoting Higher-Order Thinking (HOTS) and Meaningful Learning in Science through Questioning & Technology-Enhanced Learning” were recently held at Preah Sisowath High School, Phnom Penh, Cambodia from 22 to 26 September 2019. A total of 58 high school science teachers attended the four-day workshop. The training workshop was aimed to provide the teacher participants with the necessary knowledge and skills required to foster HOTS among the school students, and to showcase the ways in embracing

digital tools and web-resources to promote meaningful learning. This workshop gave participants the opportunities to enhance teaching and learning using higher level of questioning to promote higher-order thinking skills (HOTS). In line with the integration of digital devices in education, this workshop also acquainted participants to learning of science through E-learning exploring scientific phenomena using online resources and ICT based techniques for assessment and to engage participation in science learning relating to real world situations. These training courses were coordinated by Mr. Phann Bunnath and Mr. Bean Channy from Kampuchea Action to Promote Education (KAPE), for Ministry of Education, Youth and Sports in Cambodia. Mr. Lee Shok Mee and Mr. Liman Anthony, Science Education Specialists served as course facilitators.

## In-Country Training Course for Elementary Science and Mathematics Teachers in the Philippines



Smiles for the camera

**THE IN-COUNTRY TRAINING COURSE** for a group of teachers and educators from the Philippines on “21<sup>st</sup> Century Teaching in Science and Mathematics” was recently held at Swiss-Belhotel Blulane, Santa Cruz, Manila from 18 to 22 November 2019. The main goal of this course was to advance the pedagogical competency of elementary Science and Mathematics teachers in enhancing students’ 21<sup>st</sup> Century learning and innovative skills. This course also equipped the participants with STEM approaches in Teaching and Learning Science and assessment in Science Lesson and effective questioning skills. Course participants were also trained to design STEM teaching aids using low-cost materials and develop lesson plans. This five-day in-country course was conducted by RECSAM’s Training Programme

Specialists, Mr. Gan Teck Hock and Mr. Yuji Otsuka and organised by the Teaching and Learning Division, Bureau of Learning Delivery, Department of Education, Republic of the Philippines. A total of 58 (fifty-eight) participants participated in this course. These participants were divided into two groups namely (i) Science, and (ii) Mathematics. The Science group consisted of 28 elementary Science teachers, while the Mathematics group consisted of 30 elementary Mathematics teachers.



### Short Course for Matthayom Watnairong School, Bangkok, Thailand



Participant during an activity session



Group photo

**A THREE-DAY** short course on “*Developing Critical Thinking and Reasoning in Mathematics through Problem Solving*” for 43 (forty-three) students from Matthayom Watnairong School, Bangkok, Thailand was held at RECSAM from 1 to 3 October 2019. Through this course, students were engaged in different learning strategies to develop important Mathematics thinking and reasoning through various activities such as inductive reasoning to solve problems involving geometry and critical thinking skills in recreational mathematics. This course was activity-oriented and stressed on active involvement of participants in group discussions and demonstrations. Some major topics conducted in the course included strategies of problem solving in Mathematics, Geometrical transformations and patterns, games with deductive reasoning, and puzzle involving logic to name a few. Forty-three (43) secondary school students and four (4) teachers participated in this programme.

### Short Course for Students from Benchamaratrungsarit 2 School, Chachoengsao, Thailand



Learning session in progress



Smiles for the camera

**A FIVE-DAY** course on “*Developing 21<sup>st</sup> Century Skills through Science, Technology, Engineering and Mathematics (STEM)*” was conducted by RECSAM from 7 to 11 October 2019 for 33 (thirty-three) students and teachers from Benchamaratrungsarit 2 School, Chachoengsao, Thailand. This short course was aimed to engage the participants with the various active learning strategies to make sense of science, mathematics, technology and engineering so as to cultivate interest in these disciplines and develop scientific and mathematical/quantitative literacy as well as to motivate them to pursue careers in science, mathematics, technology and engineering. The course was activity-oriented and stressed on active involvement of participants in group discussions and demonstrations on various active learning strategies as well as ICT skills. Some major topics conducted in the workshop included Problem-based learning in Science and Mathematics, Exploring Science and Technology through toy making, Exploring Mathematics through hands-on activities and ICT-based Science and Mathematics learning.

### Short Course for Students from Datdaruni School, Chachoengsao, Thailand



Facilitator with the students



Workshop Certificate Ceremony

**A SHORT COURSE** on “*Learning Science and Mathematics through Inquiry Approach*” was conducted by RECSAM from 13 to 18 October 2019. A total of 66 (sixty-six) students and nine (9) teachers from Datdaruni School, Chachoengsao, Thailand participated in this training course. This short course was aimed to engage participants with the various inquiry-based learning strategies to solve mathematics and science problems, understand selected science concepts through experiments and investigations and appreciate the beauty of mathematics through inquiry of recreational mathematics. This short course was activity-oriented and stressed on active involvement of participants in group discussions and experimental activities through inquiry. Some major topics highlighted during the course included solving mathematics problem through inquiry, problem-based learning in Science, and exploring STEM through Inquiry.

## School Visit by Sacred Heart Convent, Bangkok, Thailand



Group photo

RECSAM played host to a group of delegates from Sacred Heart Convent, Bangkok, Thailand on 23 October 2019. The delegation was led by Ms. Pathitta Piyasakulseewee and Mr. Tanuttphat Atitanakiri and was accompanied by seven primary school and one secondary school student. The objectives of the visit was to share the research project done with the Grade Three students who were taught using board game and to develop the confidence of the students in a foreign setting. Mr. Yuji Otsuka, Science Education Specialist conducted a science workshop and exposed participants to various hands-on science activities. Through this workshop, participants were able to produce musical instrument using straws, propelling a boat using steam and travelling of sound. The Centre Director and staff

from the Training Programme Division witnessed the demonstration of teaching through the board game and the students also had an enjoyable time learning.

## Workshop on “Exploring Science through Toy Making” for Hatyaiwittayalai 2 School , Thailand

A TRAINING WORKSHOP on “Exploring Science through Toy Making” for students from Hatyaiwittayalai 2 School, Thailand was held at RECSAM on 24 October 2019. The workshop, which was conducted by Mr. Yuji Otsuka, Science Education Specialist was aimed to introduce participants to a number of individual and group hands-on science activities based on “STEM Education”. Workshop participants were taught how to redesign and modify the materials to suit their needs in classroom science lessons and obtain practical science skills and knowledge to create effective teaching materials in their own lessons. Through this workshop, participants were able to conduct effective experiments in science lessons and design low cost teaching materials which can be used in actual lessons at schools through step by step guide. The one-day training was conducted in a workshop format with 5 to 6 participants in a group. Forty-two (42) students and teachers participated in this workshop.



A session during the workshop

## Workshop on “Preparation and Dissemination of LeSMaT Curriculum through Blended-Mode Activities”



One for the album

A WORKSHOP on “Preparation and Dissemination of LeSMaT Curriculum through Blended-Mode Activities” was recently held at RECSAM on 30 and 31 October 2019. The aim of the workshop was to refine and publish the output of LeSMaT (Borderless) through e-resources in support of subsequent LearnT-SMArET online training programme that will be conducted from November to December 2019. The output of the workshop was the publication of an e-book and PowerPoint videos of SE4ALL, TeleHeal, ConWUR, and CADRRED for the purpose of dissemination and presentation during online course which was conducted on 21 November and 12 December 2019. The workshop received 16 (sixteen) participants. The workshop

was facilitated by Dr. Ng Khar Thoe, Specialist from Research & Development Division.

## Colloquium



Mr. David Wilgenbus (left) and participants during the colloquium

A COLLOQUIUM entitled “Climate Change Education” was held on 17 October 2019 at RECSAM. The talk was facilitated by Mr. David Wilgenbus, Chief Executive Officer, Office for Climate Education, Paris, France. Fifty-nine (59) teachers from nearby schools in Penang state attended this event.



## Staff Development Programme

1

Dr. Suhaidah Tahir (Centre Director), Mr. Dominador D. Mangao (Acting Deputy Director for Research & Development) and Dr. Warabhorn Preechaporn (Specialist from Training Programme) travelled to Seoul, South Korea to attend the "4<sup>th</sup> International Conference on Global Citizenship Education (GCED) on Pedagogy and Practice" organised by Asia-Pacific Centre of Education for International Understanding (APCEIU) at Seoul Dragon City Hotel Complex on 3 & 4 September 2019.

2

Dr. Suhaidah Tahir (Centre Director), Mr. Dominador D. Mangao (Acting Deputy Director for Research & Development) attended the "International Seminar at Korean National University of Education" organised by the Graduates Studies, Korean National University of Education (KNUE) in Cheongju, South Korea on 5 and 6 September 2019.

3

Dr. Suhaidah Tahir (Centre Director), Mr. Dominador D. Mangao and Mr. Yuji Otsuka (Specialists) from RECSAM attended the "First International Conference on Educational Leadership and Management (1<sup>st</sup> ICELAM)" organised by the Ministry of Education Malaysia from 1 to 4 October 2019 at Institut Aminuddin Baki Cawangan Genting Highlands.

4

Mr. Liman Anthony and Mr. Gan Teck Hock, Specialists from Training Programme Division attended a workshop on "Climate Change Education" organised by the International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO in Langkawi Island, Kedah from 14 to 18 October 2019.

5



Dr. Suhaidah Tahir (Centre Director), Mr. Dominador D. Mangao and Mr. Yuji Otsuka (Specialists) from RECSAM were invited as resource speakers in the Bridges Colloquium for Mentors 2019 on "Gearing up Philippines Education through Pedagogical Enhancement of 21<sup>st</sup> Century Skills" organised by Guimaras State College at Buenavista, Guimaras, Philippines from 25 to 27 October 2019.

6

Dr. Murugan A/L Rajoo, Specialist from Research & Development Division attended the "5<sup>th</sup> International Conference on Arts, Business, Social Science and Education 2019 (ICABSSE 2019)" organised by the International Postgraduate Group Malaysia in Cebu, Philippines from 22 to 24 November 2019.

7



Mr. Dominador D. Mangao, Specialist from Research & Development Division traveled to Japan to participate in the "Visiting Foreign Research Fellowship Programme" organised by CRICED, University of Tsukuba, Ibaraki, Japan from 1 to 31 December 2019 at University of Tsukuba, Ibaraki, Japan.

8

Mr. Lee Shok Mee, Consultant from Training Programme Division attended the "International Council of Associations for Science Education (ICASE) World Conference on Science and Technology Education 2019" organised by the International Council of Associations for Science Education (ICASE) and presented an academic paper at the Conference held in Pattaya, Thailand from 2 to 6 December 2019.

9

Dr. Suhaidah Tahir (Centre Director) together with Dr. Mariam Othman, Dr. Murugan A/L Rajoo and Mr. Liman Anthony, Specialists from RECSAM participated in the "Module of Scratch Workshop" organised by Balik Pulau Makerspace at Balik Pulau, Penang on 18 December 2019.

## Meetings and Other Events

1

Dr. Ng Khar Thoe, Specialist from Research & Development Division attended the "7<sup>th</sup> Union of International Associations (UIA) Round Table Asia-Pacific" organised by the Union of International Associations (UIA), Brussels on 19 and 20 September 2019 at Royal Cliff Grand Hotel in Pattaya, Thailand.

3

Dr. Suhaidah Tahir, Centre Director attended the "Hari Karnival Sains Teknologi Kejuruteraan Matematik (STEM), Peringkat Negeri Perlis 2019" organised by SK Kampong Salang at SK Kampong Salang, Kangar, Perlis on 14 October 2019.

2

Dr. Mariam Othman, Specialist from Research & Development Division attended the "14<sup>th</sup> Convocation Ceremony of Politeknik Tuanku Sultanah Bahiyah" at Politeknik Tuanku Sultanah Bahiyah, Kulim on 30 September 2019.

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4



Dr. Suhaidah Tahir, Centre Director attended the “*Central Curriculum Committee Meeting No. 2/2019*” organised by the Curriculum Development Division in the Ministry of Education Office in Putrajaya on 21 October 2019.

5



Dr. Suhaidah Tahir, Centre Director and Mr. Dominador D. Mangao, Acting Deputy Director for Research & Development attended the “*Monthly Regional Management Committee (MANCOM) Meeting*” with the officials from the Department of Education Regional Office VI-Western Visayas, Iloilo City, Philippines at Grand Xing Hotel, Iloilo City, Philippines on 28 & 29 October 2019.

6

Dr. Suhaidah Tahir, Centre Director attended the “*Best of the Best Showcase & Symposium on PIBKS#PBL@SEKOLAH: Transforming Mindset, Nurturing Talents*” organised by MOE Malaysia, Multimedia University, Bank Simpanan Nasional, and Universiti Teknologi MARA at HGH Convention Centre, Kuala Lumpur on 31 October 2019.

7

Dr. Murugan A/L Rajoo, Specialist from Research & Development Division attended the “*Pemurnian Modul Kompetensi dan Profesionalisme Guru Bidang Sains, Teknologi, Kejuruteraan dan Matematik (STEM) di bawah inisiatif #49 Pengukuhan Pendidikan STEM Tahun 2019*” meeting organised by Bahagian Profesionalisme Guru (BPG) in Melaka from to 7 November 2019.

8

Dr. Suhaidah Tahir, Centre Director was invited to attend the “*Majlis Penutupan-Pameran, Forum dan Penganugerahan sempena Program Pembangunan dan Latihan Profesional Guru – Place-based Learning (PBL): Real-Life Classroom in the 21<sup>st</sup> Century*” organised by Persatuan Pendidikan Seni Pulau Pinang (Arts-ED) on 15 November 2019.

9

Dr. Suhaidah Tahir, Centre Director was invited to attend the “*APEC Meeting on Computational Thinking Curriculum for the Digital Economy: Synthesis Meeting for Recommendation*” organised by Institute for Research and Development in Teaching Profession for ASEAN (IRDTP) at IRDTP, Khon Kaen University, Thailand from 18 to 20 November 2019.

10

The management and professional team attended the “*Strategic Planning Workshop*” organised by the Centre at RECSAM on 21<sup>st</sup> and 22<sup>nd</sup> November 2019. The workshop was facilitated by Mr. Mazlan bin Samsudin, Deputy Director of Curriculum Development Division, Ministry of Education Malaysia. During the two-day workshop, the team was given sufficient information and direction to create and implement their strategic plan for the Centre for the next fiscal year.

11

Dr. Ng Khar Thoe attended a discussion meeting with the Principal Assistant Director, Pn. Zalina at her office in Ministry of Education Co-curriculum Division, Putrajaya on 25 November 2019.

12

Ms. Bhavani Ramasamy, Programme Officer from Training Programme Division participated in the “*Kajian Pelaksanaan Program Latihan Malaysian Technical Cooperation Programme (MTCP) 2019/2020*” workshop organised by the Malaysian Technical Cooperation Programme (MTCP) at INSPEN Putrajaya from 25 to 27 November 2019.

12

Dr. Mariam Othman, Specialist from Research & Development Division attended “*Jawatankuasa Kurikulum Negeri Bil 3/2019 dan Mesyuarat Penyelarasan DTP Negeri dan Daerah Bil 2/2019*” meeting organised by Jabatan Pendidikan Negeri Pulau Pinang on 28 November 2019.

## Consultancy Services

1

Dr. Warabhorn Preechaporn, Specialist from Training Programme Division conducted a workshop on “*Meaningful Learning through 21<sup>st</sup> Century Learning Skills*” for 150 teachers / educators from Institute of Teacher Education Ipoh Campus on 22 October 2019.

2



Mr. Lee Shok Mee, Consultant from Training Programme Division travelled to China to facilitate a training course on “*Science Pedagogy*” for a group of primary school teachers organised by Guangxi Normal University from 1 to 8 November 2019 at Guangxi Normal University.

3

Mr. Liman Anthony, Specialist from Training Programme Division attended the “*Mesyuarat Pemurnian Modul Kompetensi & Profesionalisme Guru STEM di bawah Inisiatif #49 Kementerian Pendidikan Malaysia 2019*” organised by Bahagian Profesionalisme Guru, BPG at the Malacca State Department of Education from 5 to 7 5 November 2019.



## RECSAM's Family Dinner



Staff having a great time as a team & family during the spectacular night!

**FAMILY DINNER** is a tradition that every RECSAM staff looks forward to where the best is feted and achievements celebrated. The DoubleTree Resort by Hilton Penang was perhaps the perfect location for RECSAM's Family Dinner this year. Staff and their family members gathered there on 19 October 2019 all dressed up according to the "Around the World" theme. Everyone came dressed to the nines and the night was made more memorable with the delectable dishes served, delightful entertainment and not forgetting, the wonderful camaraderie.

The year-end dinner started at 5.30 p.m. with registration and a cocktail reception. Upon registration, everyone had their mug shots taken in a specially decorated photo booth.

Ms. Wong Lai Cheng, the Chairman of the organising committee and Dr. Suhaidah Tahir, Centre Director welcomed the staff and their family members in their opening speech. After the Director's welcoming speech, the staff was treated to an array of delectable dishes before continuing with the night's programme.

Staff were treated to a variety of performances, by the slew of talent pool who were vying for the title: Champion of RECSAM's Got Talent. There was singing and dancing about with "Bollywood Dance" from Lakka..Lakka..Lakka..Gurlz winning the Champion. They literally "killed" it with their highly entertaining routine. Thevand & Kogi aka our very own songbird was the runner-up and Gatcha Gals walked away as the second runner up with their beautiful rendition of "Qing Fei De Yi". The judges had a tough time judging before finally deciding to award the Champion to these talents.

Interspersed with the performances, there were stage games and staff lucky draws which saw everyone walking away with a prize in hand.

The event would not be complete without prizes for best dressed. Our Mr. and Ms. Glam for the night were Mr. Mohd. Faizal Zainoldin and Ms. Tiana Mohamad who both looked resplendent in their respective winning outfits. The pair walked away with a one-night hotel stay at DoubleTree by Hilton, Penang. Young Nadhratul Zahara (daughter of Ms. Rosnita Abdul Wahab) and Ren Hang (son of Ms. Wong Lai Cheng) impressed the judges with their outfits and each took home RM100 Popular Bookstore cash vouchers.

The family of Mr. Baharulnizam Baharum won the Best Dressed Competition (Family Category) and walked away with a one-night hotel stay at DoubleTree by Hilton, Penang.

Lucky draws were intermittently given away during intervals in the programme, and, the Grand Prize of the Lucky Draw (Sharp 50-inch Full HD TV) was won by Mr. Mazelan Mohamed Amin from the International House. Other prizes include PAMP Suisse Gold Bar - Lady Fortuna (999.9) 5 gram, Nikon Coolpix Camera, OGAWA Mobile Seat S Track Massage Cushion, Samsung Galaxy Tab A, and HUAWEI Mediapad to name a few.



Winners and finalists of the talent competitions during the dinner

Overall, it was a jubilation night to remember and will be cherished for years to come. Underlying the Centre's success and achievements is the fact that the people of SEAMEO RECSAM come together as a team and family. We work hard and play even harder. May this success inspire us to greater heights and accomplishments! Last but not least, kudos to the hardworking committee who had succeeded in pulling off a wonderful dinner heist!

## Management Retreat



RECSAM's future planning in progress



One for the album

A **MANAGEMENT RETREAT** for the management and academic team members of RECSAM was held from 4 to 6 December 2019 at Hotel Le Polonia, Medan, Indonesia with the objective of bridging thoughts within the Centre to consciously and collectively recommend the way forward for the Centre's upcoming plan. The Meeting was chaired by Dr. Suhaidah Tahir, Centre Director of RECSAM. Respective heads from each division (Administration, Training Programme and Research & Development) presented their 2020 annual plans which had been determined based on the Centre's strategic goals and key results areas (KRAs). Each division was required to set individual key performance indicators (KPIs) based on its job scope and responsibilities in line with the Centre's strategic goals. This was followed by discussion of other issues & concerns and setting of calendar of events for 2020. With this alignment, the staff will have a clearer vision of the Centre's direction and what is expected of them.

## New Faces

LET US welcome the following new member into RECSAM's family!



**Dr. Mariam Binti Othman** is the new Deputy Director of Research & Development Division who joined RECSAM on 1 September 2019. Dr. Mariam previously served EPRD (Educational Policy Planning and Research Division), Ministry of Education Malaysia in Putrajaya as an Assistant Director.

## Farewell

TO THE FOLLOWING former staff of RECSAM, we wish you all the best in your future endeavours. Your dedication and contribution to the Centre would be greatly remembered!



**Mr. Taufek Bin Muhamad**, Deputy Director (Administration) ended his secondment term at RECSAM and left on 11 November 2019.



**Dr. Mohd Nor Syahrir Bin Abdullah**, Specialist based at Research & Development Division resigned and left the Centre on 24 October 2019.



**Mr. Mohd Hazlie Bin Muhamad**, Specialist based at Research & Development Division ended his contract with RECSAM on 8 September 2019.



**Ms. Jenny Ong Lay Sim**, Administrative Assistant based at Research & Development Division retired and left on 31 December 2019.



**Mr. Ruzbihan Hadi Bin Ahmad Bakhtiar**, Administrative Assistant based at RECSAM International House ended his contract and left on 31 December 2019.



## Year 2019 in Review

### January



Workshop on “Enhancing Communication English through Science and Mathematics” for Benchamaracharungsarit School, Thailand, 15 to 18 January 2019 and 22 to 25 January 2019



Benchmarking Visit by SEAMEO SEN (SEAMEO Regional Centre for Special Educational Needs), 30 & 31 January 2019

### February



Training Course on “Capacity Development in Gender-Responsive Pedagogy in STEM Education for Lao PDR” in collaboration with UNESCO Bangkok, 11 to 22 February 2019

### April



Completion of Regular Courses F.Y. 2018/2019 (Batch 2), 1 to 26 April 2019

### March



First SEAMEO Science Olympiad (SEASO), 5 to 8 March 2019



Workshop on “Introducing STEM Learning in Preschools”, 23 and 24 March 2019



Memorandum of Understanding (MoU) Signing between RECSAM and PPPPTK MATEMATIKA (Centre for Development and Empowerment of Mathematics Teacher and Education Personnel), Indonesia, 12 March 2019



Workshop on “Enhancing Critical and Computational Thinking through Design-Based Approach in STEM Context: Challenge to Transform STEM Education in Artificial Intelligence (AI) Generation Education”, 26 to 28 March 2019



In-country training course on “Going Back to the Fundamentals: Models and Heuristics for Mathematics Educators” and “Going Back to the Fundamentals: Context-based Learning and Science Process Skills for Science Educators” for Indonesian teachers, 22 to 25 April 2019

### May



Workshop on “Enhancing Science and Mathematics Learning in a STEM Environment” for teachers from Triam Udom Suksa School, Nakhon Si Thammarat Province, Thailand, 2 & 3 May 2019



Customised course on “Enhancing Competencies of Mathematics Teaching” for student teachers from Kamphaeng Phet Rajabhat University, Thailand, 6 to 17 May 2019

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## June



Workshop on “Active Learning through STEM using Low Cost Materials” for students from MARA Junior Science College, Pengkalan Hulu, Perak, 20 & 21 June 2019



Workshop on “Teaching Methods in Promoting 21<sup>st</sup> Century Education”, 26 June 2019



Customised Course on “Strengthening Competencies of English Language for Mathematics Teaching and Learning” for Khon Kaen University, Thailand, 17 June 2019 to 28 June 2019

## July



Memorandum of Understanding (MoU) Signing between RECSAM and Kanchanapisekwiththayalai Nakhonpathom (Pratumngang Suankulab Matthayom), Thailand, 29 July 2019



Workshop on “Enhancing the Competency and Professionalism of STEM Teachers” for teachers from Ministry of Education Malaysia, 23 to 25 July 2019



“Effective STEM Teaching Aids Using Low-cost Materials” and “Revisiting Science Process Skills: Fundamentals of Inquiry and STEM Education” workshops for Institut Pendidikan Guru (IPG) Ipoh Campus, 25 July 2019

## August



Completion of Regular Courses F.Y. 2019/2020 (Batch 1), 5 to 30 August 2019



RECSAM 11<sup>th</sup> Five-Year Development Plan Workshop, 31 July to 2 August 2019



Memorandum of Understanding (MoU) Signing between RECSAM and Korea National University of Education, 14 August 2019



Merdeka Day Celebration “Sayangi Malaysiaku: Malaysia Bersih”, 31 August 2019



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## September



RECSAM 50<sup>th</sup> Governing Board Meeting (GBM), Kuala Lumpur, Malaysia, 24 to 26 September 2019



In-country training course on “Promoting Higher-Order Thinking (HOTS) and Meaningful Learning in Science through Questioning & Technology-Enhanced Learning” for Cambodian teachers, 22 to 26 September 2019

## October

Memorandum of Understanding (MoU) Signing between RECSAM and Iloilo Science and Technology University, Philippines, 25 October 2019

Memorandum of Understanding (MoU) Signing between RECSAM and Guimaras State College, Philippines, 26 October 2019



RECSAM Family Dinner “Around the World”, DoubleTree Resort by Hilton Penang, 19 October 2019

## December



SEAMEO RECSAM Management Retreat, Hotel Le Polonia, Medan, Indonesia, 4 to 6 December 2019

## November



RECSAM 8<sup>th</sup> International Conference on Science & Mathematics Education (CoSMEd 2019) and TIMSS International Symposium 2019, 11 to 15 November 2019



Memorandum of Understanding (MoU) Signing between RECSAM and Thepsatri Rajabhat University, Thailand, 19 November 2019



In-country training course on “21<sup>st</sup> Century Teaching in Science and Mathematics” for Philippines teachers, 18 to 22 November 2019

# 2<sup>ND</sup> SEAMEO SCIENCE OLYMPIAD 2021



2 > 5 March 2021  
SEAMEO RECSAM  
Penang, Malaysia



# SEAMEO RECSAM

SOUTHEAST ASIAN MINISTERS OF EDUCATION ORGANIZATION  
REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS



### Capacity Building

- Regular Courses
- In-Country Courses
- Customised Courses
- Third Country Training Programme (TCTP)/Malaysian Technical Cooperation Programme (MTCP)

Convenor of Conferences, Congresses, Seminars, Colloquia & Workshops

**VISION**

Leading centre for quality science and mathematics education

**MISSION**

To promote and enhance science and mathematics education in the SEAMEO Member Countries

**AREA OF EXPERTISE**

- Action Research
- Lesson Study
- Integration of ICT in Science/ Mathematics Education
- Mathematical Thinking
- Inquiry-Based Science Education & Inquiry Learning in Mathematics
- Problem Based Learning
- STEM Education
- Flipped Classroom
- Teaching Mathematics through Problem Solving
- Alternative Assessment
- Best practices in science and mathematics
- 21<sup>st</sup> Century Learning
- Scientific and Technological Literacy Curriculum / Learning Standards Academic Writing and Publications
- Science / Environmental Education
- Mix-method Research



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**Facilities Rental and Reservations**

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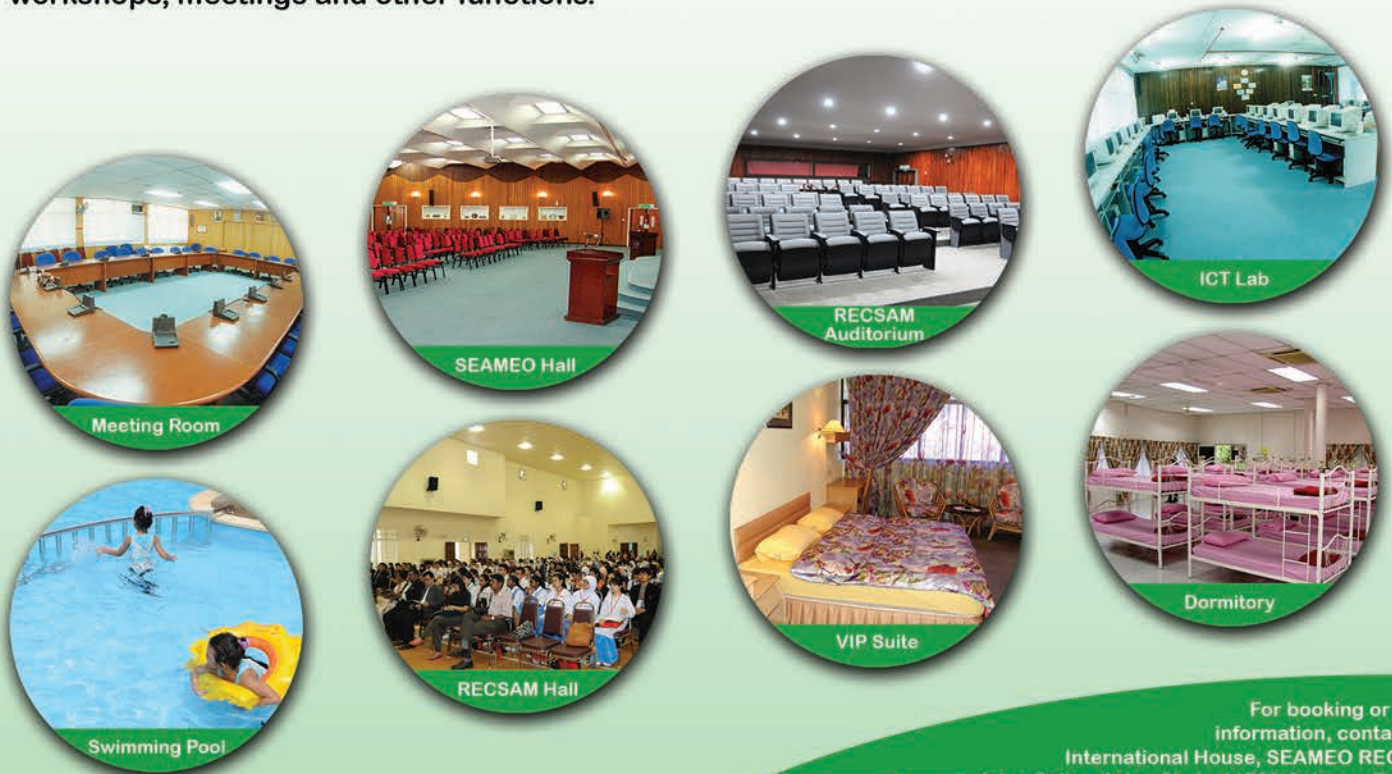




The Southeast Asian Ministers of Education Organization  
Regional Centre for Education in Science and Mathematics

## RECSAM Facilities & Accommodation

The Southeast Asian Ministers of Education Organization - Regional Centre for Education in Science and Mathematics (SEAMEO RECSAM) is an inter-governmental organisation established in Penang in 1967. The International House which is conveniently located at the heart of the Regional Centre for Education in Science and Mathematics (RECSAM) offers affordable accommodation and state-of-the-art facilities powered by cutting-edge facilities. The International House has 152 furnished rooms and suites which are elegantly designed keeping in mind the astute taste of our guests. RECSAM's fully-equipped event facilities are also suitable for seminars, trainings, workshops, meetings and other functions.



For booking or more information, contact us:  
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