



Tentative Program of I AM STEM 2020 24 – 25 September 2020

Plenary session: 24 September 2020

Join Zoom Meeting https://kku-th.zoom.us/j/7341523731?pwd=eTJDb1RuVEhYREphWEQwRGorUFZCZz09 Meeting ID: 734 152 3731 Passcode: iamstem20				
Time				Activities
Bangkok/ Jarkata (UTC+7)	Philippines/ Taiwan/ Makassar (UTC+8)	Manokwari (UTC+9)	New Zealand (UTC+12)	
09.00 – 9.20	10.00 -10.20	11.00 – 11.20	14.00 – 14.20	Opening Ceremony Welcome address 1: Dr. Sukarno D. Tanggol Chancellor, MSU-IIT, Philippines
09.20 - 09.30	10.20 – 10.30	11.20 – 11.30	14.20 – 14.30	Welcome address 2: Assistant Prof Chokchai Yuenyong Secretariat of ASEAN Research Network for STEM Education (ARN-STEM)
09.30 - 09.40	10.30 – 10.40	11.30 – 11.40	14.30 – 14.40	Welcome address 3: Prof Chun-Yen Chang Director of Science Education Center, National Taiwan Normal University (NTNU) IAMSTEM 2021 Conference Chair
09.40 – 10.20	10.40 – 11.20	11.40 – 12.20	14.40 – 14.20	Keynote speaker 1: Dr. Pornpun Waitayangkoon Director Designate of the SEAMEO Center for STEM Education (SEAMEO STEM-ED) SEA STEM Career Academies



Plenary session: 24 September 2020 (Continue)

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10.30 – 11.10	11.30 – 12.10	12.30 – 13.10	15.30 – 16.10	Keynote speaker 2: Professor Kuen-Yi Lin
11.20 – 12.00	12.20 – 13.00	13.30 – 14.00	16.20 – 17.00	Keynote speaker 3: Johnson Lam How Makerspaces & Community builders prepare ourselves for 21st Century Skills
13.00 – 16.20	14.00 – 17.20	15.00 – 18.20	18.00 – 21.20	Parallel session: ZOOM meeting room 1 ZOOM meeting room 2



Plenary session: 25 September 2020

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08.00 – 08.40	09.00 – 09.40	10.00 – 10.40	13.00 – 13.40	Keynote speaker 4: Associate Professor Chris Eames Climate change and STEM education
08.45 - 09.25	09.45 - 10.25	10.45 - 11.25	13.45 - 14.25	Keynote speaker 5: Professor Bill Atweh Flexible Education: A New Paradigm for Education or Déjà vu?
09.30 – 10.20	10.30 – 11.20	11.30 – 12.20	14.30 – 15.20	Keynote speaker 6: Associate Professor Amelia T. Buan Lesson Study : A Sustainable Model for School- Based Professional Development for STEM Teaching
10.25 – 11.05	11.25 – 12.05	12.25 – 13.05	15.25 – 16.05	Keynote speaker 7: Assistant Professor Chokchai Yuenyong What should be provided for Assessment in STEM education?
11.10 – 11.50	12.10 – 12.50	13.10 – 13.50	16.10 – 16.50	Keynote speaker 8: Dr. Ismail Suardi Wekke Teaching and learning STEM: The Portrait of Religious School in Indonesia
13.00 – 16.20	14.00 – 17.20	15.00 – 18.20	18.00 – 21.20	Parallel session: ZOOM meeting room 3 ZOOM meeting room 4



Parallel session: 24 Sep 2020
ZOOM meeting room 1

Moderators: Assoc. Prof. Edna B. Nabua and Ms. Christine Mae Tecson				
Join Zoom Meeting https://kku-th.zoom.us/j/95795473542?pwd=Vkp2ZzlxUGxvK3V0d0FnR1VnMFZidz09 Meeting ID: 957 9547 3542 Passcode: iamstem20				
Time				Authors / Title
Bangkok/ Jarkata (UTC+7)	Philippines/ Taiwan/ Makassar (UTC+8)	Manokwari (UTC+9)	New Zealand (UTC+12)	
13.00 – 13.20	14.00 – 14.20	15.00 – 15.20	18.00 – 18.20	ID 001 Sanit Srikoon, Sujinta Khamngoen and Piyapong Monsang; Title; The comparison of Interest toward STEM educational approach between
13.20 – 13.40	14.20 – 14.40	15.20 – 15.40	18.20 – 18.40	ID035 Adones Cabural, Elesar Malicoban, Amelia Buan, Neal Alfie Lasta and Ivy Claire Mordeno Title; Development of student-based interactive physics activity (SIPA): basis of conceptual change in force and motion
13.40 – 14.00	14.40 – 15.00	15.40 – 16.00	18.40 – 19.00	ID034 Johanna Joy Katada, Katrina Roxas and Monera Salic-Hairulla Development of instructional kit in ecosystem using infographics
14.00 – 14.20	15.00 – 15.20	16.00 – 16.20	19.00 – 19.20	ID 049 Pairoh Sohsomboon, Chokchai Yuenyong, and Jiraporn Tupsai Understanding student’s idea in science classroom



Parallel session: 24 Sep 2020

ZOOM meeting room 1 (Continued)

Moderators: Assoc. Prof. Edna B. Nabua and Ms. Christine Mae Tecson				
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14.20 – 14.40	15.20 – 15.40	16.20 – 16.40	19.20 – 19.40	ID033 Vanjoreeh Madale, Monera Salic-Hairulla, Rica Mae Guarin and Amelia Buan Development of Contextualized STEM Lesson Plan on the Utilization of Sakurab (<i>Allium ampeloprasum</i>) for Grade 7 Learners
14.40 – 15.00	15.40 – 16.00	16.40 – 17.00	19:40 – 20.00	ID032 Rizza Mae Serino, Elesar Malicoban, Douglas Salazar, Amelia Buan and Ivy Claire Mordeno Flipped classroom: effects on grade 10 learners' achievement in classical mechanics
15.00 – 15.20	16.00 – 16.20	17.00 – 17.20	20.00 – 20.20	ID039 Romwarin Gamlunglert, Chokchai Yuenyong, Jirakan Yuenyong, Chalong Liemsingkorn, Niramol Rakthong, Chukiatt La-ongkaew, Wanida Bussabong, and Wanpen Prechatanasitha STEM Education pedagogy: Scaffolding for developing prototype innovation



Parallel session: 24 Sep 2020
ZOOM meeting room 1 (Continued)

Moderators: Assoc. Prof. Edna B. Nabua and Ms. Christine Mae Tecson				
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15.20 – 15.40	16.20 – 16.40	17.20 – 17.40	20.20 – 20.40	ID031 Mark Anduyan, Elesar Malicoban, Manuel Barquilla, Amelia Buan and Neal Alfie Lasta STEM Teaching Kit on Dual Nature of Light
15.40 – 16.00	16.40 – 17.00	17.40 – 18.00	20.40 – 21.00	ID030 Kim Diate, Ivy Claire Mordeno, Amelia Buan, Elesar Malicoban and Neal Alfie Lasta Utilization of Design Thinking in the development of a physics learning instrument to teach motion graphs
16.00 – 16.20	17.00 – 17.20	18.00 – 18.20	21.00 – 21.20	ID004 Sanit Srikoon, Piyapong Monsang, Wilaiporn Rittikoop and Sujinta Khamngoan A comparison of attitude toward STEM Educational approach between study program
16.20 -16.40	17.20 – 17.40	18.20 – 18.40	21.20 – 21.40	ID040 Romwarin Gamlunglert, Chokchai Yuenyong and Jirakan Yuenyong Developing primary school STEM education unit of COVID 19 through professional learning community (PLC)



Parallel session : 24 Sep 2020

ZOOM meeting room 2

Moderators: Ms. Odessa D. Aberilla and Prof. Manuel B. Barquilla				
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Time				Authors / Title
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13.00 – 13.20	14.00 – 14.20	15.00 – 15.20	18.00 – 18.20	ID029 Maria Theresa Tadena, Monera Salic-Hairulla and Edna Nabua Local based lesson on hydrologic cycle with environmental education integration: Designing learners ideas through STEM
13.20 – 13.40	14.20 – 14.40	15.20 – 15.40	18.20 – 18.40	ID005 Sanit Srikoon, Thitipong Lueangsuwan, Thidawan Unkong, Ruksit Suttipong and Wannakorn Phornprasert A survey of the social phenomena of marginalized community to design learning management of STEM Education
13.40 – 14.00	14.40 – 15.00	15.40 – 16.00	18.40 – 19.00	ID 046 Arum Adita and Chokchai Yuenyong STEM Learning Activity through Tempeh Making Process
14.00 – 14.20	15.00 – 15.20	16.00 – 16.20	19.00 – 19.20	ID 041 Anggiyani Ratnaningtyas Eka Nugraheni and Chokchai Yuenyong Developing the Smog Problem in Indonesia STEM Education Learning Activity



Parallel session : 24 Sep 2020

ZOOM meeting room 2 (Continued)

Moderators: Ms. Odessa D. Aberilla and Prof. Manuel B. Barquilla				
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14.20 – 14.40	15.20 – 15.40	16.20 – 16.40	19.20 – 19.40	ID 043 Banjong Prasongsap and Chokchai Yuenyong The activities of waste water from canteen in Lahansairatchadapisek: School STEM Education Lesson
14.40 – 15.00	15.40 – 16.00	16.40 – 17.00	19.40 – 20.00	ID028 Norzeda Angagao, Amelia Buan, Monera Salic and Edna Nabua Development of STEM +C Unit Plan in Soap Makin
15.00 – 15.20	16.00 – 16.20	17.00 – 17.20	20.00 – 20.20	ID 044 Prapawan Thongsri and Chokchai Yuenyong Explicit Nature of Science (NOS) in the Science Technology and Society approach of “Solar cell” in Physics Teaching



Parallel session : 24 Sep 2020
ZOOM meeting room 2 (Continued)

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15.20 – 15.40	16.20 – 17.40	17.20 – 17.40	20.20 – 20.40	ID 045 Wacharaporn Khaokhajorn, Chokchai Yuenyong and Jiraporn Tupsai Formulating Ice-cream Activity Utilizing STEM Education for Thai Secondary School Learner
15.40 – 16.00	16.40 – 17.00	17.40 – 18.00	20.40 – 21.00	ID027 Angel Bontilao, Monera Salic-Hairulla, Amelia Buan and Edna Nabua Development of a Training Design Manual on a Contextualized STEM Lesson in Teaching Biodiversity
16.00 – 16.20	17.00 – 17.20	18.00 – 18.20	21.00 – 21.20	ID026 Rica Mae Guarin Development of a STEM Lesson Plan in Meteorological Instrumentation
16.20 – 16.40	17.20 – 17.40	18.20 – 18.20	21.20 – 21.40	ID036 Douglas Salazar and Adawiya Amanodin Enhanced Salazar’s Grouping Method: Effects on Grade 10 Learners’ Achievement and Motivation Levels in Mathematics



Parallel session: 25 Sep 2020
ZOOM meeting room 3

Moderators: Asst. Prof Rica Mae B. Guarin and Mr. Mark Clifton Badlon				
Join Zoom Meeting https://kku-th.zoom.us/j/97744480717?pwd=K3R3MDJHOEVnU0pKTnFFV2lxVEVidz09 Meeting ID: 977 4448 0717 Passcode: iamstem20				
Time				Authors / Title
Bangkok/ Jarkata (UTC+7)	Philippines/ Taiwan/ Malaysia/ Makassar (UTC+8)	Manokwari (UTC+9)	New Zealand (UTC+12)	
13.00 – 13.20	14.00 – 14.20	15.00 – 15.20	18.00 – 18.20	ID025 Mel Jane Patayon, Monera Salic-Hairulla, Amelia Buan and Rica Mae Guarin Development of Contextualized STEM Lesson in Greenhouse Effect and Global Warming for Grade 7 Learners
13.20 – 13.40	14.20 – 14.40	15.20 – 15.40	18.20 – 18.40	ID024 Honey Joy Soleria, Monera Salic-Hairulla, Rizalina Gomez and Edna Nabua Development of STEM lesson plan on Genetic Engineering for grade 10 learners
13.40 – 14.00	14.40 – 15.00	15.40 – 16.00	18.40 – 19.00	ID011 Sanit Srikoon, Sujinta Khamngoen and Piyapong Monsang A comparison of interest toward STEM Education through ethnicity
14.00 – 14.20	15.00 – 15.20	16.00 – 16.20	19.00 – 19.20	ID023 Mc Rollyn Vallespin, Edna Nabua, Monera Salic-Hairulla and Ma. Cecilia Almeda Development of 7E lesson plan on gas laws



Parallel session: 25 Sep 2020

ZOOM meeting room 3 (Continued)

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14.20 – 14.40	15.20 – 15.40	16.20 – 16.40	19.20 – 20.40	ID012 Sanit Srikoon, Piyapong Monsang and Sujinta Khamngoen The comparison of attitude toward STEM educational approach between ethnicity
14.40 – 15.00	15.40 – 16.00	16.40 – 17.00	19.40 – 20.00	ID022 Adelfa Silor, Enrico Riconalla, John Alan Lee, Osuardo Pabatang Jr. and Dexter Nario Content and Thematic Analysis of Sexism in Teacher Education New Curriculum, Implementors and Stakeholders
15.00 – 15.20	16.00 – 16.20	17.00 – 17.20	20.00 – 20.20	ID021 Larry Estalane, Amelia Buan, Roxan Consolacion and Myrna Lahoylahoy Design thinking as a process in the development of project-based learning activity for a remote math classroom
15.20 – 15.40	16.20 – 16.40	17.20 – 17.40	20.20 – 20.40	ID 046 Supawadee Sarawan, Chokchai Yuenyong, and Chris Eames Framework of critical thinking STEM model as a guideline of developing STEM education learning activities
15.40 – 16.00	16.40 – 17.00	17.40 – 18.00	20.40 – 21.00	ID 053 Sukanya Sutaphan and Chokchai Yuenyong Using Processes design for STEM education learning activity: intervention STEM-PK, Pedagogical Knowledge to enhance students' creativity



Parallel session: 25 Sep 2020

ZOOM meeting room 3 (Continued)

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16.00 – 16.20pm	17.00 – 17.20pm	18.00 – 18.20pm	21.00 – 21.20pm	ID 047 Chontawat Meedee and Chokchai Yuenyong Examining Thai science teachers' existing ideas about scientific explanation of electrochemistry
16.20 – 16.40	17.20 – 17.40	18.20 – 18.20	21.20 – 21.40	ID037 Everlita Canalita, Amelia Buan and Ivy Claire Mordeno Capability Building in Teaching Science through Inquiry Based Learning



Parallel session: 25 Sep 2020

ZOOM meeting room 4

Moderators: Asst. Prof. Elesar Malicoban and Assoc. Prof. Monera A. Salic-Hairulla				
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13.00 – 13.20	14.00 – 14.20	15.00 – 15.20	18.00 – 18.20	ID 048 Pratuengsook Maneelam, Chokchai Yuenyong and Peter Charles Taylor STEAM Education in Western Australia: Lesson Learnt from School Observation
13.20 – 13.40	14.20 – 14.40	15.20 – 15.40	18.20 – 18.40	ID017 Christia Baltar Using Principal Component Regression Analysis to Explore Professional Competence of Mathematics Teachers
13.40 – 14.00	14.40 – 15.00	15.40 – 16.00	18.40 – 19.00	ID018 Sanit Srikoon and Thitipong Lueangsuwan The study of interest in STEM content influencing on attitude toward STEM
14.00 – 14.20	15.00 – 15.20	16.00 – 16.20	19.00 – 19.20	ID002 Sanit Srikoon, Areewan Khemkhan and Ronnachit Apaivatin The Effects of the Research-Based Learning Integrating with Cognitive Training and Conventional Teaching Model on the Students' Learning Outcomes in Science



Parallel session: 25 Sep 2020

ZOOM meeting room 4 (Continued)

Moderators: Asst. Prof. Elesar Malicoban and Assoc. Prof. Monera A. Salic-Hairulla				
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14.20 – 14.40	15.20 – 15.40	16.20 – 16.40	19.20 – 20.40	ID020 Sanit Srikoon, Netchanok Wichaino and Sirikorn Bamroongkit The effect of Problem-Based Learning integrated with cognitive training to enhance science learning outcomes
14.40 – 15.00	15.40 – 16.00	16.40 – 17.00	19.40 – 20.00	ID 050 Dorn Srisawat and Chokchai Yuenyong Guidelines for learning STEM education approach to enhance of creative thinking of dyer assembly students
15.00 – 15.20	16.00 – 16.20	17.00 – 17.20	20.00 – 20.20	ID 051 Prajak Boosdee, Sukanya Sutaphan, and Chokchai Yuenyong Strategies of scaffolding students to learn STEM education
15.20 – 15.40	16.20 – 16.40	17.20 – 17.40	20.20 – 20.40	ID 052 Pornchai Chinsa, Jiraporn Tupsai, and Chokchai Yuenyong The STEM education unit of making capacitors: Case of flexible polyaniline-carbon nano fiber supercapacitor electrode
15.40 – 16.00	16.40 – 17.00	17.40 – 18.00	20.40 – 21.00	ID 049 Douglas Salazar and Adawiya Amanodin Enhanced Salazar's Grouping Method: Effects on Grade 10 Learners' Achievement and Motivation Levels in Mathematics



Parallel session: 25 Sep 2020

ZOOM meeting room 4 (Continued)

Moderators: Asst. Prof. Elesar Malicoban and Assoc. Prof. Monera A. Salic-Hairulla				
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16.00 – 16.20pm	17.00 – 17.20pm	18.00 – 18.20pm	21.00 – 21.20pm	ID003 Sanit Srikoon, Sudaporn Tippala and Sirikorn Bamroongkit The effect of open approach integrated with cognitive training on mathematics learning outcomes
16.20 – 16.40	17.20 – 17.40	18.20 – 18.20	21.20 – 21.40	ID038 Amelia Buan, Everlita Canalita, Crispin Jr Ebal, Maria Rebecca Flores, Neal Alfie Lasta, Mary Joy Luga, Grace Liwanag, Ivy Claire Mordeno, Alma Gloria Silva and Dante Joma Zabala Improving Science and Mathematics Teaching Practices Through Community of Learning

