

ISEC 2009 PROGRAMME

Day 1 (24 November 2009)

0800-0830	REGISTRATION			Foyer outside LT 1
0830-0930	OPENING CEREMONY			LT1, LT2 and LT12
0930-1000	TEA BREAK			Foyer outside LT 1
1000-1100	Keynote 1 - Larry YORE (Science literacy for all - More than a logo or rally flag)			LT1, LT2 and LT12
1100-1200	Keynote 2 - Reinders DUIT (Conceptual change - Still a powerful framework for improving the practice of science instruction)			
1200-1300	LUNCH			Plaza Level (Rainforest Café)
1300-1430	CONCURRENT SESSIONS 1			
Concurrent 1.1 (Paper- Science for the Early Years)		Author	Co-authors	Room
A090428	Effectiveness of word search puzzles for observation skills	Kheng ANG*	-	TR 51
A090348	Children's conceptions of matter from a cognitive, socio-cultural and science education perspective	Anu JOY	-	
A090452	What does science look like for 3 and 4 year old children?	Elaine BLAKE	Christine HOWITT	
Concurrent 1.2 (Paper- Science in Informal Setting)		Author	Co-authors	Room
A090152	Solar water fountain project	Flavian Brian FERNANDEZ*	-	TR 52
A090375	Characteristics of image about science teaching-learning depicted on science television educational cartoon 'Magic school bus': Focus on the analysis of teacher-student interaction	Sohye PARK	-	
A090462	Information of biotechnology: Taiwanese students' sources and trust	Kuan-Chiao CHIEN	(2) Hsin-Mei LI (3) Chen-Yung LIN	
Concurrent 1.3 (Paper - Assessment and Evaluation)		Author	Co-authors	Room
A090266	A study on the languages of sciences in Singapore classrooms	Hui Yueh FOO*	-	TR 53
A090032	Developing and validating performance-based assessment tasks in science: A how-to guide	Gouranga SAHA	-	
A090335	Evaluation and content analysis of a physics textbook	Narges SARIKHANI	(2) F. AHMADI (3) M. R. EMAMJOMEH	
Concurrent 1.4 (Paper - Curriculum, Instruction and Policy)		Author	Co-authors	Room
A090139	TfU Sparks!	Abu Bakar FARID*	(2) Li Heong TEH-YAU (3) Sharizah Md AMIN	TR 54
A090519	Infusing the environmental elements into the junior secondary school curriculum: A school-based experience in Hong Kong	Leo Sun-wai FUNG	-	
A090318	Design-n-make projects in Design and Technology education: Investigating technology components and students' creativity	Johnson Voon Ping WONG	Che Ming YAU	

Concurrent 1.5 (Paper- Science Literacy and Nature of Science)		Author	Co-authors	Room
A090447	Teaching physics by a humanistic approach	Boon Hian TAN*	-	TR 56
A090431	Effect of an explicit-reflective approach on the teaching of nature of science in the study of chemical equilibrium	Melek Nur ERDOĞAN	(2) Fisun ÖZBILGIN (3) Fitnat KÖSEOĞLU	
Concurrent 1.6 (Paper - Innovation and new technologies in science education)		Author	Co-authors	Room
A090189	Using Video Paper Builder as an effective tool for achieving understanding in the learning of organic chemistry	Mui Keow LEE*	-	TR 57
A090021	Using simulations in science: An exploration of pupil behaviour	Susan RODRIGUES	-	
A090363	Learning chemistry with the game "Legends of Alkhimia": Pedagogical and epistemic bases of design-for-learning and the challenges of boundary crossing	Yam San CHEE	(2) Daniel Kim Chwee TAN (3) Ek Ming TAN (4) Ming Fong JAN	
Concurrent 1.7 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090193	TRIZ - Inventive problem solving with high school students	Tyng Yong CHEW*	-	TR 58
A090444	Collaborating with 'real' scientists to increase pre-service early childhood teachers' science content knowledge and confidence to teach science	Christine HOWITT	-	
A090475	Thai student teachers' struggles in and learning about teaching science through student teaching and action research	Chatree FAIKHAMTA	-	
Concurrent 1.8 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090102	Improving student science learning through modified writing-to-learn strategy	Hang Chuan TENG*	Jashanan KASINATHAN	TR 60
A090129	Development of a chemistry educational card game for meaningful learning in the classroom	Don Shyh Yuan YEO	-	
A090118	An inquiry approach in learning science with engaging web-based multimedia resources	Khang-Miant SING	(2) Charles CHEW (3) Jack LI	
Concurrent 1.9 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090172	Deepening pupils' understanding of wheel and axle through station-based learning	Tayeb RAJIB*	Puwen WU	TR 62
A090092	Cooperative learning in biology: Enhancing the academic, community, and spiritual lives of second year seminarians of Our Lady of Guadalupe Minor Seminary	Noel NOBLE	-	
A090240	An introduction to analysis of science knowledge construction in an asynchronous discussion forum	Kok Pin CHIA	Kueh Chin YAP	
Concurrent 1.10 (Workshop)		Author	Co-authors	Room
A090498	The boar hunters : Indigenous knowledge in the wild	Chorng-Jee GUO	(2) Shu-fang CHEN (3) N. Y. SHIEN	Science Education Lab II (7A-B1-07)
Concurrent 1.11 (Workshop)		Author	Co-authors	Room
BY001	Creating opportunities for classroom assessment	Benny YUNG	-	LT2
Concurrent 1.12 (Workshop)		Author	Co-authors	Room
A090194	Gameplay as motivation in learning of science-using chemistry card games	Rohizan Binte TALIB	(2) Antony Raj SASAYAH (3) Esther Lai Peng SETO	Biology Education Lab

Concurrent 1.13 (Exhibitors' Workshop)		Author	Co-authors	Room
EW001	Recent developments in potentiometric titration and ion analysis	Metrohm Singapore	-	Science Education Lab
1430-1500		TEA BREAK		Foyer outside LT 1
1500-1630 CONCURRENT SESSIONS 2				
Concurrent 2.1 (Paper - Science in the Early Years)		Author	Co-authors	Room
A090402	Dispelling the stereotypical myths of a scientist through an integrated literature approach	Francis Jude YAM*	Yin Kiong HOH	TR51
A090464	The Bamboo Project-a place-based early childhood science curriculum co-constructed with kindergarten teachers in northern Taiwan Tayal tribal village	Shu-Chen CHIEN	(2) Chao-Ti HSIUNG (3) Shu-Fang CHEN	
Concurrent 2.2 (Paper - Science in Informal Setting)		Author	Co-authors	Room
A090099	Informal astronomy and earth science education	Hoe Teck TAN*	-	TR52
A090200	The innovative approach of science and technology learning: A case of POWER TECH contest	Giann-Yeou CHEN	(2) Jon-Chao HONG (3) Min-Hsien LI	
A090340	The relationship of galleries and collections to science museum programs for schools	Patricia ROWELL	-	
Concurrent 2.3 (Paper - Assessment and Evaluation)		Author	Co-authors	Room
A090454	Exploring pupils' engagement in an inquiry based lesson through lesson study	Grace QUEK*	(2) Edwin WAN (3) Sabrina KAUR (4) Elaine CAI (5) Junhua CHEN (6) Veronica CHER (7) Sok Kheng YEAN (8) Nora TEO	TR53
A090145	Equivalence of science achievement tests with bilingual accommodation and English only format	Saw Lan ONG	-	
A090141	Defining a creative and co-operative science and technology education course	Ossi AUTIO	-	
Concurrent 2.4 (Paper - Curriculum, Instruction and Policy)		Author	Co-authors	Room
A090247	Toys @ Work: A Nanyang Primary School initiative	Yasmeen MOHAMAD *	Si Ming TAN	TR54
A090225	Art-based chemistry activities: Effect on students' conceptual understanding and attitude	Dennis DANIPOG	-	
A090473	Perception and understanding of secondary 1 students on force and pressure	See Kit FOONG	Chim Chai LIM	
Concurrent 2.5 (Paper - Science Literacy and Nature of Science)		Author	Co-authors	Room
A090465	An analytical frame to explore scientific literacy in intended curriculum: Bangladesh perspective	Md. Mahbub Alam, SARKAR*	-	TR56
A090366	Effects of explicitly designed lab activities on pre-service science teachers understanding of the nature of science (NOS) concepts	Hakan AKCAY	-	
A090371	Idea of 'heat' and students' understanding of earth phenomena	Xueli WANG	(2) Beaumie KIM (3) Misong KIM	

Concurrent 2.6 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090174	The effects of inquiry-based computer simulation on scientific thinking and conceptual understanding among Madrasah pupils	Faizah ABDUL RAHMAN*	(2) Rosli Subaidah (3) Noor Isham	TR57
A090109	Investigating the effects of animation on learning the concept of covalent bonds in high school chemistry	Bahereh ARABSHAHI	(2) A. BADRIAN (3) R. DABAGHIAN	
A090211	Enabling pupils to develop core constructs using PDA together with a learner centered pedagogy in science in Mauritian primary schools	Yashwantrao RAMMA	(2) Kah Chye TAN (3) Hyleem MARIAYE	
Concurrent 2.7 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090418	Science teachers' beliefs in using performance task as an authentic assessment tool: An exploratory study	Habib Mohamed MUHAMMAD MUBARAK*	-	TR58
A090362	Partnerships in professional development between secondary and tertiary institutions: 'The floating classroom' approach	Susan JOHN	(2) Tim STOJANOVIC (3) Chris WOOLDRIDGE	
A090289	What went wrong? A case study of hypothesis-verification process in investigative inquiry teaching	Mijung KIM	(2) Yong Jae JOUNG (3) Hye-Gyoung YOON	
Concurrent 2.8 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090214	The effect of classroom demonstrations based on conceptual change instruction on students' understanding of electromagnetism and electromagnetic induction	Chai Seng NEO*	Kueh Chin YAP	TR60
A090185	Using interactive lecture demonstration to promote active learning in a large science class: A case study of magnetic field	Pattawan NARJAIKAEW	-	
A090241	Case study approach to science knowledge construction and mis-construction in an asynchronous discussion forum	Kok Pin CHIA	Kueh Chin YAP	
Concurrent 2.9 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090258	The impact of investigative plans in science lessons to improve pupils' performance in answering experimental-based multiple-choice and open-ended questions	Noryati Ab RAHAMAN*	Genevieve Wai Har CHOW	TR63
A090248	Development and validation of a two-tier multiple-choice diagnostic instrument to evaluate secondary school students' understanding of electrolysis concepts	Ding Teng SIA	(2) David F. TREAGUST (3) A.L. CHANDRASEGARAN	
A090278	Development and application of Curious Note Program teaching-learning model (CNP Model) for enhancing the creativity of scientifically gifted students	Jongseok PARK	(2) Yohan HWANG (3) Eunju PARK (4) Jaeheon PARK	
Concurrent 2.10 (Symposium)		Author	Co-authors	Room
A090433	Inculcating an awareness of environmental issues in primary school pupils	James HAN*	-	TR64
A090434	Structures and curriculum to inculcate environmental awareness among primary school	James HAN	-	
A090435	Community involvement and industry partnerships in support of school wide programmes	Jamilah YACOB	-	
A090438	Educating for a sustainable future	Abdul LATIFF	-	

Concurrent 2.11 (Workshop)		Author	Co-authors	Room
BC001	Using fossils as evidence to help children understand evolutionary concepts, inquiry, and nature of science	Barbara CRAWFORD	-	Physics Education Lab (7-B1-32)
Concurrent 2.12 (Workshop)		Author	Co-authors	Room
A090226	Chemistry through children's eyes: hands-on activities for ages 9-11	Samantha TANG	-	Science Education Lab
Concurrent 2.13 (Exhibitors' Workshop)		Author	Co-authors	Room
EW002	LABQUEST- The Technology to Excel	Labquip	-	Biology Education Lab

Day 2 (25 November 2009)

0930-1030	Keynote 3 - Fouad Abd El-Khalick (Nature of science in science teaching and learning: The why, the what and the how)			LT1, LT2 and LT12
1030-1100	TEA BREAK			Foyer outside LT1
1100-1230	CONCURRENT SESSIONS 3			
Concurrent 3.1 (Paper - Science in Informal Setting)		Author	Co-authors	Room
A090479	St Andrew's river studies programme	Michael Kheng Guan LIM*	-	TR 51
A090403	Information literacy: No exception for the elderly residents	Feng ZHANG	-	
A090274	Engaging visiting school children in learning science and environmental issues: The pedagogical practice of botanic garden educators	Junqing ZHAI	-	
Concurrent 3.2 (Paper - Assessment and Evaluation)		Author	Co-authors	Room
A090142	An assessment of chemistry laboratory environment and student attitude and their relationships to student performance	Merlita MEDALLON*	-	TR 52
A090176	Impact of differentiated science instructions on students' learning experiences	Sok Yen LIM	(2) Yin Kiong HOH (3) Chen Chen TEO	
A090180	Equivalence of bilingual test booklet and English-only booklet	S.Kanageswari d/o SUPPIAH SHANMUGAM	Saw Lan ONG	
Concurrent 3.3 (Paper -Curriculum, Instruction and Policy)		Author	Co-authors	Room
A090334	Fostering higher order thinking through a thematic-based science curriculum	Chui Eng LEE *	(2) Kee Hoe TAN (3) Mei Li GOH (4) Amy LUI (5) Nur DIANA H	TR 53
A090261	The effectiveness of web-based problem-based learning for secondary school students	Shi Yun CHUA	-	
A090487	Journey from lecture into scientific discourse in primary-grade classroom	Pi-Chu KUO	Hsiao-Yun WU	
Concurrent 3.4 (Paper - Science Literacy and Nature of Science)		Author	Co-authors	Room
A090126	Cognitive factors that affect the translation of NOS understandings into teaching practice	Victor Kwok Chi LAU*	-	TR 54
A090411	Effectiveness of nature and history of science course on Turkish pre-service science teachers' understanding of the nature of science concepts	Behiye Bezir AKCAY	-	
A090186	Pre-service teachers' environmental knowledge, attitudes and behaviour	Mohamad Termizi bin BORHAN	Zurida binti Haji ISMAIL	
Concurrent 3.5 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090111	Using Facebook as a multi-functional online tool for collaborative and engaged learning	Daphne May May TAN*	(2) Magdalene Xiao Juan TAN	TR 56
A090224	The periodic table of videos	Samantha TANG	-	
A090294	Video as a flexible tool for supporting teacher and student talk in primary science classrooms	Kathrin OTREL-CASS	-	

Concurrent 3.6 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090199	Exploring the impact of achievement motivation on learning performance in science project design	Jon-Chao HONG*	(2) Jiann-Yeou CHEN (3) Min-Hsien LI	TR 57
A090442	The development of a nanotechnology attitude scale for K-12 Teachers	Yu-Ling LAN	-	
A090331	Pre-service training of chemistry teachers in Singapore	Kok Siang TAN	-	
Concurrent 3.7 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090220	Teachers' collaborative practice in inquiry-based lesson in chemistry	Siew Lee TENG*	(2) Hui Boon TANG (3) Widayah OTHMAN (4) Sarawanan s/o KASINATHAN (5) Chun Ming. TAN (6) Ying Zhi TEO	TR 58
A090291	Engaging with issues of HIV and AIDS in the science classroom	Shakila REDDY	-	
A090314	Role play as an innovative strategy to actively engage students in learning physics	Mohun CYPARSADE	(1) K Moheeput (2) S Carooppunnen	
Concurrent 3.8 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090352	Learning basic chemistry using experimental kits	Kulthida NUGULTHAM*	-	TR 64
A090190	Writing for publication: A tool for collaborative science education	Yu Min LYE	-	
A090223	Science as a tool for developing literacy and numeracy skills	Noraini ABBAS	Nurulhuda Binte ABBAS	
Concurrent 3.9 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090251	Investigating teaching and learning with lesson packages designed using the BSCS 5E instructional model	Su Fen GOH*	(2) Jalela ATAN (3) Tan Ying CHIN (4) Susan LeAnne SIM	TR 60
A090147	Illuminating mental representations - Use of gestures in teaching and assessing understanding of college biology	Yian Hoon LIM	Yew Jin LEE	
A090489	Promoting an integrated teaching approach to enhance student expectation in quantum physics classroom	Sura WUTTIPROM	-	
Concurrent 3.10 (Symposium)		Author	Co-authors	Room
A090327	Discourse, argumentation and questioning in science	Christine CHIN*	(2) Zahra binte AHMAD (3) Kelvin HO (4) Joan S K NG-CHEONG	TR63
Concurrent 3.11 (Workshop)		Author	Co-authors	Room
RD001	Key challenges of conceptual change oriented research and development	Reinders DUIT	-	LT2
Concurrent 3.12 (Workshop)		Author	Co-authors	Room
A090114	Workshop on inquiry in the everyday classroom @ Temasek Primary	Doris TAN	Fui Ming TOH	Science Education Lab
Concurrent 3.14 (Workshop)		Author	Co-authors	Room
A090413	Effective learning and talent development through science research projects for students	Tit Meng LIM	-	LT3
Concurrent 3.13 (Exhibitors' Workshop)		Author	Co-authors	Room
EW003	Seamless integration and one-stop solution to digital microscopy	Multi Universal Instrument	-	Biology Education Lab

1230-1330	Keynote 4- Barbara CRAWFORD (Moving science as inquiry into the classroom: Research to practice)			LT1, LT2 and LT12
1330-1430	LUNCH			Plaza Level (Rainforest Café)
1430-1600	CONCURRENT SESSIONS 4			
Concurrent 4.1 (Paper - Curriculum, Instruction and Policy)		Author	Co-authors	Room
A090179	To what extent can inquiry-based learning impact students' science achievements and learning from the Express and Normal (Academic) streams?	Judith Sok Cheng LIM*	(2) Siong Leong TAN (3) Oliver Osman JUNUS	TR51
A090015	Math and narrative: using math fiction in general education as a pedagogy for teaching math thinking	Fang-Mei LIN	Wann-shen HORNG	
A090108	Preparing urban (science) educators in East Asia: A necessary but neglected mandate	Yew-Jin LEE	-	
Concurrent 4.2 (Paper - Science Literacy and Nature of Science)		Author	Co-authors	Room
A090209	The seventh grade Thai students' understandings of the nature of science	Kanchana MAHALEE*	(2) Chatree FAIKHAMTA (3) Sudjit SANGUANRUANG	TR52
A090421	An investigation of Taiwanese graduate students' views toward the nature of science	Yu-Li CHIU	Chin-Chung TSAI	
A090323	Public attitudes towards science and technology in China	Hongbin GAO	-	
Concurrent 4.3 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090206	An Investigation of practical performance and attitude and interest towards laboratory work by using an online game designed based on Kolb's experiential learning cycle for a particular topic in chemistry (qualitative analysis)	Shasikumar Chandr SEGARAN*	M. LOSINY	TR53
A090370	Use of ICT in the teaching of chemistry	Yuen Tuck LIM	-	
Concurrent 4.4 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090374	Attitude toward 5T in 'T5' Design Model via D4LP	Karntarat WUTTISELA*	Saksri SUPASORN	TR54
A090426	Using MT as an alternative learning tool for deaf in learning science tool	Nadh DITCHAROEN	-	
A090259	Interactive Whiteboard Technology in primary science: What are teachers' beliefs and concerns about the discourse in their classrooms?	Rachel SHEFFIELD	Karen MURCIA	
Concurrent 4.5 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090104	Developing teacher identity, teacher confidence and classroom practice: The influence of a blended science teacher education programme	Neil TAYLOR*	Susan RODRIGUES	TR56
A090173	Developing a research-based model for enhancing PCK of secondary science teachers	Syh-Jong JANG	-	
Concurrent 4.6 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090268	A study on the effectiveness of brain-based teaching strategies in enhancing pupils' learning of chemical bonding	Kim Woon LOH*	-	TR57
A090286	Use of concept cartoons as a strategy to address pupils' misconceptions in Primary 4 science topic on 'Matter'	Farah Aida RAHMAT	-	
A090298	Use of concept mapping to facilitate deep learning in Biology	Cheng Wai YIP	-	

Concurrent 4.7 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090287	Effectiveness of the 5E Learning Cycle Model and POE [Predict, Observe, Explain] teaching & learning approach in the acquisition of abstract science concepts and the level of achievements among middle-to-low ability Primary 6 students.	Agnes LIM*	(2) Jalene LIM (3) Adrian LIM	TR58
A090339	Engaging pupils in an inquiry-based science lesson through questioning	Grace QUEK	-	
A090381	The explicit teaching of process skills questions to improve pupils' answering techniques	Noor Aishah ABU BAKAR	(2) Manickam SUMATHI (3) Zahrah Mohd ABBAS (4) Cassandra CHOO	
Concurrent 4.8 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090416	Paper use of IT-based tools in the teaching of research at the Secondary Level	Wen Pin LEOW*	-	TR60
A090440	Teaching questioning in high ability primary science classes	Lih Min Samuel YAP	Mary Anne HENG	
A090446	Alternative assessments in Chemistry	Ming Lee LIAU	-	
Concurrent 4.9 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090313	Developing a diagnostic instrument in acid-base equilibria	Ming Ming TAN*	Daniel Kim Chwee TAN	TR62
A090187	International curriculum reform and views on genetics education	Michael LINICH	-	
A090272	Fundamental thermal concepts: An evaluation of Year 11 students' conceptual understanding in everyday contexts	Hye-Eun CHU	(2) Daniel Kim Chwee TAN (3) Lee Choon LOH (4) David F. TREAGUST	
Concurrent 4.10 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090383	Applying a hybrid learning model and cooperative learning for engaged learning in chemical education	Swe Swe MIN*	Raymond Mun Fie TSOI	TR64
A090417	Application of concept-based learning in a large undergraduate biology classroom	Supaporn PORNTRAI	-	
A090368	What are students up to during problem solving?	Shien CHUE	Daniel Kim Chwee TAN	
Concurrent 4.11 (Workshop)		Author	Co-authors	Room
LY001	Writing to become a member of the science education discourse community: Bridging the gap between authors and readers (participants of this workshop are to bring their own laptops with the 30-day free trial of EndNotes downloaded)	Larry YORE	Sharyl A. YORE	Physics Education Lab (7-B1-32)
Concurrent 4.12 (Workshop)		Author	Co-authors	Room
A090304	Spaceward bound Australia with NASA 2009	Nicolette HILTON	-	Biology Education Lab
Concurrent 4.13 (Exhibitors' Workshop)		Author	Co-authors	Room
EW004	Learning science tomorrow's way, today	Vivanotion	-	Science Education Lab
1600-1630	TEA BREAK			Foyer outside LT1
1630-1800	CONCURRENT SESSIONS 5			
Concurrent 5.1 (Paper - Curriculum, Instruction and Policy)		Author	Co-authors	Room
A090344	A comparative study between Iran, Japan, England and Pakistan high school Chemistry textbooks	Alireza ASSAREH*	(2) Rasol Abdullah MIRZAIE (3) Ashraf ANARAKI	TR 51
A090365	Teaching about climate change: Science teachers' experiences and challenges	Joan CHAMBERS	-	
A090423	A preliminary investigation of the relations between elementary students' interested science topics and their science achievement	Sung-Tao LEE	Fu-Pei HSIEH	

Concurrent 5.2 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090480	Using i-phone in learning trails	Efizah SAMAT*	-	TR52
A090296	Talk about a walkabout: Pathways and potholes using ICT in science education	Julie CROUGH	(2) Jenni WEBBER (3) Louise FOGG	
A090445	Introducing students to authentic inquiry investigation through odor classification experiment with an artificial olfactory system, nose simulator	Niwat SRISAWASDI	-	
Concurrent 5.3 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090033	Lived experiences of teachers: A reflection on interpersonal relationship	Maria Antonia CAPILI*	-	TR53
A090508	A study on prospective teachers' attitudes towards internet	Yusuf YILMAZ	(2) Abdülkadir KARADENIZ (3) Ercan AKPINAR	
A090388	Science education-the common thread	Kay LEMBO	Susan JOHN	
Concurrent 5.4 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090499	Teachers' beliefs in the inquiry-based approach in the teaching of primary science	Kwee Lan ONG*	Mary Anne HENG	TR54
A090355	AC made visible by panning photography	Kah Hean CHUA	Jek Yaw ONG	
A090514	Measuring students' misconceptions in static electricity with online three-tier misconception test	Muhammed Sait GOKALP	Ali ERYILMAZ	
Concurrent 5.5 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090305	Impact of portfolio assessment on the academic achievement and attitudes of non - biology majors	Joy TALENS*	-	TR56
A090197	Science argumentation in situated blended learning	Min-Hsien LI	(2) Jon-Chao HONG (3) Jiann-Yeou CHEN	
A090203	Misconceptions about misconceptions	Anjana ARORA	-	
Concurrent 5.6 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090249	Physics at the theme park: Providing the authentic real-life experiential learning tool in enhancing students' understanding of conceptual and contextual applications of the laws of physics	Surianah ROSLI*	-	TR57
A090256	Is learning photosynthesis and respiration a problem? An evaluation of eight graders' understanding of photosynthesis and respiration in written test and oral reasoning	Helena NÄS	Christina OTTANDER	
A090497	Ethnoscience: Scientific knowledge and technology imbedded in the Taiwan five-year ceremony	Shu-fang CHEN	Chorng-Jee GUO	
Concurrent 5.7 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090321	A study on the gender dimensions and determinants of science aptitude of students across selected South East Asian countries	Ester OGENA*	-	TR58
A090191	Studying the relationship between students' schemas and their conceptions of electricity	Mehdi Mollanoori SHAMSI	(2) Mansour VESALI (3) Masoud SADROLASHRAFI	
A090210	Grade-7 students' views on science-technology-society	Wiangchai SANGTHONG	(2) Chatree FAIKHAMTA (3) Naruemon YUTAKOM	

Concurrent 5.8 (Workshop)		Author	Co-authors	Room
A090317	Concept cartoon, active assessment and puppets workshop	Jonathan Chong Wee OH	(2) Boon Eng NG (3) Cheng Hong KAY (4) Mohamed Nasir B. RAHMAT ALI	Biology Education Lab
Concurrent 5.9 (Symposium)		Author	Co-authors	Room
A090113	Inquiry in the everyday classroom@Temasek Primary	Chew Leng POON*	(2) Aik Ling TAN (3) Yew-Jin LEE (4) Shirley LIM (5) Doris TAN (6) Fui Ming TOH (7) Jamie CHONG (8) Intan MAZLINA A J	TR62
Concurrent 5.10 (Exhibitors' Workshop)		Author	Co-authors	Room
EW 005	Understanding safety cabinets	Esco Micro Pte Ltd	-	Science Education Lab
1800 onwards	CONFERENCE WELCOME DINNER			Plaza Level, Rainforest Café

Day 3 (26 November 2009)

0830-0930	Keynote 5 - Benny YUNG (Fairness and professionalism: What counts in school-based assessment?)			LT1, LT2 and LT12
0930-1000	TEA BREAK			Foyer outside LT1
1000-1130	CONCURRENT SESSIONS 6			
Concurrent 6.1 (Paper - Science Literacy and Nature of Science)		Author	Co-authors	Room
A090427	Thai pre-service science teachers' understanding about the nature of science	Akarat SREETHUNYOO*	Chatree FAIKHAMTA	TR51
A090501	An historical perspective approach: Development of 7th grade students' views about nature of science	Muharrem Basol OZCAN	Nihal DOGAN	
A090506	Let's look at the science from two windows: Pre-service science and maths teachers' views about the nature of science	Seda CAVUS	Nihal DOGAN	
Concurrent 6.2 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090439	Scientific argumentation: Cultural negotiations in science classrooms	Khadeeja IBRAHIM-DIDI *	-	TR52
A090253	Development of two-tier diagnostic test for examination of Thai high school students' understanding in acids and bases	Romklao ARTDEJ	-	
A090273	Status of science education in Arab countries	Saouma BOUJAOUDE	Zoubeida DAGHER	
Concurrent 6.3 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090208	The secondary students and teachers' mental models of chemical bonding	Nattharit KUATHAN*	(2) Chatree FAIKHAMTA (3) Sudjit SANGUANRUANG	TR 53
A090239	Implementation of paper-based T5 learning model to enhance student understanding: The case for low-achievement agriculture students in organic chemistry course	Saksri SUPASORN	-	
A090342	Study of project based method effect on physical chemistry laboratory teaching for undergraduate chemistry students	Rasol Abdullah MIRZAIE	(2) Alireza ASSAREH (3) Zinab NIKFARJAM (4) Arezo ASFA	
Concurrent 6.4 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090457	Development of students' scientific argumentation through question-type scaffolding	Sun Mi YUN*	Heui-Baik KIM	TR54
A090408	Tutees in the footsteps of Rutherford –Discovering the atom's model by analogy to the solar system	Jacob THIMOR	Taha MASSALHA	
A090486	Thai grade 11 students' conceptual understanding versus algorithmic problem-solving in quantitative chemistry	Chanyah DAHSAH	-	
Concurrent 6.5 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090260	Curriculum reform towards scientific literacy enhancement	Merle TAN*	-	TR 56
A090468	Learning through writing in biology by an online peer assessment activity	Jyh Chong LIANG	Chin-Chung TSAI	
A090504	The development of an attitude scale towards science experiments	Demet EROL	(2) Ercan AKPINAR (3) Bülent AYDOĞDU (4) Can ÖZTÜRK	
Concurrent 6.6 (Workshop)		Author	Co-authors	Room
AK001	Teaching about the nature of science: An overview	Foad ABD EL-KHALICK	-	Science Education Lab

Concurrent 6.7 (Workshop)		Author	Co-authors	Room
A090250	STaR kits to promote inquiry in primary and lower secondary science classrooms	Tan Ying CHIN	(2) Me Lan ONG (3) Hwee Leng SEK (4) Su Fen GOH (5) Susan LeAnne SIM (6) Doris TAN (7) Choon Hui LIM (8) Wan Ping GUI	TR 63
Concurrent 6.8 (Workshop)		Author	Co-authors	Room
A090387	International partnerships and science education	Kay LEMBO	Susan JOHN	TR58
Concurrent 6.9 (Workshop)		Author	Co-authors	Room
A090800	Science in informal settings	Lai Tuck CHONG	-	Biology Education Lab
Concurrent 6.10 (Workshop)		Author	Co-authors	Room
A090441	3-D mind maps: Real objects and real connections for young children	Christine HOWITT	Elaine BLAKE	TR60
1130-1300	POSTER SESSION			TR57A
1300-1400	LUNCH			Foyer outside LT 1
1400-1530 CONCURRENT SESSIONS 7				
Concurrent 7.1 (Paper - Science Literacy and Nature of Science)		Author	Co-authors	Room
A090510	Combined physics curriculum in Turkey	Sule DONERTAS*	-	TR51
A090511	The changing nature of school science in post-apartheid South Africa	Lesley LE GRANGE	-	
A090369	Knowledge advancement in environmental science through Knowledge Building	Jennifer YEO	Yew-Jin LEE	
Concurrent 7.2 (Paper - Innovations and New Technologies in Science Education)		Author	Co-authors	Room
A090347	Constructivist technology-aided instruction and its influence on pre-service science teachers' beliefs and understanding	Lorna Milly NAVAJA*	-	TR52
A090422	The application of social bookmarking to information searching and sharing in support of science learning on the Internet: A pilot study of behavioral patterns by use of log analysis	Chia-Ching LIN	Chin-Chung TSAI	
A090463	Taiwanese college students' arithmetic word problem solving: Evidence from eye movement	Meng-Lung LAI	(2) Meng-Jung TSAI (3) Chun-Hui LEE	
Concurrent 7.3 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090353	Pedagogical practices and science learning with a focus on sustainability for pre-service primary and middle years educators: directions and challenges	Kathryn PAIGE*	David LLOYD	TR53
A090999	Science and technology education for disadvantaged students in Thailand	Thasaneeya RATANAROUTAI	-	
A090500	Protraying preservice teachers' knowledge in science teaching: The strength and weakness in PCK (Pedagogical Content Knowledge)	Young-Shin PARK	-	
Concurrent 7.4 (Paper - Professional Development and Teacher Education)		Author	Co-authors	Room
A090373	Conceptual organisers in pre-service science education	Gregory SMITH*	-	TR54
A090469	The relationship between the environmental attitude of pre-service biology teachers and their interest in biological organisms	Heung-tae KIM	(2) Jae Geun KIM (3) Chankook KIM	

Concurrent 7.5 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090343	Study of macroscopic and microscopic aspects of entropy concept: Effect on creation misconception in chemistry teachers	Rasol Abdullah MIRZAIE*	Massomeh SHAHMOHAMMADI	TR56
A090488	Observation through different lens: Gifted-in-art students' perspectives of the biological world	Pi-Chu KUO	Yu-Ju HSIEH	
A090168	Multi-modal representations of science: What affordances are offered by interactive whiteboard technology?	Karen MURCIA	-	
Concurrent 7.6 (Paper - Science Teaching and Learning)		Author	Co-authors	Room
A090389	Analyzing teachers' instructional explanation to improve chemistry teaching	Liao LIANG*	-	TR57
A090242	Teachers' questioning techniques and their potential in heightening pupils' inquiry	Anne ROMAN	(2) Sunny Seng Tat HO (3) Siti Omairah OMAR (4) Hock Siang LOW	
A090310	The effects of drama lessons on pre-service science teacher's self-efficacy beliefs	Canan DÄ°Lek EREN	Zeynep Ä-ZBUDAK	
Concurrent 7.7 (Paper- Science Teaching and Learning)		Author	Co-authors	Room
A090205	What is the purpose of practical work in school science? What are the possible solutions?	Hoe Teck TAN*	-	TR 65
A090505	The effect of instruction using open-ended experiment technique on 6th grade students' understanding of basic science concepts	Ercan AKPINAR	(2) Demet, EROL (3) Özel Ege, LİSESI	
A090146	Development of scientific concepts in children's learning geometry: A Vygotskian, body-centered approach to literacy	SungWon HWANG	(2) Wolff-Michael ROTH (3) Mijung KIM	
Concurrent 7.8 (Symposium)		Author	Co-authors	Room
A090119	Teaching pharmaceutical chemistry	Grace Hui Ying CHUA*	-	LT2
A090120	Hands-on molecular model activities for teaching organic chemistry	Pei Chin LIEW	Choon Siew TAN	
A090121	An alternative assessment: Viva voce (oral examination) for analysing of spectroscopic data	Peh Ling PHEE-TAN	-	
A090122	Feedback practices in teaching and learning	Grace Hui Ying CHUA	-	
Concurrent 7.9 (Workshop)		Author	Co-authors	Room
A090346	Stimulating interest in science and developing science talents in Nanyang Girls' High School	Olivia CHEE	Christine LEE	LT3
Concurrent 7.10 (Workshop)		Author	Co-authors	Room
A090424	Alternative assessments in integrated sciences	Shan Shan LEE	Yann Shiou ONG	TR58
1530-1600	TEA BREAK (Good Bye and Networking)			Foyer outside LT1

POSTERS

	Title	Authors	Institution Name	Strand
A090516	Making environmental consciousness a way of life @ Zhenghua Primary School	(1) Min Chern LIM (2) Chwee Eng ONG (3) Herman ISMAIL (4) Li Lian TAN (5) Mijung KIM	Zhenghua Primary School	Curriculum, Instruction and Policy
A090328	A preliminary study on kindergarten children's science problem solving ability	(1) Ching-Yi CHANG (2) Jen-Mein KUNG (3) Shu-Hui LIN (4) Wen-Shin CHIU	Tajen University	Science for the Early Years
A090329	Playing out creativity - the science play in kindergarten	(1) Ching-Yi CHANG (2) Yen-Chou SHIH (3) Jen-Mein KUNG	Tajen University	Science for the Early Years
A090221	The "NanoWhat? Totally Tiny technology!" roadshow	Samantha TANG	University of Nottingham	Science in Informal Settings
A090028	An assessment training package based on the evaluation techniques and practices of the faculty members of Holy Trinity College of General Santos City	(1) Melissa Marie GETURBOS-BAUTISTA (2) Joie A. VELARDE (3) Tobias A. FLORES	Holy Trinity College of General Santos City	Assessment and Evaluation
A090236	Evaluating the content of physics textbook by the ROMÉY technique	(1) Narges SARIKHANI (2) Fatemeh, AHMADI (3) M. R. EMAMJOMEH	Shahid Rajaei University	Assessment and Evaluation
A090448	Using classroom performance system (CPS) as a form of assessment	Meng Teck CHEE	Ngee Ann Secondary School	Assessment and Evaluation
A090458	Views of the web users about what sections should be in physics education related websites at which priority	(1) Muhammed Sait GOKALP (2) Ali ERYILMAZ	Middle East Technical University	Assessment and Evaluation
A090470	Korean science teachers' perceptions of science practices	(1) Hyun Ju PARK (2) Dae Hong JEONG (3) Won Ho CHOI	Seoul National University	Assessment and Evaluation
A090517	Assessment of students' perception of the green chemistry laboratory learning environment	(1) Mageswary KARPUDEWAN (2) Zurida Hj ISMAIL (3) Norita MOHAMED	University Sains Malaysia	Assessment and Evaluation
A090280	The new explaining method of microstate in learning entropy	Jin Seo YOUNG	Seoul National University	Innovation and new technologies in science education
A090385	A study on the effectiveness of using UCC in science teaching and learning	(1) Seon Ok CHO (2) Jeong Woo SON (3) Yong Sun BYEON	GyeongSang National University	Innovation and new technologies in science education

A090406	Creating real experiments in teaching scientific subjects	(1) PHU CHI Hoa (2) Pham Viet THANG	Dalat University	Innovation and new technologies in science education
A090372	Standard views on models in science and science education	(1) Phil Seok OH (2) Sung Jin OH	Gyeongin National University of Education	Science Literacy and Nature of Science
A090386	The effect of introducing nanoscale science in high school curriculum on students' views about the STS	(1) JeeHye HONG (2) Hyun Jung KIM (3) Hun-Gi HONG	Seoul National University	Science Literacy and Nature of Science
A090117	Investigating practice teachers' mathematics teaching conception development	Chih-Yeuan WANG		Professional development and teacher education
A090257	Coteaching science as an in-service beginning teacher with a professor in Korea	(1) JaeYoung HAN (2) Sueun KIM	Chungbuk National University	Professional development and teacher education
A090332	A planning study on science-emphasis university of education in Korea	(1) Yong Jae JOUNG (2) Myeong Je LEE (3) Jinho BAE (4) Youngseok JHUN (5) Kyungmoon JEON	Gongju National University of Education	Professional development and teacher education
A090432	Integrating socio-scientific issues into science instruction: Taiwanese elementary science teachers' views and teaching practices	(1) Chao-Shen CHENG (2) Ying-Tien WU	National Taichung University	Professional development and teacher education
A090460	The effects of peers' reflective discussion about their classroom practice on science teachers' teaching	Sukkyoung SEONG	Seoul National University	Professional development and teacher education
A090219	A development of inquiry-based science and literacy instruction for upper elementary school students following the philosopher's heart principle	Punika PRAPUTTAKUN	Srinakharinwirot University	Science teaching and learning
A090262	Development of modeling modules and application to the gifted science high school students	(1) Eun-Kyung JANG (2) Ji-Hee HA (3) Seong-Joo KANG	Korea National University of Education	Science teaching and learning
A090263	The perception and reaction of the problem-emerging situation on the general chemistry laboratory	(1) Seong-Joo KANG (2) Hee-Young LIM (3) Eun-Kyung JANG	Korea National University of Education	Science teaching and learning
A090279	Factors of hindrance in visualizing molecules in sub-microscopic Level: Focusing on students' concepts of molecular motion of gases	(1) Kyung Jin MIN (2) Hee Kwon CHAE	Seoul National University	Science teaching and learning
A090336	Literature synthesis of inquiry learning and teaching of science:Lessons drawn and future direction	Yong Shoun TEK	National Junior College	Science teaching and learning
A090405	Creativity methodologies in performing scientific experiments	(1) Phu Chi HOA (2) Anh Bui TUAN	Dalat University	Science teaching and learning
A090451	Development and assessment of an inquiry-oriented experiments and instructional materials on diffraction and interference of light	Jeong Hwa YUN	Seoul National University	Science teaching and learning
A090456	An analysis of Physics students' difficulty to get the 'true' value by calculating the error and uncertainty in the period of pendulum experiment	Min Kyung LEE	Seoul National University	Science teaching and learning

A090461	High school students' abilities to construct tables in biology	(1) Yu-Hyang KIM (2) Young-Soo KIM	Seoul National University	Science teaching and learning
A090481	Development and application of animation and digital comic books for eco-friendly environmental education	(1) Kew-Cheol SHIM (2) Keum-Hyun SO (3) Sung-Hee YEAU	Kongju National University	Science teaching and learning
A090484	Gifted education program using scientific research for scientifically gifted youth	(1) Kew-Cheol SHIM (2) Kyoung-Ae PARK (3) Ji-Hyon KIL	Kongju National University	Science teaching and learning
A090485	Analysis and improvement of experiment on the diffusion rate of gases in high school chemistry textbook	Young Chae KIM		Science teaching and learning
A090521	Conceptual change of preservice teachers in inquiry experiment on molecular diffusion	(1) Jong Ho BAEK (2) Sukkyoung SEONG (3) Dea Hong JEONG	Seoul National University	Science teaching and learning