

Siam Physics Congress 2022 (SPC2022)

Thursday, June 23, 2022

S1 Physics Innovation: Oral presentation 1 - AMETHYST (10:45 AM - 12:00 PM)

time	[id] title	presenter
10:45 AM	[372] Digitalization of smell: development of chemical sensors from lab to startup business	Prof. KERDCHAROEN, Teerakiat
11:15 AM	[263] Colorimetric Sensor for Formaldehyde Detection Using Thiol-Functionalized Polydiacetylene and Zinc Oxide Nanocomposites	SIRIBUNBANDAL, Papaorn
11:30 AM	[186] Analysis and prediction of vegetation, croplands, and urbanization change in the philippines using data satellite images between 2001-2018	Mr CABASAL, Earon
11:45 AM	[189] UV germicidal rays working with timer and motion sensors	KOBKAM , Chatpong

S1 Physics Innovation: Oral presentation 2 - SAPPHIRE (10:45 AM - 12:00 PM)

time	[id] title	presenter
10:45 AM	[375] How to make important ideas in science learnable? A design case study of an educational robotics toolkit	SIPITAKIAT, Arnan (Roger)
11:15 AM	[85] A baby mobile as a STEM activity for promoting students' learning and interest in a simple harmonic motion	Dr SAMAIMONGKOL, Panupon
11:30 AM	[231] Using a pre-instruction math test to predict first-year physics exam results	POPANAO, Meta
11:45 AM	[167] How Does Student Skill on Interpreting Circular Motion Situation Change in an Online Physics Classroom?	Ms EAMBAIPREUK, Arunee

S1 Physics Innovation: Oral presentation 8 - AMETHYST (3:15 PM - 4:00 PM)

time	[id] title	presenter
3:15 PM	[94] Simulation Sensitivities Study to the Wind Characteristics over Uttaradit Rajabhat University at Lamrang Thungkalo campus with WRF model	Mr RAKTHAM, Chainarong Ms JITPRASERT, Jitranud Mr NANFUN, Thanakit
3:30 PM	[190] Night-time Human Mobility during Pandemic in the Philippines as Observed by VIIRS Satellite	GUIDO, Ryan Manuel
3:45 PM	[333] Flow dependence of handheld breath analyzer for body fuel utilization monitoring	SRICHAROEN, Chan

S1 Physics Innovation: Oral presentation 9 - SAPPHIRE (3:15 PM - 4:00 PM)

time	[id] title	presenter
3:15 PM	[185] ATTITUDES AND MOTIVATION OF INTERNSHIP STUDENTS TOWARDS PHYSICS, ASTRONOMY, AND SPACE SCIENCE SATELLITE TECHNOLOGY VIRTUAL INTERNSHIP PROGRAM	GUIDO, Ryan Manuel

3:30 PM	[103] Compact and easy-to-use smartphone based experimental set for studying simple and damped harmonic motion patterns.	Dr BUAPRATHOOM, Somporn
3:45 PM	[218] Development of Circular Motion Experiment Set with the Reduction of Friction for High School Physics Students	Mr PRATUMMA, Anucha SAPANKAEW, Mongkol BOONKHAM, Kitisak

Friday, June 24, 2022**S1 Physics Innovation: Oral presentation 1 - AMETHYST (9:00 AM - 10:15 AM)**

time	[id] title	presenter
9:00 AM	[370] Green energy applications under ANSEE project in Khao Yai National Park	MEEVASANA, Worawat
9:30 AM	[235] An estimation of net radiation from global solar radiation in the main regions of Thailand	TOHSING, Korntip
9:45 AM	[193] Carbon electrode for perovskite solar cell	BURIMART, Supavidh
10:00 AM	[187] The Relationship of Solar Activity to Western North Pacific Tropical Cyclone Frequency	Mr CACCAM, Eliezer

S1 Physics Innovation: Oral presentation 2 - SAPPHIRE (9:00 AM - 10:15 AM)

time	[id] title	presenter
9:00 AM	[265] Competition of SARS-CoV-2 Delta and Omicron variants: A modeling study	Mr CHAIAIAD, Chatchapat
9:15 AM	[152] Mathematical modeling of vaccination strategies for COVID-19 in Thailand	Ms ARBSUWAN, Nattawadee
9:30 AM	[173] Association of COVID-19 pandemic with meteorological and PM 10 in Thailand using LSTM models	WINALAI, Chanidapa
9:45 AM	[242] The determination of the effectiveness of mouth covering method while coughing using Background-oriented schlieren technique	CHANSAMPHAN, Phongthep KHAIOPHUENG, Watcharapath
10:00 AM	[262] Air convection demonstration via background-oriented schlieren technique	CHANSAMPHAN, Phongthep KHAIOPHUENG, Watcharapath SRIRATHAT, Pakorn

S1 Physics Innovation: Oral presentation 1 - AMRTHYST (11:30 AM - 12:00 PM)

time	[id] title	presenter
11:30 AM	[211] A model for estimating solar ultraviolet radiation for vitamin D photosynthesis	Ms LAIWARIN, Pradthana
11:45 AM	[44] A mathematical study on the effects of fluid density on the impact cavity formation	Mr CHOPARA, Sarith

S1 Physics Innovation: Oral presentation 2 - SAPPHIRE (11:30 AM - 12:00 PM)

time	[id] title	presenter
11:30 AM	[55] DEVELOPMENT OF NANOBUBBLES CARRIER IN DRUG DELIVERY SYSTEM OF MELATONIN ENCAPSULATED PARTICLE	Dr TEMPROM, Likit
11:45 AM	[133] Experimental and theoretical studies of spread factor of swine blood- and deionized water-drop on glass surface.	Ms RAWREENROJ, Suparat

S1 Physics Innovation: Oral presentation 8 - AMRTHYST (1:00 PM - 4:30 PM)

time	[id] title	presenter
1:00 PM	[51] A Modification of Newton's Cooling Law with Correlation to Fractional Derivative	Mr ANANTACHAISOPHON, Supphanat
1:15 PM	[99] Monte Carlo study of uncertainty propagation in Euler rotational kinematic equation	Mr NUTSATHAPORN, Chanasorn
1:30 PM	[101] Coordinates transformation method for pointer gauge reading by machine vision	Prof. JINUNTUYA, Noparit
1:45 PM	[146] The moment of inertia of a Mahogany seed	WORRASOOKWANICH, Bodin CHAIDET, Nattanon TADTA, Kritsada
2:00 PM	[117] Assessment of annual effective dose due to inhalation and ingestion of radon from groundwater at Kantharawichai District, Maha Sarakham Province	Mr ATYOTHA, Vitsanusat
2:15 PM	[251] Experimental Study of Tap Water Activated by Commercial Fruit and Vegetable Purifier	Dr DANGTIP, Somsak Dr NUPANGTHA, Wasin
2:30 PM	[257] The study of ring surface water wave generated by impacting droplets of using Free surface synthetic schlieren (FS-SS) technique.	SRIRATHAT, Pakorn CHANSAMPHAN, Phongthep PUSSADEE, Nirut
2:45 PM	[148] A study on optics: Invisibility properties of a lenticular lens	PRASUTHAM, Bangon HAYEEBEEELUNG, Tusmee WORAKITTHAMRONG, Thanabodi
3:15 PM	[62] The effects of hair-cell polarity on the dynamics of two coupled hair-cell bundles of the inner ear	NGAMPATTRAPAN, Tanawat
3:30 PM	[258] Modeling the navigation of a weaver ant in a simple, unfamiliar environment	CHAROONRATANA, Lattawat
3:45 PM	[239] Networks structure and entropy of stocks in the Stock Exchange of Thailand (SET)	JAROONCHOKANAN, Nawee
4:00 PM	[53] Fabrication of Radiative Cooling Matrix through Low-Cost Scalable Method and High Adaptability	WINTAKORN, Pongporn

S1 Physics Innovation: Oral presentation 9 - SAPPHIRE (1:00 PM - 4:30 PM)

time	[id] title	presenter
1:00 PM	[196] The Python Programming Code on Cloud Computing Service for the Stellar Photometry Astrophysics Teaching	KRITTINATHAM, Watcharawuth
1:15 PM	[65] The application of machine learning based on OpenCV for automatic digital dial gauge calibration	THAMPHET, Sirichanya
1:30 PM	[144] An Approach to The Development of Raman Spectroscopy System for Field Usage	SAEYEE, Thiti
1:45 PM	[288] DESIGN AND DEVELOPMENT OF THE TRIGGER SYSTEM FOR PROTON COMPUTED TOMOGRAPHY APPLICATIONS	PHUMARA, Passakorn Dr KOBDAJ, Chinorot
2:00 PM	[319] An Application of Autocollimator for Surface Profile Measurement	KAEWPHO, Surasak
2:15 PM	[323] A Design of Laser Triangulation System with Combined Diffuse and Specular Reflection Modes for Dull and Shiny Surface Measurements	Mr KERDKAEW, Chaturaporn
2:30 PM	[347] Online Monitoring and Control of 3D Printer with Open Source Software and Embedded Systems	Dr KETSUWAN, PIYACHON

2:45 PM	[332] Comparison of an Auto-Regressive with Exogenous Variable (ARX) Model to that of the Artificial Neural Network (ANN) in Simulating a Solar Vapour Compression Refrigeration System	Mr SIRIKAEW, Sattra
3:15 PM	[271] Investigation of plasma activated water in the growth of green microalgae (<i>Chlorella</i> spp.)	Ms SILAPASERT, Prangnapat
3:30 PM	[272] Utilization of DBD plasma in shelf-life extension for climacteric fruits	Ms UDTACHEE, Konkanok
3:45 PM	[371] The study of spin effects on the bouncing trajectory of a ball	Mr TUNGSATITCHAI, Ai
4:00 PM	[291] A model for estimating global spectral solar radiation under all-sky conditions for Nakhon Pathom station Thailand	KHAKHU, Sunisa
4:15 PM	[138] Hydrogen sulfide (H ₂ S) detection system in risky areas with real-time display via smartphone	Mr KITSAMRET, Wiphu Mrs TUEANWIRADET, Thanyathon Mr UTTAWAT, Titat