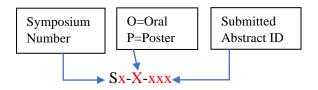
# 19th Siam Physics Congress

## **Presentation Code**



# **Oral Presentation List**

#### **Symposium 1: Physics Innovation and Education**

Code	Author/Speaker	Title
S1-KEY	Prof. Dr. Dheerawan Boonyawan	Air Plasma Spray and PlasOne: Top-to-Toe Cold Atmospheric Plasma Innovation
S1-INV1	Assoc. Prof. Dr. Mudtorlep Nisoa	Engineering Physics Research to Develop Microwave Heating Technology for Agricultural and Industrial Development
S1-INV2	Assoc. Prof. Dr. Suthira Taychakhoonavudh	Navigating through the Innovation Journey: Case Study of Baiya Phytopharm
S1-O-13	Patanin Ngaensupalak	Development of In Situ Diameter Measuring Device of 3D Printing Filament in Extruder using Image Analysis
S1-O-50	Haifa Kaseng	Investigate Students' Understanding of Newton's Third Law in Thai High Schools
S1-O-150	Somporn Buaprathoom	Experimental Set for Studying Charge-Discharge of Two RC Circuits Simultaneously by Automatically Displaying Electric Potential Graphs in Real Time.
S1-O-170	Danbhadin Wongphadungtham	Development of Portable Detection Device for Heavy Metal Contamination using Ultraviolet- Visible Spectroscopy
S1-O-202	chinapat mongkholsiriwattana	The Effectiveness of Hands-on Experience Peer-assisted Learning in Aviation Camps for Enhancing Basic Knowledge of Physics, Airplane Components, and Control
S1-O-258	natthagrittha nakhonthong	Investigating Factors Affecting Student Performance in Physics 2 Course by Analyzing the Number of Re-enrollment Students
S1-O-261	Piyoros Khondok	A Semi-automatic Demonstration Kit for Determination of The Static Friction Coefficient Using the Variable Incidence Tribometer Method
S1-O-316	Anyamanee Pattranont	A IOT Demonstration Kit Waste Separation Education for Middle School Student
S1-O-198	Thanakit chaocharoen	Using Internet of Things for Management Farm
S1-O-178	Pusanisa suwansil	Convex Lens Image Formation Kit: Enhancing Students' Learning Achievement for Pre-service Science Teachers
S1-O-263	Kittiwat Tangmongkollert	Home-lab Experiment of Beat and Resonance of Guitar's String via Phyphox
S1-O-278	Wittaya Kanchanapusakit	Measuring the Charge on An Object Suspended in An Electric Field
S1-O-283	Tippavan Hongkachern	Enhancing Physics Education: From Water Wave Experiments to Coastal Dynamics
S1-O-324	Sumalee Tientongdee	The Impact of Problem-based Learning Integrated with STEAM Education Light and Optics on Problem-solving Skill of Pre-service Science Teachers
S1-O-335	Thanakrit Trivuth	Investigation of Styrofoam Ball Stability in Acoustic Field

## **Symposium 2: Condensed Matters and Materials Physics**

Code	Author/Speaker	Title
S2-KEY	Assoc. Prof. Dr. Jakrapong Kaewkhao	Scintillation Material from Glass: Advantages and Application
S2-INV1	Assoc. Prof. Dr. Pongsakorn Kanjanaboos	Functional Materials and Scalable Processes for Low-Cost Perovskite Solar Cells and Radiative Cooling Films
S2-INV2	Assoc. Prof. Dr. Saichon Sriphan	Tribovoltaic Effect Based on Solid-Solid Interface: Transition from Emerging Mechanism into Potential Applications
S2-O-29	Peerapong Yamchumporn	The Analysis of Dielectric and Thermal Properties on Glass Oxide 30B <sub>2</sub> O <sub>3</sub> : 22.5V <sub>2</sub> O <sub>5</sub> : 22.5MoO <sub>3</sub> : 15TeO <sub>2</sub> : 10Li <sub>2</sub> O
S2-O-259	Rattachanok Chongprasit	Controlling the Phase and Properties of Sol-Gel Derived Vanadium Dioxide Thin Films through Rapid Thermal Annealing Parameters for Smart Window Application
S2-O-264	Yodchay Jompol	Graphene Photodetector: An Observation of the Negative Photoresponse
S2-O-270	Chotipach Phophueannoi	Observation of the Negative Photocurrent in Single-walled Carbon Nanotube Field Effect Transistor under Broad Spectrum of Light
S2-O-291	Karnthida Buranapanich	Colorimetric Detection of Sodium Metabisulfite
S2-O-292	Sitrathip Bunruang	Facile Synthesis of Copper-based Particles and Characterization
S2-O-227	Noppawit Sukpan	Fabrication of Carbon-based Perovskite Solar Modules
S2-O-114	Nakorn Henjongchom	Enhancing the Stability of All-Inorganic CsPbI <sub>2</sub> Br Perovskite Solar Cells through Surface Engineering with Formamidinium Halide Salt
S2-O-226	Yodchay Jompol	Radiative Cooling Materials for Energy-saving Greenhouse with Light Selectivity
S2-O-141	Saitanthong Wongsuban	The Effect of Phase Structure on the Optical Transmittance and Heater Characteristic of Indium Tin Oxide Thin Film on a Glass Substrate
S2-O-64	Tosapol Maluangnont	Gamma Irradiation Improves Charge Transport of Highly Insulating Graphite Fluoride
S2-O-186	Kittitat Lerttraikul	Realization of the G-peak Splitting in Graphene/VO <sub>2</sub> Heterostructures
S2-O-216	Pataiy Praiypan	Impact of Electron-phonon Coupling on Graphene Intercalation Compounds from Self Energy: Polynomial Models Selection
S2-O-314	Maryam	Synthesis and Characterization of TiO <sub>2</sub> Decorated Reduced Graphene Oxide Sheets for Energy Storage Application
S2-O-7	Sitichoke Amnuanpol	Disclinations in Vibration-induced Size Segregation
S2-O-14	Voranuch Thongpool	Synthesis, Characterization and Antibacterial Activity of CuO Nanoparticles via Green Synthesis Using Kratom Leaf Extract
S2-O-18	Wittaya Kanchanapusakit	Factors Influencing Rotation-counterrotaion Transition in a Swirling Granular System
S2-O-54	Supaluk Prapan	A Study on Thermoplastic/Carbon Fiber Interface Mechanism using Atomistic Calculation

## Symposium 3: Astronomy, Astrophysics and Cosmology

Code	Author/Speaker	Title
S3-KEY	Prof. Dr. David Ruffolo	Space Radiation Science and Technology
S3-INV1	Dr. Taweewat Somboonpanyakul	CHIPS1911+4455: A Cooling Flow in a Mering Cluster
S3-INV2	Dr. Saran Poshyachinda	National Astronomical Research Institute of Thailand (NARIT)
S3-INV3	Dr. Wiphu Rujopakarn	Thailand's Space Research and Space Technology Development Program
S3-INV4	Assoc. Prof. Dr. Piyabut Burikham	Thermodynamics of Black Hole in Certain Class of Weyl Geometric Gravity
S3-INV5	Prof. Dr. Burin Gumjudpai	Gravitational UV/IR Mixing with Matter Effects in Cosmology
S3-O-53	Thansuda Chulikorn	Confronting the Earth Detectability with the Microlensing Technique using the Gaia DR3 data.
S3-O-85	Napaporn A-thano	Investigating the Transit Timing of the Hot Jupiter WASP-43 b from a Decade of Multi-band Transit Follow-up Observations
S3-O-99	Tanagodchaporn Inyanya	Confronting Interstellar Extinction in the Line of Sight of Galactic Bulge with the VVV Survey
S3-O-101	Pakawee Surarittikul	Comparison of Parameter-based and Image-based Classification of Variable Stars with the Imbalance Database
S3-O-115	Manasanun Tanasan	Optical Transient Observation of SN2023wrk for Gravitational Wave Candidate Exclusion
S3-O-120	Muhammadalawee Sareh	Investigating Transit Timing Variations of a Hot Jupiter HAT-P-43b
S3-O-124	Orarik Tasuya	Astronomical Variable Objects Classification Based on Machine Learning from Survey Telescope Observations Data: A Comparative Study of ASAS-SN and GAIA DR2 Catalogs
S3-O-138	Supachai Awiphan	Variations in Time-Dependent Signals within a Photocentric Model of Transiting Exoplanet with Exomoon
S3-O-143	Napat Nabklang	Enhancing Machine Learning in Astrophysics: A Comparative Study of Numeric and Imagery Data Modalities
S3-O-22	Lucero Uscanga	Cosmic Masers from Dying Stars
S3-O-69	Malcolm Gray	Astrophysical Maser Flares by Saturation Catastrophe
S3-O-105	Bannawit Pimpanuwat	Improved 3D Model of High-frequency SiO Masers towards the AGB Star π1 Gru
S3-O-106	Sarith Chopara	Tracing Galactic Evolution: Comparing AGN-like Emissions with the Galactic Centre Emission
S3-O-126	Kritaporn Butsaracom	Explaining Cosmic Ray Electron and Positron Spectrum by AMS-02 using DRAGON2: Interpretation for Pulsar Wind Nebulae
S3-O-129	Supphakit Wiweko	Leptonic Spectral Energy Distribution Emission of Vela Pulsar Wind Nebulae from Fermi- LAT, Suzaku, and H.E.S.S. observations
S3-O-144	Jaruchit Siripak	Indirect Detection of Solar Captured DM in JUNO Experiment
S3-O-176	Montree Phetra	Cloud Overlapping for EVPA Flip in CSE with 3D Maser Polarization Simulation
S3-O-179	Nobuyuki Sakai	OH Maser Survey toward off-plane AGB Stars with 40-m Thai National Radio Telescope (TNRT)
S3-O-342	Praween Siritanasak	The Current Status of POLARBEAR and Simons Array experiment
S3-O-162	Nareemas Chehlaeh	Physical Properties of Globular Clusters NGC 288 and NGC 362 from the ACS Survey of the Hubble Space Telescope
S3-O-185	Sittipong Konkaew	Long-term Study of PSR J2129-0429 with the Thai National Telescope
S3-O-320	Krittapas Chanchaiworawit	Extragalactic and Time-domain Astronomy with SEA OtTeRS and CoLoRS
S3-O-249	Deepak Pandey	Study of Type II Radio Bursts Associated or Non-associated with Type III Radio Bursts
S3-O-309	Apoorva Srinivasa	Forecasting of Calcium-K Line Profiles of the Sun using Machine Learning Techniques

S3-O-337	Samaporn Tinyanont	Probing a Stripped-envelope Supernova Progenitor's Mass Loss History and Dust Formation with James Webb Space Telescope
S3-O-155	Yosita Loungrueang	Rotation Velocity of the Milky Way Galaxy Based on VLBI Astrometry
S3-O-84	Kraiwut Dakam	Linearly Interacting Barrow Holographic Dark Energy in Modified Cosmology
S3-O-210	Sakdipat Autthakunlakun	Axion Clouds around Black hole in f(R) Theory
S3-O-15	Ittipat Roopkom	The Fourth Dimension of Time and Gravity

# **Symposium 4: Accelerator and Synchrotron Radiation**

Code	Author/Speaker	Title
S4-KEY	Dr. Prapong Klysubun	Advanced Physics and Engineering Developments for Siam Photon Source II Particle Accelerator Complex
S4-INV1	Dr. Thakonwat Chanwattana	SLRI Ongoing Synchrotron and Accelerator Projects
S4-O-62	Pajeeraphorn Numanoy	Development of Quadrupole Magnet Prototype for Booster Synchrotron of Siam Photon Source II
S4-O-65	Netchanok Thiabsi	Error Analysis of Stretched Wire System for Magnetic Field Measurement of Quadrupole Magnets
S4-O-79	Nontaphat Promsena	Design of Tandem Accelerator for AMS Radiocarbon Dating
S4-O-83	Nawasin Chomchan	Design of Octupole Deflector for Accelerator Mass Spectrometer
S4-O-87	Jetsada Phomuen	Design of Faraday Cup for Compact Accelerator Mass Spectrometer
S4-O-94	Umput Suethonglang	Design of Electrostatic Einzel lens for Accelerator Mass Spectrometer
S4-O-175	Natthapong Saengwises	Optimization of SNICS Design for Accelerator Mass Spectrometry

## Symposium 5: Mathematics, Computational and Numerical Physics

Code	Author/Speaker	Title
S5-KEY	Assoc. Prof. Dr. Jatuporn Thongsri	Computer Simulation in Engineering
S5-INV1	Assoc. Prof. Dr. Papichaya Chaisakul	Finite-difference Time-domain Method for the Investigation of Silicon-based Photonic Integrated Circuits
S5-INV2	Assoc. Prof. Dr. Thanayut Kaewmaraya	Two-dimensional Materials as Cathode Host for Inhibiting Polysulfide Shuttling and Promoting Kinetics in Metal–Sulfur Batteries
S5-O-36	Chayapol Leardngammongkolkul	Comparison of Efficiency of Machine Learning Techniques for Prediction of PM 2.5 in Thailand
S5-O-184	Natthanidnan Sricharoen	Enhancing PM2.5 Data Collected Via Low-Cost Sensors in Chiang Mai, Thailand, Utilizing A Nonlinear Regression Modeling Approach
S5-O-228	Krittin Phornsiricharoenphant	Exploiting Quadratic Unconstrainted Binary Optimization for Solving Vehicle Routing Problem with Discretized Time Windows
S5-O-238	Maitai Dahlan	Analyzing Earthquake Occurrences: Applying Computational Methods for Time, Magnitude, and Direction by using Triangular Reaction Analysis of Earth's Crust.
S5-O-90	Songvudhi Chimchinda	Bright and Dark Solitons to the Perturbed Nonlinear
S5-O-168	prajya Tangjitsomboon	Determination of the Q factor and Resonance Frequency of RLC series Circuits using Various Electrical Waveform Inputs.
S5-O-220	Sarun Phibanchon	Exploring Weakly Ion-acoustic Waves in Plasmas with Physics-informed Neural Networks: A Study Based on the Schamel Equation
S5-O-232	Chainarong Taepanich	Chaotic Dynamics of Weakly Ion Acoustic Waves with Maxwellian Electron Distributions: The Role of Damping and Sinusoidal External Forces
S5-O-70	Thanasee Thanasarnsurapong	Investigation of Hydrogen Storage Potential in Monolayer Y2C MXenes using First-principles Calculations
S5-O-77	Suchanuch Sringamprom	Two-dimensional Penta-BeAs <sub>2</sub> as a Promising Gas Sensor by using First-principles Calculations
S5-O-311	Tisorn Na phattalung	Empirical and Numerical Analysis of the Dynamics of Euler's Pendulum
S5-O-5	Idris Sani Salisu	Application of Glauber Model in Identifying the Halo Structure of Neon Nuclei Cluster by Determining its Removal Cross Section

## Symposium 6: Quantum Physics and Technology

Code	Author/Speaker	Title
S6-KEY	Assoc. Prof. Dr. Areeya Chantasri	Quantum Measurement, Estimation, and Control, All Continuous in Time
S6-INV1	Asst. Prof. Dr. Pruet Kalasuwan	Exploring the Realm of Quantum Communication within the Context of Thailand
S6-INV2	Prof. Dr. Yoshiaki Yasuno	Contrast Augmentation of Optical Coherence Tomography by Computational Methods
S6-O-21	Kasidit Srimahajariyapong	Potentials and Limitations of Analog Quantum Simulators in Variational Quantum Algorithms (VQAs)
S6-O-23	Konstantin Zloshchastiev	Modern Quantum-statistical Approach to Open Systems
S6-O-47	Chayapon Thunsetkul	Quantum Approximation Algorithm with Efficient Resource Allocation for Loan-collection Optimization
S6-O-55	Chattamas Manoworakul	Parameter Calibration for Transmon Qubit Experiments using Sequential Monte Carlo Method
S6-O-174	Worapon Jenpanichwong	Ab Initio Investigation for Spin Coherence Dynamics of the Molecular Qubits at Room Temperature
S6-O-254	Nutchaya Palakachen	Temperature Effects on the Stability of the Hong-Ou-Mandel Dip
S6-O-322	Koraat Petchrat	Imaging and Finding Joint Probability Distribution with a Single-photon Avalanche Diode Camera and an Intensified Complementary Metal Oxide Semiconductor Camera
S6-O-145	Pongpol Parkprom	Aberration Correction of Optical Dipole-traps Array Utilizing Phase-modulated Holographic Technique
S6-O-284	Autpittayakul Aketasaeng	Optimization of Photolithography Exposure Dose for the Fabrication of Electrode Pad of Nb Based Josephson Junction
S6-O-74	Napoom Thooppanom	Real-time Vector Magnetometry with Quantum Diamond Sensor
S6-O-118	Kritsana Saego	Indirect Control of 13C Nuclear Spin in Nitrogen Vacancy Center in Diamond
S6-O-123	Masahiro Daibo	Development of an Elliptically Polarized Single-beam Optically Pumped Atomic Magneto-Gradiometer
S6-O-134	Perawit Boonsomchua	The Dynamics of Quantum Entangled Bipartite System via Feynman Path Integrals
S6-O-95	Apiwit Kaewko	Spectroscopic Characterization of Homemade Vapor Cells
S6-O-208	Prin Insang	Optimization of Magnetic Field for Cold Rubidium Atoms Preparation
S6-O-230	Kitisak Ketiam	Simulation of Rydberg Electromagnetically-induced Transparency for Pulsed RF Field Measurement
S6-O-253	Matachan Oupatam	Evaluating Quantum State Verification for d-Level Stabilizer States

# Symposium 7: Optical Physics and Technology

Code	Author/Speaker	Title
S7-KEY	Assoc. Prof. Dr. Nattaporn Chattham	Exploring Molecular Orientation in Smectic Liquid Crystal Films Induced by Mass Flux:
S7-INV1	Prof. Dr. C.K. Jayasankar	An Overview of Visible and Infrared Down- and Up-Conversion Luminescence Properties of
	·	Er <sup>3+</sup> -doped Glasses for Photonic Applications
S7-INV2	Assoc. Prof. Dr. Amarin Ratanavis	Development of Laser Systems and Applications
S7-INV3	Asst. Prof. Dr. Chat Teeka	Artificial Intelligence in Meta–Optics
S7-O-26	Patarawagee Yasaka	Preparation for the Microgravity Experiment on the International Space Station
S7-O-27	Nattaporn Mahingsa	Study of the Effect of Doping Dysprosium Ions in Borosilicate Glass using Microwave Techniques for White-light Application
S7-O-97	Narongrit Peansin	Laser Frequency Stabilization using Pound-Drever-Hall Technique
S7-O-163	Kanokwan Nontapot	Traceability and Standard Method for Medical Laser Calibration in Thailand
S7-O-223	D. A.	Characterization of Instrument Line Shape in a Laboratory Fourier Transform Infrared (FTIR)
37-0-223	Pornapa Artsang	Spectrograph Utilizing a Polka-Dot Beamsplitter
S7-O-158	Nuttawat Khammata	Investigation and Characterization of Beam Splitters for the Time-resolved Terahertz
37-0-136		Spectroscopy System at PCELL
S7-O-111	Supawit Sungthong	The Simulation of the Three-dimensional Optical Tweezers Pattern
S7-O-349	Pakorn Prajuabwan	The Effect of Airholes (Concave Lens) as The Light Scatter in Light Guide Plate Attached
57 0 347	1 akom 1 rajuaowan	with Red and Blue Light Emitting Diodes as Artificial Lighting for Plant Illumination
S7-O-196	Pakorn Prajuabwan	Application of Light Guide Plate and Light Emitting Diode for Plant Illumination by Using
2, 3 150	1 unom 1 rajune wan	Drilling Holes as the Light Scatter
S7-O-334	Witoon Yindeesuk	Comparing the Interferometry Applications between the Michelson Interferometer and the
		Sagnac Interferometer
S7-O-28	Pattraporn Saengka	Study of Physical and Optical Properties of Cobalt Oxide Doped Glass Prepared by
07.0.001		Microwave Melting Technique
S7-O-331	Suebtarkul Suchat	Photorefractive Effect in a Cracked Cerium Doped Barium Titanate Crystal
S7-O-35	Tibodee Mandee	Spectrum and Color Analyses for 3D Color Printing on Translucent Materials
S7-O-6	Titaporn Supasri	Simulation of Optical and Mechanical Design for the Atmospheric LiDAR system

## Symposium 8: Applied Physics and Technology, Biophysics, Nano-physics and others

Code	Author/Speaker	Title
S8-KEY	Assoc. Prof. Dr. Jessada Chureemart	Physics and Engineering in the Application of Magnetic Recording Technology
S8-INV1	Assoc. Prof. Dr. Soodkhet Projprapai	A Case Study of Suratec: From Research to a Startup
S8-INV2	Assoc. Prof. Dr. Ratchanok Somphonsane	Inducing Spin-Dependent Functionality in 2D Semiconductors
S8-O-17	Prasong Kessaratikoon	A Study on Environmental Radionuclides Transfer from Paddy Soil-to-Sangyod Rice Grain (TF Values) in Na Pakho Sub-District, Bang Kaeo District, Phatthalung Province, Thailand
S8-O-40	Warit Songsri	Rapid Portable Anemia Classifier for Non-invasive Detection using Optical Absorption Technique
S8-O-49	Supitsara Potpong	Highly Uniform Plasmonic Microstructures for Surface-enhanced Raman Scattering Applications
S8-O-58	Kuntapon Kongtago	The Impact of Soil Characteristics on Seismic Amplification in Tokyo: An Analysis Using Linear Regression models
S8-O-60	Chutimon Suebka	The Study of Calibration of Automatic Catch-weighing Instruments in Dynamic Mode According to EURAMET Calibration Guide No. 26
S8-O-108	Sangsanthiphon Withunyut	Development of Activated Carbon/Amine Composite Materials for Carbon Dioxide Capture
S8-O-137	Ekkanat Prawanta	Head-related Transfer Function for the Measurements of Otoacoustic Emissions Evoked by Localized Sound Sources
S8-O-140	Mussatorn Promachan	Unlocking the Potential for Fast Charging through Exploration of the Influence of Critical Current Density on the Morphology of Sodium Metal Batteries
S8-O-142	Parita Jumpaburee	Exploring the Effects of Different External Pressures on Sodium Deposition Behavior in Sodium Anode-Free Batteries through an In-Depth Investigation
S8-O-151	Teerapat Kotpatjim	Composite Membranes with Zn-MOFs for Potential Use in Electrochemical Devices
S8-O-4	Raymond J Ritchie	Transient Square Pulse-electric Field Induction of Monosex-male Reversal of the Eggs of Nile Tilapia ( <i>Oreochromis niloticus L.</i> , <i>Chitralada</i> )
S8-O-152	Anantachai Lakrathok	Optimization of the Comb-drive and Sense Actuator and Spring Geometries to Reduce Asymmetric Lateral Plasma Etching on the Cavity SOI Substrate for MEMS Fabrication
S8-O-153	Inthu-on Sutthiraksa	Finite Size Effect on the Reader Performance
S8-O-154	Amika Chinnajuk	Synthesis and Characterization of Polyethylene Terephthalate Wastes as a Linker Source in Copper-based Metal-organic Frameworks
S8-O-156	Taworn Intaro	Electrochemical Sensor for Detect Chlorpyrifos Pesticides in Vegetables
S8-O-160	Rungtawan Khamtawi	Advanced Micromagnetic Model of Reader in Hard Disk Drive
S8-O-161	Khanitta Yuanmae	Comparison of Bit Error Rate Calculation for HAMR: Atomistic Model Versus Multiscale Model
S8-O-165	Thanapon Sinkruason	The Optimal Condition of L10/A1 FePt Magnetic Nanodot for the Application in Heated Dot Magnetic Recording Technology
S8-O-166	Rattaphon Phoomatna	Temperature Impact Study on Signal to Noise Ratio in HAMR Technology
S8-O-177	Ratthaphong Rang-ngoen	Atomistic Model of MTJ for the Application of Spin-torque Nano-oscillator
S8-O-183	Ratchataphan Thammawat	Investigating the Deposition and Plating Behavior of Lithium in Li-Alloys Electrodes for Dendrite-Free Li Metal Batteries
S8-O-201	Jatuporn Puntree	Personalized Human Speech Cancellation using Synthesized Voice

S8-O-205	Tretased Amtungpong	Effect of Geometry on the Performance of a Rotary Ionic Engine with Rotating Electrode and Counter-Electrode
S8-O-219	Chayutpong Chaimongkol	Microseismicity Distribution in Chiang Mai Basin – Northern Thailand
S8-O-225	Kanokwan Duchthuyawat	Enhancing Battery Performance through Investigation of Critical Sodium Excess in Sodium Metal Batteries
S8-O-287	Naveen V. Kulkarni	Novel Cross-linked PVA-iron Composites: Properties and Application in Dye Sensitized Solar Cell
S8-O-341	Wiranya Chomphurach	The Effect of MgO Thickness on the Performance of Reader

## **Symposium 9: High Energy and Particles Physics**

Code	Author/Speaker	Title
S9-INV1	Asst. Prof. Dr. Norraphat Srimanobhas	Highlights from Flavor Physics and CP Violation conference 2024
S9-INV2	Dr. Pinit Kidkhunthod	Hard X-ray Absorption Spectroscopy (HXAS) Beamline at the New 3 GeV SPS-II
S9-O-45	Krittaporn Anukulkich	High Order Cumulants of Net-proton Number in Au+Au Collision at 14.5 GeV, 16.5 GeV, and 19.6 GeV by using UrQMD Model
S9-O-52	Zheng Zhao	Charmonium-like Tetraquark Mass Spectrum
S9-O-61	Warissara Tangyotkhajorn	Bandwidth Analysis for a Combined Horizontal and Vertical Correcting Magnet for Siam Photon Source II
S9-O-63	Ek-ong Atthaphan	Determining the Meson Clouds Contribution of Nucleon Electromagnetic Form Factor Using Dispersion Relation
S9-O-80	Kai Xu	Light and Hidden-charm Pentaquark States in Molecular and Pentaquark Pictures
S9-O-88	Jetnipit Kaewjai	Study of the Cluster Size of a Monolithic Active Pixel Sensor using a Sr-90 Source
S9-O-89	Apiwit Kittiratpattana	(Hyper)nuclei Production in Pion induced Reactions with p_lab=1.7 GeV/c at HADES
S9-O-102	suppawit polkong	Greybody Factor for a Massive Scalar Field in Schwarzschild and Reissner–Nordström Black Holes
S9-O-107	Woradon Sophonamphonsucha	Study of the Light Production and Transmission to Observe the Efficiency of the Range Counter Particle Detector for COMET Phase-alpha collaboration
S9-O-121	Sarawit Chindaratchakul	Simulation of the Detection of Light Ions Detection for a Luna Orbiter Detector to Evaluate Geometrical Acceptance and Estimate Detection Count Rate using GEANT4
S9-O-122	Wararat Treesukrat	Upper Limits of Dark Matter Mass in the Inert Doublet Model
S9-O-128	Wassachon Kammeemoon	Analysis of Solar Energetic Particles Directional Distribution from the 70th Ground Level Enhancement Event using Polar Neutron Monitor Data
S9-O-146	Punnawich Chokeprasert	Search for Additional Higgs Bosons in Fermionic Final States with the CMS Experiment
S9-O-199	Bpoon Prapaso	Effect of the Magnetic Field on Relativistic Runaway Electron Avalanche (RREA)
S9-O-221	Moh Moh Aung	Electromagnetic form Factors of Delta-N Transition
S9-O-233	Nopporn Poolyarat	Thailand Tokamak-1: The Correlation of Plasma Current, Electron Temperature and Electron Density during the 1 <sup>st</sup> Commissioning Period.

#### Symposium 10: Plasma, Radiation, Nuclear Physics and Technology

Code	Author/Speaker	Title
S10-KEY	Assoc. Prof. Dr. Somsak Dangtip	Capability Building and Networking for Fusion Technology through the First Tokamak of Thailand (TT-1)
S10-INV1	Assoc. Prof. Dr. Porramain Porjai	Cold Plasma Technology for Agriculture and Food
S10-O-252	Taweesak Jitsuk	Nonlinear Multi-Scale Interactions of MHD and Microturbulence in Magnetically Confined Plasmas
S10-O-257	Suriya Phongmoo	Cold Air Plasma: Emerging Technology for Agro-livestock Quality and Productivity Amidst Climate Change
S10-O-271	Watchara Kumkrong	Measurement of Thermal Effect on Signal Pulse Height of a Silicon PIN Prototype Detector Signal Pulse Height
S10-O-272	Sunruthai Burom	Development of Charge Sensitive Preamplifier for Space-based Silicon PIN detector on POISE
S10-O-280	Kanokkan Titipornpun	Health Risks due to Radon in Water and Indoor Radon in Dwellings Located in the Coastal Area of Bandon Bay, Kanchanadit District, Surat Thani Province, Southern Thailand
S10-O-318	Thiti Aungcharoen	L-I-H Transition Dynamics in Magnetically Confined Plasma
S10-O-346	Siriporn Angkunrat Auisui	Natural Radioactivity Concentration in Sediment Samples from the Coastal Area Bandon Bay, Kanchanadit District, Surat Thani Province

## **Special Scientific Seminar**

Seminar topic	Company/Agency		
	Company/Agency	Presenter	Code
Introducing Laboratory Furniture Products of Design Alternative Company	Design Alternative Company Limited	K. Sompong Vatinchai	SS-8
Instrumentation for Physics Laboratory by AML Technology Company Limited	AML Technology Company Limited	K. Assawin Ranusawud	SS-9
June 6	th, 2024 (Room: Orchid)		
Seminar topic	Company/Agency	Presenter	Code
Quantum Technology Research and Education Initiative in Thailand	Quantum Technology Research Initiative Collaboration (QTRic), Suranaree University of Technology	Assoc. Prof. Worawat Meevasana	QTRic
June 7th	, 2024 (Room: Krungsri 1)		
Seminar topic	Company/Agency	Presenter	Code
The Science and Technology Development Fund to enhance the accessibility of S&T instruments and S&T infrastructures	Thailand Science Research and Innovation (TSRI)	Nirawat Thammajak DPhil (Oxon.)	SS-1
THz Time-domain Spectroscopy Experimental Station at Chiang Mai University	Thailand Center of Excellence in Physics	Mr. Nuttawat Khammata	SS-2
Morning Coffee Break			
Hub of knowledge: Microwave heating and applications	Microwave Heating Hub, Walailak University	Prof. Dr. Mudtorlep Nisoa	SS-3
Advanced Surface Analysis by X-ray Photoelectron Spectroscopy (XPS)	Bara Scientific Co., Ltd.	K. Ekchai Somakastarin	SS-4
Thai Synchrotron: Infrastructure for Empowering National Research and Innovation	Synchrotron Light Research Institute (SLRI), (Public Organization)	Dr. Thakonwat Chanwattana	SS-5
Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly	China National Nuclear Corporation Overseas Ltd.	Dr. Chen Minfeng	SS-6
Progress of Advanced and Small Modular Reactor	Nuclear Power Institute of China	Mr. Zeng Chang	SS-7
	Instrumentation for Physics Laboratory by AML Technology Company Limited  June 6  Seminar topic  Quantum Technology Research and Education Initiative in Thailand  June 7th  Seminar topic  The Science and Technology Development Fund to enhance the accessibility of S&T instruments and S&T infrastructures  THz Time-domain Spectroscopy Experimental Station at Chiang Mai University  Hub of knowledge: Microwave heating and applications  Advanced Surface Analysis by X-ray Photoelectron Spectroscopy (XPS)  Thai Synchrotron: Infrastructure for Empowering National Research and Innovation  Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly	Alternative Company  Instrumentation for Physics Laboratory by AML Technology Company Limited  June 6th, 2024 (Room: Orchid)  Seminar topic  Quantum Technology Research and Education Initiative in Thailand  Seminar topic  Quantum Technology Research Initiative Collaboration (QTRic), Suranaree University of Technology  June 7th, 2024 (Room: Krungsri 1)  Seminar topic  Company/Agency  The Science and Technology Development Fund to enhance the accessibility of S&T instruments and S&T infrastructures  THz Time-domain Spectroscopy Experimental Station at Chiang Mai University  Hub of knowledge: Microwave heating and applications  Advanced Surface Analysis by X-ray Photoelectron Spectroscopy (XPS)  Thai Synchrotron: Infrastructure for Empowering National Research and Innovation (Public Organization)  Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly  AML Technology Company Limited  Quantum Technology Cantania (Push Company/Agency)  Thailand Center Of Excellence in Physics  Thailand Science Research and Innovation  Microwave Heating Hub, Walailak University  Bara Scientific Co., Ltd.  Synchrotron Light Research Institute (SLRI), (Public Organization)  Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly	Alternative Company  Instrumentation for Physics Laboratory by AML Technology Company Limited  **New York Company Limited**  **New York Company Limited**  **New York Company Limited**  **New York Company Limited**  **New York Company Agency**  **Presenter**  Quantum Technology Research and Education Initiative in Thailand Search and Education Initiative in Thailand Search and Education (OTRic), Suranaree University of Technology  **New York Collaboration (OTRic), Suranaree University of Technology  **Presenter**  **New York Collaboration (OTRic), Suranaree University of Technology  **Presenter**  **New York Collaboration (OTRic), Suranaree University of Technology  **Presenter**  **The Science and Technology Development Fund to enhance the accessibility of S&T instruments and S&T infrastructures  **Thai Inailand Science Research and Innovation (OXon.)  **Thai Time-domain Spectroscopy Experimental Station at Chiang Mai University  **Morning Coffee Break**  **Hub of knowledge: Microwave heating and applications  **Morning Coffee Break**  **Hub of knowledge: Microwave heating and applications  **Advanced Surface Analysis by X-ray Photoelectron Spectroscopy (XPS)  **Thai Synchrotron: Infrastructure for Empowering National Research and Innovation  **Presenter**  **Morning Coffee Break**  **Morning Coffee Break**  **Morning Coffee Break**  **Morning Coffee Break**  **Hub of knowledge: Microwave heating and applications  **Advanced Surface Analysis by X-ray Photoelectron Spectroscopy (XPS)  **Prof. Dr. Mudtorlep Nisoa Spectroscopy (XPS)  **Thai Synchrotron: Infrastructure for Empowering National Research Institute (SLR1), Pr. Thakonwat Chanwattana (Public Organization)  **Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly  **Thai Synchrotron: Infrastructure for Empowering Public Organization  **Develop Nuclear Energy and Nuclear Technology Applications: Actively, Safely, and Orderly  **That State Research Institute (SLR1), Pr. Thakonwat Chanwattana (Public Organization)  **That T

## **Poster Presentation List**

## **Presentation period:**

Poster session	Symposium	Posting time	Presentation time	Removal time
Session I	4, 6, 7, 8, 9 and 10	5 June, 14:00-18:00	6 June, 16:45-18:00	6 June, After 18:30
		6 June, 11:30-15:00		
Session II	1, 2, 3 and 5	7 June, 8:00-10:30	7 June, 10:45-12:00	7 June, After 13:00

## **Symposium 1: Physics Innovation and Education**

Code	Author/Presenter	Title
		Active Learning through the STEM Process using the Framecount Application to Participate
S1-P-41	Rinda Sutasri	in Experiments to Increase Learning Achievement in Free Fall Motion
		Hands-on Demonstrations of Subsurface Scattering Effects using Edible Material for
S1-P-59	Tiantada Hiranyachattada	Enhanced Realism Image Rendering
		The Development of Teaching and Learning Apparatus Based on the Simulation of Exoplanet
S1-P-67	Matchima Wangphimun	Detection by the Transit Method
S1-P-78	Phollakrit Suphaphon	TTEPS: Transpiration and Transportation Driven Electrokinetic Power Source
S1-P-103	Nitat Sripongpun	Machine Learning for Predicting Projectile Motion with and without Air Resistance
		Management of Experiential Learning for Third-year Physics Education Students: Hands-free
S1-P-130	Preedaporn Suwandee	Glider.
		Design and Development of STEAM Education using Tangram Puzzles for Learning
S1-P-169	Nisakorn Kaewmai	Management in the Topic of Center of Mass
		Study and Testing of a Simplified Protocol Design for Hashed Data Transport via Quantum
S1-P-190	Porrutai Chinkrnjanaroj	Channels to Enhance Security in Personal Data Authentication Process
		Enhancing Scientific Literacy in Alignment with PISA Framework through DIY Dynamo-
S1-P-192	Kitisak Boonkham	Based Learning Activities in Wind Energy Production for Science High School Students
		An Alternative Approach to Fostering Critical Thinking, Creativity, and Technology
		Integration in Twenty-first Century Education: A Case Study of Mahidol Wittayanusorn
S1-P-193	Thanyanan Somnam	School
		Comparing Half-Life: Data from Radioactive Dice Experiment Versus Mathematical Models
S1-P-203	Kongkeat Khongpagdee	from New Approach
		Propagation of Uncertainty with Arbitrarily Distributions by Kernel Density Estimator
S1-P-211	Noparit Jinuntuya	Method
S1-P-215	Chanakan Grosseau	Effectiveness of Integrated Learning Activity (U-tube Activity) in Laboratory
		Using Machine Learning to Predict the Relation between Numbers of Particles and Sound
S1-P-236	Chainarong Taepanich	Intensity and Frequency

		Development of an Apparatus for 1- and 2-dimensional Collisions Experiment using
S1-P-243	Sumaman Buntoung	a Smartphone
		Development of Hall Effect Sensor with Raspberry Pi Pico Microcontroller Board for Low-
S1-P-269	Pattareeya Damrongsak	cost Magnetic Field Measurement System
		A Simple and Low-cost Experimental Setup based on RP2040 Microcontroller for the
S1-P-275	Darapan Chotiphun	Investigation of Newton's Law of Cooling
S1-P-332	Yongyut Kaewjumras	Employing LVDT Demonstration Kit for Cylinder Size Measurement in Engine
		Development of a Robotic Dust Cleaner Controlled using Arduino Microcontroller for Solar
S1-P-347	Sutthipoj wongrerkdee	Panel Maintenance
		Assessing Pre-service Science Teacher's Understanding of Physics Laboratory Skill in
S1-P-356	Arunee Eambaipreuk	Measurement and Uncertainty

# **Symposium 2: Condensed Matters and Materials Physics**

Code	Author/Presenter	Title
		The Effect of Chitosan on the Structural, Physical, and Chemical properties of
S2-P-30	Natchapon Rattanaanothaikul	Polyvinylpyrrolidone Matrix for the Application in Dissolving Materials
		Transparency and Conductivity with Joule Heating Temperature of Indium Tin Oxide Thin
S2-P-44	Natchanon Moeikhunmak	Film on a Glass Substrate Prepared by RF-sputtering
S2-P-56	Jakkree Boonlakhorn	Enhancing Permittivity While Reducing Loss Tangent in Ni <sup>2+</sup> -doped CCTO Ceramics
		Thermodynamic and Structural Analysis of Proximity-Induced Transitions in Surface-Grafted
S2-P-86	Porpieng Kullohamongkol	Polymer Pairs
S2-P-91	Natthapong Jampaiboon	First-Principles Study of Amorphous Hafnium Dodecaboride
		Enhanced Stability of Perovskite Solar Cells through Addition of 5-Ammonium Valeric Acid
S2-P-92	Prachtrakool Koking	Iodide
		Critical Temperature Oscillations Controlled by Vortex Switching in Hybrid Ferromagnet-
S2-P-93	Boonlit Krunavakarn	Superconductor Structures
		Synthesis and Gas Sensing Properties of Tin Dioxide Nanostructures Materials for Ammonia
S2-P-96	Pitchanunt Chaiyo	Detection
S2-P-113	Jaruwan Seangrit	Preparation of Epoxy Resin Doped with PPO for Gamma Ray Detection
		Synthesis CMC (Carboxymethyl Cellulose) by using Coffee Grounds for Bioplastic
S2-P-116	Agnes Theresia Sebayang	Packaging Application
		Synthesis of Reduced Graphene Oxide Quantum Dots (rGO-QDs) via Optimized
S2-P-119	Tanatchaya Seesan	Hydrothermal Process for Thermoelectric Material Enhancement
		Eco-friendly Synthesis of Reduced Graphene Oxide from Agricultural Waste for Electrodes in
S2-P-197	Teerayut Uwanno	Capacitive Deionization Applications
		Exploring Properties of Sn <sup>4+</sup> -doped CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> Ceramics: Structure, Dielectric, and
S2-P-212	Prachit Khongrattana	Electrical Characteristics
		Effect of PEI on Thermoelectric Properties of MWCNT/PEDOT:PSS for Textile-based
S2-P-235	Kuntima Pattanarat	Temperature Sensors
		Copper Compound Nanoparticles Synthesized using Electrochemical Process in Mixing
S2-P-242	Sutthipoj wongrerkdee	Solution of Citric Acid and Potassium Chloride
		Effect of Al dopant on Physical and Optical Properties of Er-doped CuS Prepared by
S2-P-247	Junkrajang Wattana	Co-precipitation Process

		Investigating Superconductivity in Flat and Cylindrical Wire Structures with Ginzburg-
S2-P-276	Pisek Sagapanee	Landau Theory
S2-P-279	Suthima Supokaiwanit	Temperature Dependent Magnetic Force Microscopy Study of Fe and FeV Thin Films
S2-P-281	Atsakorn Chuenkruit	Preparation of WO <sub>3</sub> on TiO <sub>2</sub> Nanotubes for Electrochromic-enhanced Photocatalytic Activity
S2-P-282	Anunyapon Junmanee	Effect of Raman laser intensity on the stability of VO <sub>2</sub> samples
		Study of Piezoelectric Property of Polyvinylidene Fluoride Filled with Reduced Graphene
S2-P-286	Atipon Panpar	Oxide using Electrospinning and Film Casting
		Impact of External Magnetic Fields on Phase Transitions in Two-Dimensional Hexagonal
S2-P-290	Praewwanit Thampitak	Ising Systems: A Wang-Landau Approach
		X-ray Fluorescence Spectroscopy Features of Silver Nanoparticle-Decorated Zinc Oxide
S2-P-293	Raumporn Thongruang	Nanoflowers
		Structural, Optical, and Morphological Properties and X-Ray Absorption Spectroscopic Study
S2-P-295	Tirapat Wechprasit	of Local Structures of Bi-Doped Fapbi <sub>3</sub> Films
S2-P-297	Panwasa Pleansin	Modification of the Electron Transport Layer in Perovskite Solar Cells using Carbon Dots
S2-P-298	Musalimin Dacharun	Effect of Carbon Dots Interlayer on Carbon-based Perovskite Solar Cells
		Preparation and Synthesis of NiO and Reduced Graphene Oxide Derived from Oil Palm
S2-P-299	Pimpisa Maisuwan	Petioles Mixed PEDOT:PSS for Counter Electrodes in Dye-Sensitized Solar Cells
		Fabrication of 3D Network Peanut Shells Carbon and Nickel Sulphide Counter Electrodes for
S2-P-300	Pornchanok Ngaophithaksinlapin	Dye Sensitized Solar Cells
		Enhanced Photoconductive Detection by using Reduced Graphene Oxide/Silver Nanoparticle
S2-P-301	Benyapha Sangtong	Composites
		Simplified Combustion Technique to Synthesize Nano Powders and High-Performance
S2-P-308	Theerachai Bongkarn	Multiferroic 0.1BLTO-0.9CZFO Composite Ceramic
		The Influence of the Firing Temperatures on the Microstructure, Dielectric, and Magnetic
S2-P-310	Nipaphat Charoenthai	Properties of Mn-Zn-Ni Spinel Ferrites Synthesized by Solid-State Combustion Technique
S2-P-312	Wimutti Kumpor	The Preparation of SiO <sub>2</sub> /Fe <sub>3</sub> O <sub>4</sub> /Pt,W by Sputtering Technique for Spin Seebeck Effect
		Effect of BTS Content on Microstructure and Dielectric Properties of 0-3 BTS/ACSA Cement
S2-P-313	Theerachai Bongkarn	Composites
S2-P-315	Nithiporn Photimas	The Co-sputtering of Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> and LSMO Ferrimagnetic Materials for Spin Seebeck Effect
		Investigating the Optical, Electrical, and Physical Properties of Graphite-like Carbon Derived
S2-P-319	Woranuch Sudthongkong	from Durian Peels
S2-P-321	Sudarat Khwanmueang	Synthesis and Characterization of Carbon Films Derived from Wolffia Globosa
		Development of Carbon Dioxide Adsorbents via Composite Formation of Metal-Organic
S2-P-329	Pawinee Klangtakai	Framework (ZIF-67) and Reduced Graphene Oxide
		The Large Thermal-voltage of Yttrium Iron Oxide (Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> )/Tungsten (W) Hybrid Structure
S2-P-350	Chananyapat Wongsakulkhamkhot	on Spin Seebeck Effect Measurement
S2-P-353	Wantana Koetniyom	Flavonoid Extraction from Mango Peels for Nanoparticles by Green Synthesis Process
S2-P-355	Aewittra Banchuen	Observation of Anomalous Nernst Effect in Graphite
S2-P-359	Narit Triamnak	Effect of Glass Fiber Reinforced Polymer Composite Rebar Size on Mechanical Properties

## Symposium 3: Astronomy, Astrophysics and Cosmology

Code	Author/Presenter	Title
		Optical Counterparts and Follow up Gravitational Wave Events of the O4a Observing Run of
S3-P-37	Kanthanakorn Noysena	LIGO and Virgo
S3-P-104	Markos Aguirre Elorza	Optimal Selection of Reference Stars for Exoplanet Light Curves
		27-day Variations of Space Climate and Space Weather: The Power Input to the
S3-P-182	Thana Yeeram	Magnetosphere
S3-P-195	Grit Saowanit	Enhancing Planck All-Sky Maps through Fourier Transform-Based Smoothing
S3-P-213	Sukanya Meethong	Temporal and Spatial Variation of Methane Lines in High-Resolution Spectra of Jupiter
		A Single-Image Approach to Identify Non-Registered Astronomical Objects within a Wide
S3-P-218	Tinnapat Meeboon	Field-of-view Astronomical Image for Optical Transient Identification
S3-P-222	Ronnakrit Rattanamala	Orbital Period Change of a Close Binary Star V2802 Orionis
S3-P-245	Nattaporn Thongphaijit	Evolution of Axial Ratio Distribution of Galaxies at z < 6 with Early Data Release of JWST
S3-P-248	Watchara Khanakorn	Astronomical Seeing Measurements at Faculty of Science Khon Kaen University
S3-P-250	Thanawat Anusonthi	Thermodynamic Stability of Schwarzschild-de Sitter Black Holes with Rényi Entropy
S3-P-265	Thiranee Khumlumlert	An Analysis of the Solar Flare Event and Space Weather on the Peak of Solar Cycle 23-25
S3-P-289	Patcharawee Munsaket	A Machine Learning-based Alternative Method for Exoplanet Retrieval
		LSTM Model for Thermospheric Density Prediction during the Moderate Geomagnetic
S3-P-306	Patapong Panpiboon	Storms

## **Symposium 4: Accelerator and Synchrotron Radiation**

Code	Author/Presenter	Title
S4-P-9	Siriwan Jummunt	Study and Development of Beam Loss Monitor for the SPS Storage Ring
		Effects of Eddy Current and Permeability of Vacuum Chamber in Booster Synchrotron of
S4-P-68	Prapaiwan Sunwong	Siam Photon Source II

## Symposium 5: Mathematics, Computational and Numerical Physics

Code	Author/Presenter	Title
S5-P-25	Sujittra Ratjiranukool	Potential Evapotranspiration Estimation Over Northern Thailand by Thornthwaite Method
		Transition Metal-doped and Pressure-induced Hydrogen Dehydrogenation of the K-Mg-H
S5-P-43	Prayoonsak Pluengphon	System: Ab Initio Study for Hydrogen Storage Improvement
S5-P-57	Pimpunyawat Tummuangpak	The 3D Modeling of Heat Transfer in Soil using Finite Difference Method
		Radiation Safety Design for Gas Bremsstrahlung and Synchrotron Radiation in SPS-II
S5-P-66	Pawitra Aim-O	Multipole Wiggler Beamline
		Enhancing Weather Forecasting Accuracy in Thailand through Microphysics Scheme
S5-P-76	Thanapon Klaewphaipan	Optimization

## Symposium 6: Quantum Physics and Technology

Code	Author/Presenter	Title
		Removal of Textile Dyes from Wastewater: A Study of γ-irradiation on Adsorption and
S6-P-12	Wilasinee Kingkam	Physicochemical Properties of Diatomaceous Earth
S6-P-127	Wirunwit Worawirat	Quantum State Purification by Feedback Control on Qiskit IBM-Q
S6-P-157	Tosanut Rimprongern	Development of Polarization-based Demonstration Kits for Quantum Key Distribution
		Green Synthesis of NiO Nanoparticles using Ocimum Tenuiflorum Leaf Extract for Memory
S6-P-327	Korakot Onlaor	Device Application
S6-P-351	Thanapat Phetvongsakul	First Occurrence Technique for Three-Detector Measurement of Photon Correlation
		The Effect of a Quarter Wave-plate on Two-photon Quantum State from a Portable Entangled
S6-P-352	Jeerasak Phu-arphit	Light Source
S6-P-354	Panawat Wongklaew	Heralded Single-photon Sources with On-chip Heralding Detectors

# Symposium 7: Optical Physics and Technology

Code	Author/Presenter	Title
S7-P-31	Santhad Pitakwongsaporn	Optimizing Energy Efficiency of Adiabatic Frequency Conversion in Add-Drop Resonators
		Development of Orange-Emitting Sm <sub>2</sub> O <sub>3</sub> -doped Tellurite Glasses Prepared for Solid State
S7-P-32	Patarawagee Yasaka	Lighting
		Studying Thermal Expansion and Thermal Cooling of Solids by Interference Pattern using
S7-P-34	Nantameth Sringam	Michelson Interferometer
S7-P-72	Thada Keawprasert	Improving Photometric Scale based on Spectral Irradiance Responsivity at NIMT
		Deep-learning-based Scatterer Density Estimation from Speckle of Optical Coherence
S7-P-117	Thitiya Seesan	Tomography and its Application to Assessing Age-related Changes of the Human Eye
S7-P-214	Anuwat Kaewcharoon	Simulation of Evanescent Field Trapping by Optical Nanofiber
		Surface Plasmons of Gold Nanoparticles Enhanced Ultraviolet Photoresponsivity of Zinc
S7-P-239	Siwaporn Khemphet	Oxide Nanoflowers
		Exploring Phosphorescent Materials: Luminescence Properties and Traffic Safety
S7-P-268	Kachain Dangudom	Applications
		Manipulating Polarization via Optical Fiber Twisting and Michaelson Interferometer for
S7-P-325	Keerayoot Srinuanjan	Optical Switch Applications
		Studying Air's Refractive Indexes Changed Pressure and Temperature by 1D Metal-dielectric
S7-P-339	Thammarat Taengtang	Photonic Crystal

# Symposium 8: Applied Physics and Technology, Biophysics, Nano-physics and others

Code	Author/Presenter	Title
S8-P-38	Nuttakrit Somdock	Development of Measuring Moisture Wood Content using Capacitive Sensing Techniques
S8-P-39	Nuttakrit Somdock	Development of Smart Medicine Box using IoT
		Non-invasive Blood Glucose Measurement using Near-Infrared Spectroscopy and
S8-P-51	Umpon Jairuk	Microcontroller Equipment
		The Effect of the Pre-vulcanization Time on the Porous Structure Preservation of Silica
S8-P-73	Chayanan Boonrawd	Aerogel/Natural Rubber Composite
S8-P-75	Natakorn Sapermsap	Development of a Fluorescence Lifetime Spectroscopy System with Multicolor-Excitation
S8-P-82	Marina Mani	Equilibrium Moisture Sorption Isotherm of Kaempfer
S8-P-109	Phatcharin Phumuen	Electrochemical Properties of Ni(OH) <sub>2</sub> for Supercapacitor Applications
S8-P-110	Nannaphat Kiatkaiwansiri	Activated Carbons Derived from Water Hyacinth for a Green Supercapacitor
S8-P-112	Wassana Wannabut	Room-temperature Synthesis of Co-ZIF-67 for Supercapacitor Application
		Synthesis and Analysis of Au:Pd Nanoparticles by Substrate Removable Technique for
S8-P-147	Suphansa Chansuriya	Enhanced Catalytic Applications on Zno Gas Sensor
		Nyquist Plot and Equivalent Circuit Model for Capacitively Coupled Contactless Conductivity
S8-P-149	Niyom Hongsith	Detection (C4D) in Zno And Zno:Au:Pd Nanostructures Gas Sensors for VOC Detection
		Assessing of Natural Radioactivity in Beach Sand from Tourist Beaches along Upper Gulf of
S8-P-167	Santi Raksawong	Thailand Coast
S8-P-172	Nichanun Neamtad	Wastewater Treatment using Electrocoagulation Technology at Maejo University
S8-P-173	Panatcha Anusasananan	Investigating Air Pollution in Northern Thailand using Wavelet Analysis
		Heavy Metals Removal in Aqueous Solution using Chitosan Coating onto Magnetite
S8-P-188	Panakamon Thonglor	Nanoparticles
		Comparison of the Utilization of Arrowroot Starch, Corn Starch, and Polyvinylpyrrolidone
		(PVP) as Capping Agents for Synthesizing Silver Nanowires (AgNWs) using the Polyol
S8-P-189	Suteeporn Kidtang	Method for Applications in Flexible Transparent Electrodes
		Appling a Semi-empirical Model for Estimating Hourly Diffuse Solar Radiation at the Main
S8-P-200	Korntip Tohsing	Regions of Thailand
S8-P-209	Thasapong Saibunpang	Effects of Radiation on Seed Germination Time for Vegetable Breeding: Chinese Spinach
		Frequency-Based Characterization of Contactless Conductivity Detection with Coplanar
S8-P-217	Traitot Lianghiranthaworn	Electrodes
		Application of SiPM in the Development of a High Performance Portable Fluorometer for
S8-P-224	Sirirat Ouiganon	CKD Screening
S8-P-231	Khattiya Chalapat	Design of MEMS-Based Force Sensors for Artificial Finger Tactile Perception
S8-P-234	Pornchanan Chanchot	Machine Learning-Analyzed Colorimetric Sensor for Smartphone-Based Ammonia Detection
S8-P-237	Apishok Tangtrakarn	Cu(OH)2/Ni(OH)2 as a supercapacitor electrode
		Effect of Magnetically Treated Water on Qualitatively Remove Malathion Contaminating in
S8-P-240	Chadapust Sudsiri	Vegetables
		Effect of Discharge Electrode Material on Dust Collection Efficiency for Electrostatic
S8-P-244	Kewalee Nilgumhang	Precipitator

S8-P-255	Benchapol Tunhoo	Low-Cost Electronic Nose for Perfume Odor Classification with Machine Learning
S8-P-256	Thutiyaporn Thiwawong	Preparation of Polyvinyl Alcohol Fibres by the Standing Wave Vibration Electrospinning
S8-P-266	Chalad Yuenyao	Physicochemical and Permeation Properties of PSF Composite Membranes Incorporated by High Surface Area Graphene Nanoplatelets
		Flash Infrared Annealing as Cost-Effective Process for Perovskite Solar Cells Based on SnO <sub>2</sub>
S8-P-267	Kritsada Hongsith	Quantum Dots
S8-P-273	Preeda Larpthavee	Optimization of Deterministic Lateral Displacement Microfluidics for Enhanced Particle Separation and Diagnostic Applications
S8-P-285	Sittidech Yomrum	Cosmic Ray Spectral Variation during 2018-2023 Indicated by the Neutron Monitor Leader Fraction at High Cutoff Rigidity
S8-P-296	Watcharaporn Thongjoon	Effects of Ions Type and Concentration of Electrolyte Solutions on the Electrochromic of WO <sub>3</sub> Films
S8-P-303	Darika Jaaoh	Enhancing Impact Resistance and Sustainability in Transportation Packaging: the Role of Cushioning Pads Made from Natural Rubber and Activated Carbon
S8-P-304	Jiraphong Sararat	Examining the Influence of Crystal Structure and Morphology on the Electrochemical Properties of Cobalt Sulfide Fabricated through Hydro/solvothermal Techniques
		Physical Properties of Copper Nitride Thin Film Deposited using Reactive DC Magnetron
S8-P-305	Apinan Jantee	Sputtering for Photodetection
S8-P-307	Pat Kerdsomsri	The Investigate of Earth's Inner Core Variation Travel Time Beneath Thailand form PKP(AB)- PKP(DF) Times
S8-P-328	Keratiya Janpong	Design the Sensor for Measuring the Purity of Honey through Electric Conductivity.
S8-P-338	Arthit Sansomboon	Investigation of Garlic Drying with Novel Low-Cost Solar Dryer for Local Farming
S8-P-340	Sureerat Triosod	Hydrothermal Transforming Phase Structure and Chemical Composition Of V <sub>2</sub> O <sub>5</sub> For Elevating Electrochemical Property of Zinc Ion Batteries
S8-P-344	Tanyapa Sanyen	Investigation of CuO/SiO <sub>2</sub> /TiO <sub>2</sub> Nanocomposite Films: Fabrication, Characterization, and Efficiency for Physical and Antimicrobial Properties
S8-P-345	Winadda Wongwiriyapan	Optimizing Lignocellulose Ratios in Activated Carbon for Enhanced Supercapacitor Performance
S8-P-357	Natchayaporn Sakulpeeb	Influence of Dragon Fruit Peels on the Synthesis of Antibacterial Nano Zinc Oxide (Nano-ZnO) via Green Synthesis Method
S8-P-358	Sikarek Uengsuwanpanich	Multifractal Analysis of Electrocardiogram Signals for Atrial Fibrillation Detection Based on Machine Learning Algorithms

## Symposium 9: High Energy and Particles Physics

Code	Author/Presenter	Title
		Study of Neutron and Gamma-Ray Pulse Shape Discrimination Capability of Liquid EJ-301
S9-P-19	Chawidpol Sangthong	Scintillation Detector in the Fast Neutron Laboratory
		Exploration of the Lost Runaway Electron via Bremsstrahlung Emission Analysis in the
S9-P-20	Arreerat Kunkanha	Thailand Tokamak-1 Utilizing MCNP Simulations
S9-P-131	Thanat Sangkhakrit	Radiative Decays of Xc1 States in the Picture of Triangle Singularities
		Monte Carlo N-Particle (MCNP) Simulation of Neutron Flux at a Vertical Port in the
S9-P-135	Atirat Pitaktrakul	Suranaree University of Technology Research Reactor (SUT-RR) Building
		Study of Non-Relativistic Charmonium Mass Spectra in Cornell Potential by using Nikiforov-
S9-P-159	Taksaporn Promjak	Uvarov Method
		Centroiding the Charge Cloud Footprint from a Microchannel Plate Detector using Machine
S9-P-181	Thawatchai Sudjai	Learning Techniques
S9-P-204	Suebsak Suksaengpanomrung	Estimation of Electron Temperature based on Hydrogen Gas in Thailand Tokamak-1
S9-P-229	Suphot Musiri	Analytical Perturbation of Schwarzschild Ads Black Hole Quasinormal Modes
S9-P-241	Attaphon Kaewsnod	Study of Substructure of $\Delta(1232)$ Resonance in P $\gamma \rightarrow \Delta(1232)$ Process
S9-P-260	Ratchaphat Nakarachinda	Thermodynamics of Black Holes with Rényi Entropy from Classical Gravity
		Supersymmetric Domain Walls in Maximal 6D Gauged Supergravity with Gauge Groups
S9-P-262	Patharadanai Nuchino	Embedded in SO(4,4)
		Noether Charge and Thermodynamics of a Black Hole in the Schwarzschild-Anti-de Sitter-
S9-P-326	Tosaporn Angsachon	Beltrami spacetime
		Development of FPGA Algorithm for the Data Acquisition of a Compact Charged Particle
S9-P-348	Chaloemwut Duangsombat	Detector for Event Identification using De-E Technique

## Symposium 10: Plasma, Radiation, Nuclear Physics and Technology

Code	Author/Presenter	Title
S10-P-33	Apichart Siriwitpreecha	Determination of Radioactivity in Soil Samples around the 30 MeV Cyclotron Building
		Transforming Waste Glasses into Multifunctional Shielding Materials: A Simulation Study
S10-P-81	Chahkrit Sriwunkum	with Phantom Validation
		Mathematical Modeling for Evaluation of Radiological Health Impact on Medical Staff
S10-P-323	Siritorn Buranurak	Undergoing Fluoroscopically Guided Interventional Radiology