

Session Program

24-26 May 2017



Siam Physics Congress 2017

Poster Presentation II

Rayong Marriott Resort & Spa

<http://www.marriott.com/hotels/travel/bkkrr-rayong-marriott-resort-and-spa/> Rayong, Thailand

Thursday 25 May

17:00

Poster Presentation II

Poster Session |

Location: Rayong Marriott Resort & Spa, <http://www.marriott.com/hotels/travel/bkkrr-rayong-marriott-resort-and-spa/>
Rayong, Thailand

Determining the Relationship of Atmospheric CO₂ Concentrations to Vehicular Traffic

Speakers

Ms Laksika Chumphuin, Ms Suthima Fankrea

Low Temperature Reduction of Graphene Oxide by Plasma Processes

Speaker

Mr Krisada Soonthornnant

Spectroscopic properties for identifying sapphire samples from Ban Bo Kaew, Phrae Province, Thailand

Speaker

Jidapa Mogmued

Production of dried shrimp mixed with turmeric and salt by Spouted Bed technique enter the rectangular chamber.

Speaker

Mr PISUT THANTONG

Design and construction of portable survey meter

Speaker

Mr Warut Singseeta

The production $\{K^+ + \}$ meson in Al+Al collisions at beam energy 1.9A GeV.

Speaker

Ms Kristiya Tomuang

The Relationships Between Wind Speed and Temperature Time Series in Bangkok, Thailand.

Speaker

Dr Nipon Thangprasert

Thermal Efficiency of Natural Convection Solar Dryer

Speaker

Ms Pitchpilai Khoonphunnarai

Correlation between Electrical Resistivity and pH of Lateritic Soil

Speaker

Mr Somkuan Phocharin

Rainfall Estimation from Radar in different seasons over Northern Thailand

Speaker

Ms Papatsorn Aumjira

Investigating differences in light stable isotopes between Thai jasmine rice and Sung Yod rice

Speaker

Dr Chunyapuk Kukusamude

A preliminary study on identification of Thai rice samples by INAA and statistical analysis

Speaker

Dr Supalak Kongsri

Removal of hydrogen sulfide (H₂S) from biogas for the community in the province of Maha Sarakham

Speaker

Mr Wasan Pinate

Potential Increasing of Rubber Sheet Production with Fungus Displacement by Solar Tunnel Dryer.

Speaker

Duangkamol Dungphontong

Applying Isotope Techniques for Sustainable Development of Groundwater in the Upper Chao Phraya Basin (Bang Rakam area)

Speaker

Mr Kiattipong Kamdee

Atmospheric water vapor: Distribution and Empirical estimation in the Atmosphere of Thailand

Speaker

Mr Sayan Phokate

Thermal Characterization of Clay Roof Tile Using Photothermal Deflection Technique

Speaker

Tanawut Rittidach

Implementation of a Parallel Simplex Algorithm

Speaker

Thanachot Nasawad

Forbush decreases detected at the Princess Sirindhorn Neutron monitor in the 24th Solar Cycle

Speaker

MALIWAN DEEPROM

Riceberry Grain Standardization Based on Color Distribution and Shape Parameters

Speaker

Ms Khotchakorn Kaisaart

Monte Carlo Production Management in CMS Experiment

Speaker

Gurpreet Singh Chahal

Determination of ω - ϕ mixing at leading order

Speaker

Mr Ruchipas Bavontaweepanya

Construction of Earth's field NMR signal transmission system**Speaker**

Mr Klitsadee Yubonmhat

Low-cost standalone multi-sensor thermometer for long time measurements**Speaker**

Mr Nakorn Kumchaiseemak

Development of measurement system for gauge block interferometer**Speaker**

Sakchai Chomkokard

Digital Lock-in Amplifier based on Soundcard Interface for Physics Laboratory**Speaker**

Jinda Sinlapanuntakul

Measurement of Plasma Parameters of Argon DC Discharge Plasma by Mean of Double Electric Probe**Speaker**

Chatchai Sirithipvanich

The Effect of Epoxy Molding Compound Floor Life to Reliability Performance and mold ability for QFN Package**Speaker**

Mr Udom Peanpu-Nga

Warpage of QFN Package in Post Mold Cure Process of integrated circuit packaging**Speaker**

๑NATTHA SRIWITHOON

Reduction of delamination for MSOP Package in die attach process for integrated circuit package**Speaker**

Ms Tawika Buntam

Design and Development of Emittance Measurement Device by Using the Pepper-pot Technique**Speaker**

Ms Siriwan Pakluea

A Study of Star Formation by H α Emission of Galaxies in the Galaxy Group NGC 4213**Speaker**

Sakdawoot Maungkorn

Auroral bright spot in Jupiter's active region in corresponding to solar wind dynamic**Speaker**

Suwicha Wannawichian

XMM-Newton observations of the ultraluminous X-ray source NGC 1313 X-1: a super-Eddington accreting black hole

Speakers

Mr Surasak Loekkesee, Ms Kewalin Thongpoyai

Photometric Data to Derive an Hertzsprung - Russell Diagram for the Spectral Types of Open Cluster M35

Speaker

Patapong Panpiboon

Schwinger pair creation in graphene wormhole

Speaker

Mr Trithos Rojjanason

Structural and optical properties of mercury chalcogenide $\text{HgS}_x\text{Se}_{1-x}$ and $\text{HgS}_x\text{Te}_{1-x}$ nanocrystals: Atomistic tight-binding theory

Speaker

Mr Adulvit Chuaephon

First-principles study of native defects in $\text{ZnRh}_{20}\text{O}_{40}$ spinel

Speaker

Ms Kodchakorn Simalaotao

The thermal insulators fabricated from leaves green tea with water hyacinths

Speaker

Mr Nikorn Suksawad

2D Seismic Wave Forward Modeling by Finite-Difference Method

Speaker

Mr Phudit Sombutsirinun

Nature of Seismicity of the Northern Thailand

Speaker

SUTHASINEE ANUSORNHIRUNKARN

Determining the appropriate altitude to improve accuracy in rainfall estimation from radar reflectivity data.

Speaker

Mr Manot Lakkham

Electricity Cogenerator from Hydrogen and Biogas

Speaker

Wasan Pinate

Identification of charm quark jets at the CMS experiment

Speaker

Kittikul Kovitanggoon

Design and Construction of a Small Vacuum Furnace

Speaker

Ms piroonrat peawbang

Simple system to measure Seebeck effect coefficient at room temperature

Speaker

Mr Angmanee Bundasak

Radio Frequency Interference Site Survey for Thai Radio Telescopes**Speaker**

Dr Phrudth Jaroenjittichai

Development of electropinning system have a hemispherical collector**Speaker**

Mr piriya praneekit

A Comparative Study of Gunshot Residue Obtained from M16 and AK47 Rifles for Forensic Science.**Speakers**

Ms Plaifhon Pooyooyen, Ms Saowaluk Sodchuen

Investigation of using wavelet analysis for classifying pattern of cyclic voltammetry signals**Speaker**

Arthit Jityen

Magnetic Force Microscopy Observation of Perpendicular Recording Head Remanence**Speaker**

Mr Poumin Dilekrojanavuti

Micro-Raman Investigation of Selective-area Growth of Cubic GaN on [110]-Stripe Patterned GaAs (001) Substrate by MOVPE**Speaker**

Nattamon Suwannaharn

Elemental composition analysis of stony meteorites discovered at Phitsanulok, Thailand**Speaker**

Mr Teerayut Loylip

Peltier Effect Based Temperature Controlled System for Dielectric Spectroscopy**Speaker**

Mr Teeperkorn Mukda

Effect of doping by different transition metal oxides on the elastic and structural properties of recycled borosilicate glasses**Speaker**

Poonnaphob Sopapan

Mechanical Properties of Cement/Bacterial Nano-Cellulose Composite**Speaker**

Mr Dulayawit Palaporn

Non-contact capacitive sensor for measurements of soil moisture profiles**Speaker**

Mr Nakorn Kumchaiseemak

Gamma-ray shielding and structural properties of strontium-lead-silicate glasses

Speaker

Pattaranipa Gunhakoon

Temperature dependence of graphene and N-doped graphene for gas sensor applications**Speaker**

Rangsan Panyathip

Synthesis and characterization of MgO by microwave-assisted thermal oxidation for photocatalytic applications**Speaker**

Dr Sanpet Nilphai

A portable flat vacuum cell and the effect of its surface adsorption**Speaker**

Mr Nakarin Jayjong

Structural stability and electronic structures of YH₂ and ScH₂**Speaker**

TeeRachote PaKornchote

Geometry-Dependent Faraday Rotation in Strained Graphene**Speaker**

Mr Phusit Nualpijit

Effective capacitance of metallic single electron transistor**Speakers**

Dr prathan srivilai, Mr pipat harata

Building and testing antennas wainscot from teak and para scrap woods: Built-up Column type and Spaced Column type**Speaker**

Mr Jamon Wasuratmanee

F and D Supersymmetry Breaking in AdS Space**Speaker**

Mr Sirapat Lookrak

The measurement of cosmic-ray muon**Speaker**

Mr Jittrathep Sukultanasorn

Principle chiral models and integrable systems**Speaker**

Dr Benjo Fraser

Reduction of setup time in wafer sort process before integrated circuit packaging**Speaker**

Mr Pannawat Watthakeehuttakum

Classification of Glutinous rice RD6 Grain Using Machine Vision and Support Vector Machine

Speaker

Ms Pananya Somwong

Fabrication and preparation of Mg-reducing $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ cement for enhancing of electrical and optical properties**Speaker**

Chalermpol Rudradawong

Effecting aging time of epoxy molding compound to molding process for integrated circuit packaging**Speaker**

Jirayu Tachapitunsuk

Magnetic Force Microscopy Study on Wide Adjacent Track Erasure in Perpendicular Magnetic Write Heads**Speaker**

Ms Poramaporn Ruksasakchai

 CuFeO_2 formation using fused deposition modeling 3D printing and sintering technique**Speaker**

Mr Ahamad Salea

Materials selection for Repairing Case Study: Marine propeller shafts**Speaker**

Mr Siva Sitthipong

Giant Dielectric in Sb-Single Doped Rutile- TiO_2 Ceramics**Speaker**

Mr Apiwat Boonkhuang

On the λ -extended class of the canonical transformations**Speaker**

Mr Saksilpa Srisukson

Instability analysis of dust acoustic solitons in dusty plasma with both trapped electrons and ions**Speaker**

Sarun Phibanchon

Thermal Properties of Green Briquettes Fuel from Corn Cobs Residue Materials Mixed Macadamia shell Charcoal Powder**Speaker**

Suminya Teeta

Application of combined gas-fired infrared and air convection drying for quality and energy consumption of instant rice**Speaker**

Dr Mali Nachaisin

Effect of thick barrier in a gapped graphene Josephson junction**Speaker**

Tatnatchai Suwannasit

Production and Ratio Analysis for The Production of Charcoal Briquettes from Bamboo(Dendrocalamus Asper Backer)

Speaker

Mr Ratchatapong Lukmuang

Properties of Dried Cultivated Banana Using 3-Shelves Solar Oven

Speaker

Ms leeming sofia

Theoretical Study on Structural and Electronic Properties of Polypyrrole: Ammonia Gas Sensor

Speaker

Ampaiwan Marutaphan

Schiff Base modified on CPE electrode and PCB gold electrode for selective determination of silver ion

Speakers

Ms Piyawan Leepheng, Dr Darinee Phromyothin

Monte Carlo simulation of cosmic radiation dosimetry to aircrews at the world highest rigidity cutoff

Speaker

Mr dumrongsak rodphothong

Moisture Measurement in Paddy Rice

Speaker

Ms Panadda Klomklao

The investigation physical and electric properties of $Mg_{1-x}Mn_xFe_2O_4$ ceramics

Speaker

Nititorn Kenyota

Effects of an intermediate c-GaN buffer layer on structural and optical properties of AlN films on MgO (001) substrates

Speaker

Mr Nutthapong Discharoen

A Molecular Dynamics Study of the Interfacial Regions Between Polymer and Carbon-Based Nanoparticle Fillers

Speaker

Dr Thana Sutthibutpong

Phase Transition and Electrical Properties of $CaCO_3$ Prepare by Precipitation Method.

Speaker

Sayamon Kaewsopa

Simulation and Experimental Study of Bipolar Plates on The Performance in PEM Fuel Cell

Speaker

Mr pornchai chinnasa

Preparation of Platinum (Pt) Counter Electrode Coated by Electrochemical Technique at High Temperature for Dye-sensitized Solar cell (DSSC) Application

Speaker

Mr Tanachai Ponken

Phase Transformation, Surface Morphology and Dielectric Property of P(VDF-HFP)/MgCl₂•6H₂O Nanocomposites**Speaker**

Ms Jureeporn Yuennan

Effect of Lightweight aggregates prepared from fly ash on lightweight concrete performances**Speaker**

Dr Rudeerat Suntako

Effect of Mg on Mechanical Properties of Mg_xFe_{3-x}O₄ Prepared by Solid State Reaction**Speaker**

Aekasit Sutthapintu

Modeling Disease Spreading Dynamic via Magnetic Ising Spins Distribution: The Stochastic Monte Carlo and Neural Network Analysis**Speaker**

Dr Wimalin Laosiritaworn

Development Thermoelectric Properties of Al-doped ZnO Materials for Thermoelectric Module and Power Generator**Speaker**

Mr Singkarn Chanprateep

Development of Beam Diagnostic System for Natural Rubber Vulcanization Linac**Speaker**

Mr Ekkachai Kongmon

Simulation and Design of Electron Beam Irradiation System for Natural Rubber Vulcanization**Speaker**

Ms Kittiya Kosaentor

Calcium oxide synthesis from cockle shells. The catalyst For the production of biodiesel from palm oil.**Speaker**

Ms Subaidah A wae

Properties of Pre-main sequence stars in young star cluster NGC 2175**Speaker**

Mr Siwarut Ploydang

Eclipsing Binary in the Field of Open Cluster NGC 2126**Speaker**

Ms Nareemas Chehlaeh

A review of scalar field cosmology: Its non-linear Schrödinger-type formulation**Speaker**

Ms Chonticha Kritpetch

The background evolution in general disformal gravity**Speaker**

Mr Saksith Jaksri

The Pulsational Analysis of the oEA component of RX Hydrae**Speaker**

Ms Napaporn A-thano

Observation of GEO Satellite Above Thailand's Sky**Speaker**

Kanpatom Kasonsuwan

Non-Minimal Derivative Coupling Gravity in Palatini Formalism: Scalar Field Phase Portraits**Speaker**

Somphoach Saichaemchan

A study the period variation rate of V1292 Taurus RR Lyrae variable star**Speaker**

Patsakorn Prachumlek

Correlation between Io's lead angle and the satellite's magnetic footprint**Speaker**

Dr Suwicha Wannawichian

Preheating in disformal inflation**Speaker**

Dr Khamphree Karwan

Gibbs Energy Additivity Approaches in Estimation of Kinematic Viscosities of n-Alkane-1-ol**Speaker**

Suriya Phankosol

Full Characterization of Two-beam Magneto-optical Trap**Speaker**

Mr Nuttanan Tanasanchai

Analysis data of sensitive layer and charge collection electrode of monolithic pixel sensors for the ALICE ITS upgrade**Speaker**

Wanchaloem Poonsawat

TRIBOLOGICAL CHARACTERIZATION OF ELECTRONIC GRADE LUBRICANTS USING BALL-ON-DISK TRIBOMETER**Speaker**

Ms Sawanee Jitphayomkun

Quantum Oscillation of Conductance and Negative Tunneling Magnetoresistance in Velocity-Modulated Graphene Spin-Valve Device**Speaker**

Mr Husnul Fuad Zein

Stress-Strain Measurement of Rubber with Optical Moiré Fringes

Speaker

Mr Watthana Sriklin

Comparison of Characteristics of Hydroxyapatite Powders Synthesized from Cuttlefish Bone via Precipitation and Ball Milling Techniques**Speaker**

Kridsada Faksawat

Synthesis and properties of cobalt ferrite nanoparticles in bacterial cellulose nanofiber scaffold**Speaker**

Ms Kanchanok Phoophathong

Effect of Bacterial Cellulose and its Carbon Nanofiber Derivatives Addition on the Compressive Strength of Cement Paste Composite.**Speaker**

Mr Nuttawat Parse

Effect of Carbon Fiber and Nano-Silica Addition on the Microstructure, Electrical and Mechanical Properties of Fly Ash Geopolymer**Speaker**

Mr Pichainarong Boomprasert

Role of ilmenite micro-inclusion on Fe oxidation state of natural sapphires**Speaker**

Mr Natthapong Monarumit

Microstructural Improvement of Hydroxyapatite-ZrO₂ Composite Ceramics via Thermal Precipitation Techniques.**Speaker**

Mr Aekgaran Sangmala

Mechanical and Physical Properties of Banana Fiber (Three Species) Reinforced Epoxy Resin Composite**Speaker**

CHamp Pongsathorn

Structural and Vibrational Properties of GaAsN Films grown by MOVPE with a Partial Nitrogen Carrier Gas**Speaker**

Mr Teerapat Lapsirivatkul

Quasinormal Modes of a Massless Charged Scalar Field in the 3+1 Dimensional AdS Reissner-Nordstrom Spacetime.**Speaker**

panapol kanjanaphomchom

Effect of External Economic Field and Market Temperature on Stock-Price Hysteresis and Price-Return Distribution: Monte Carlo simulation on the Ising Agent-Based Model.**Speaker**

Dr Yongyut Laosiritaworn

A study of two qubits system with Quantum operator formalism

Speaker

Ms Siriratchanee Thammasuwan

Electrical properties of two-dimensional zinc oxide in hexagonal, (4,4)-tetragonal, and (4,8)-tetragonal structures by using Hybrid Functional calculation**Speaker**

Mr Chumpol Supatutkul

First Principles Study of Structural Stability and Electronic Band Structure of Al₂C Monolayer and Nanotube**Speaker**

Mr Sittichain Pramchu

Theoretical study of the hydration structure and interaction energy of Sorbitan monostearate (Span60) by using hybrid quantum mechanical/molecular mechanical (QM/MM) method**Speakers**

Mr Nikorn Shinsuphan, Dr Sriprajak Kongsuk, Dr Jeffrey R. Johns

Measurement of Side Wall Angles of Magnetic Recording Heads with a Nano-scale Pole Tip using Magnetic Force Microscopy**Speakers**

Ms Achara Phuagrapun, Mr Chatchai Kerbut

Effect of Shelf Life to Void Under Die for Die Attach Process in Integrated Packaging**Speaker**

varunee paktramook

Characterization of Structural and Optical Properties of CsI:TI Crystals With Different Precursor Purity**Speaker**

Mr Poramin Sintham

Annealing Effects on Surface Morphology of IrMn Thin Films**Speaker**

Ms Kanogkwan Sawaengsai

Effect of Cationic ions in mud and Laterite to indigo blue interactions using molecular dynamics simulation**Speaker**

Mr Keerati Maneesai

Measurement of Electron Beam Energy by Using Dipole Magnet and Alpha Magnet**Speaker**

กิตติพงษ์ เตชะแก้ว

Position Change of the Moon to showing the Lunar Mansion's Pattern**Speaker**

Mr Adisak Sukwisoot

Photometric Investigation of Novae T Pyx, BT Mon and V574 Pup**Speaker**

Dr Farung Surina

Orbital Shapes of Asteroids in Cometary Orbits based on 0.7m Telescope Imaging**Speakers**

Mr Sittiporn Dueantakhu, Dr Suwicha Wannawichian

Beam Dynamic Simulation of the Thermionic RF Electron Gun with Self-generated Cathode Emission**Speaker**

Chaipattana Saisa-ard

The solar energetic particle propagation of solar flare events on the 24th solar cycle**Speaker**

Ms Papitchaya Paluk

The study of physical properties of low density sub-Saturn mass exoplanet HAT-P47b**Speakers**

Mr Jathurawit Mateewattanakul, Ms Supichaya Padjaroen

Solar energetic particle propagation from solar flare**Speaker**

Mr Phichayoot Baisri

Analysis of Physical Properties and Evolution of Binary System V2790 Ori**Speaker**

Mr Sarawut Chulok

Rotation Curves and Constraints on Dark Matter Annihilation**Speaker**

Dr Maneenate Wechakama

Phonon frequencies, Born effective charges and LO-TO splitting of Mg-IV-N₂ semiconductors**Speaker**

Mr Chaikawat kaewmeechai

Air Pollution Estimates from Vehicular Emissions in Amphoe Muang Lampang, Thailand**Speakers**

Ms Pawika Audwing, Ms Porntiwa Poutong

Simulation of Wind Speed and Wind Direction over Urban Structures**Speakers**

Mr Natthawut Wongjanta, Ms Natnicha Thamcharoenrat

Deep Shear Wave Velocity of Southern Bangkok and Vicinity**Speaker**

Mr Thanagrit Wongpanit

18:00