

**Session Program**

**20-22 May 2015**

**Siam Physics Congress 2015**

***Poster-2***

# Thursday 21 May

08:00

## Poster-2

Poster Session | Location:

### Sound absorption of oil palm trunks

**Speaker**

Ms Asleena SALAEH

### Using a Terminal Block as a Protoboard for the Development of Concepts related to Simple Direct Current Circuits

**Speaker**

Mr Phusit Juntana

### Using Simple Experiments incorporated with a Laboratory Group Investigation Model to Develop Conceptual Understanding of Static Electricity

**Speakers**

Mr Akapong Buachoom, Dr Sura Wuttiptom

### Simulation and Experimental Study of Vibration Characteristics of Thai Traditional Brass Gong

**Speaker**

Ms Thitinan Chantramontol

### Applying the Michael and Wittmann's Framework to Analysis of the Force and Motion Conceptual Evaluation Test

**Speaker**

Mr Suriya Chalemchat

### Application of Role-playing Game Strategies in Teaching and Learning High School Physics

**Speaker**

Mr ratapon kamkaen

### Surveying Students' Conceptual Knowledge of Fluid Mechanics

**Speaker**

Mr Mana Chatmontree

### Designing an Inquiry-based Learning Approach about Force and Pressure to Enhance Elementary Students' Critical Thinking Skills

**Speaker**

Ms Pannaporn Duangkam

### Using Active Workbooks as a Tool to Develop Concepts and Problem-solving Skills in Work and Energy

**Speaker**

Mrs Lanjakorn Tongrueng

### Comparisons of Students' Responses Relating to Buoyancy Force Between Two Different Teaching Approaches

**Speaker**

Mr Pawaret Intana

**The effectiveness of learning with guided lecture worksheets designed based on students' learning difficulties****Speaker**

Ms Thanida Sujarittham

**Developing Analysis Skills about electrical DC circuit by Virtual board on Ohm's law****Speaker**

Mr Panya Wichanphet

**Surveying of high-school students' ability in drawing free-body diagrams****Speaker**

Mr Rathaphol Yooyued

**Developing concept of a frictional force by using predict-observe-explain (POE) technique****Speaker**

Mr Anek Hongthong

**Cambodian Students Understanding of Forces and Motions: A Comparison with US, Australian, Japanese and Thai students****Speaker**

Mr Seng Khun Beang

**Developing Scientific Concepts on Magnetic and Electric Field using Simple Experiment and Multimedia Learning****Speaker**

Mr Kreangkrai Tanawesh

**Pre-Service Physics Teachers Expectations in Learning Physics****Speaker**

Dr Singha Prasitpong

**Developing STS Projectile Motion Unit for Providing Students' perception of the relationship between Science Technology Engineering and Mathematics****Speaker**

Mrs Prapatsorn Seattha

**Teaching strategies to facilitate students' use of mathematics when solving physics problems****Speaker**

Mr Putcharapong Prawai

**Development of light detector for Michelson Interferometer experiment Instrument****Speaker**

Ms Chanoknan Banglieng

**Smartphone in teaching Physics****Speakers**

Ms Pokonwong Suthichon, Pornrat Wattanakasiwich

### **Thermodynamics of a Rubber Balloon**

**Speaker**

Piimonpun Prasongsri

### **Surveying Physics Teaching Strategies in Three Leading Schools**

**Speaker**

Dr Umporn Wutchana

### **To design learning activities for the interference and the diffraction of light by using the learning package cooperate STAD techniqe : a case of secondary high school.**

**Speaker**

Ms Sumana Aungplachai

### **The development of scientific of concept on electric current of grade 11 students through Predict - Observe - Explain : Classroom - Based Action Research**

**Speaker**

Mr Songsith Khunsawat

### **Investigation of Students' Moral Reasoning in Learning Physics Laboratory**

**Speaker**

Pornrat Wattanakasiwich

### **The Development of Concepts of Grade 11 Students on Resistor Circuit Through Predict-Observe-Explain (POE) Approach**

**Speaker**

Ms Yupaporn Jarearnkhat

### **Applying Michelson Interferometer for Coherence Length Measurement of Laser Light**

**Speaker**

Mr Pornchai Kopatta

### **An Effective Hands-On Experiment in Light and Optics for Grade 10 Students**

**Speaker**

Ms Sujitra Khuntee

### **Automatic Marking System for Basic Physics Laboratory**

**Speaker**

Dr Noparit Jinuntuya

### **Development of Portable Desk Lab for High School and University Physics**

**Speaker**

Wachira Seesad

### **The development of scientific concepts on motion in uniform field of grade 10 students through Predict-Observe-Explain (POE) with video demonstration.**

**Speaker**

Mr Thoedsak Nachampa

### **Using colour light mixer cooperate with CIPPA model to teach primary colour light and their mixed: A case of secondary high school students.**

**Speaker**

Ms Rapeepat SONKRUA

**The development of scientific concept on electrostatics of grade 11 student through Predict - Observe - Explain (POE)****Speaker**

Ms Mateeya Martjun

**Simple Thick Lens Made of a Bottle Filled with Liquid****Speaker**

Kittipoom Mala

**The study scientific concepts about conservation of mechanical energy in before and after learning through Predict-Observe-Explain approach for Grade 10 Students****Speaker**

Mr Paritat Picitmal

**Analysis of Students' Task Relating to Boyle's law, Charles's law and Kinetic Energy for Gases.****Speaker**

Mr Pattarawut Chaweewong

**The Development Of Scientific Concept of "Momentum And Regarding Collision" For Grade 10th Students Though Learning Activities Based On The Predict-Observe-Explain (POE) Method****Speaker**

Ms Kanita Srithanee

**Classification of arabica by electronic tongue****Speaker**

Mr Aant Phatthara-aneksin

**Electronic and dynamical properties of  $\text{YH}_{\text{trm}\{x\}}$  ( $2.83 < x \leq 3.00$ )****Speaker**

Mr Anuphong Thongted

**Health Determinations of Yeast Suspensions for Brewery Industry using Cell Velocity Spectrum****Speaker**

Sakshin Bunthawin

**Mathematical Analyze of Breakdown Transmembrane Potentials of Fish Eggs using Hen-egg model****Speaker**

Sakshin Bunthawin

**A Second-Quantization Approach to the Analytical Faraday Effect in Graphene****Speaker**

Mr Phusit Nualpijit

**Pulse-Electric Fields Inductions for Preliminary Sex Reversal of Blue-Spotted Coral Trout**

**Speaker**

Sakshin Bunthawin

**Analysis of Biological Effect inside Human Body Exposed to Extremely Low Frequency due to Overhead Transmission Lines****Speaker**

Mr Apichart Siriwitpreecha

**Structural phase transition of binary compounds of TlX (X = N, P, As) under high pressure : An  $ab$  initio Study****Speaker**

Kittipong Limchuchua

**Sequential Signal Generator for Yeast Separations****Speaker**

Sakshin Bunthawin

**Calculation of Average Charge Number on the Single Electron Transistor by Quantum Monte Carlo Method****Speaker**

Mr Tawan Thongsuk

**Ga acceptors in  $\text{SnO}_2$  revisited: A hybrid functional study****Speaker**

Mr Nirawith Palakawong

**Transport of Macromolecules through Glomerular Basement Membrane****Speaker**

Numpong Punyaratabandhu

**Electronic band structure of Hydrazine-water doped Single-Walled Carbon Nanotubes as n-Type Semiconductor****Speaker**

Wutthisak Prachamon

**High pressure properties of doped ZnO from ab initio calculation****Speaker**

Dr Prayoosak Pluengphon

**Study of  $\text{Butea superba}$ . Roxb Root (Red Kwao Krua) Extract on Sex Reversal of Nile Tilapia by using Exponential Decay Pulse-Electric Fields****Speaker**

Sakshin Bunthawin

**Development of  $^{68}\text{Ga}$ -peptide for Positron Emission Tomography Tracer****Speaker**

Ms Piriya Kaeopookum

**Enhancement of oil Palm (*Elaeis guineensis* Jacq.) by Magnetically treated Water****Speaker**

Sasitorn Uaysin

**Carbon screen-printed electrode/Graphene-PEDOT:PSS/Prussian blue/PEDOT-AuNPs for electrochemical immunosensor application.**

**Speaker**

Mr Zunpitch Kwanyuen

**Electrical sex reversal of Nile tilapia from prototypes toward commercial product****Speaker**

Sakshin Bunthawin

**Crystal and electronic structures of  $\text{Li}_2\text{Ti}_6\text{O}_{13}$  for lithium-ion batteries****Speaker**

Mr Klichchupong Dabsamut

**Effect of water vapour on neutron detection of cosmic rays****Speakers**

Mr Kritpong Kulthamrongsri, Mr Supawit Kittipadakul, Mr Wattanapol Sangpho

**Development of weather station for wind direction, wind speed and temperature measurements****Speaker**

Mr Warut Singseeta

**Creation of 3D information from 2D images****Speaker**

Apiram TEERANAVAGUM

**Search for the Standard Model Higgs boson in  $ZZ^*$  to  $4\mu$  decay channel with the CMS experiment at  $\sqrt{s} = 8$  TeV****Speaker**

Teerapat Payupol

**First principles calculations of cation-ordering effects on electronic band structure of  $\text{ZnSnN}_2$  and  $\text{ZnGeN}_2$** **Speaker**

Dr Atchara Punya

**Micron-size Electrodes Fabrication for Capacitively Coupled Contactless Conductivity Detection ( $C^4D$ )****Speaker**

Ms Jongrak Sanglao

**The Role of Core Hole Effects on Calculated Resonant Inelastic X-Ray Scattering Spectra of Graphene****Speaker**

Nuchalee Schwertfager

**Preliminary Investigation of Heat Transfer and Thermal Distribution in Computer Mainboard based on Finite Element Analysis****Speakers**

Mr Ittiwat Meesap, Mr Tossapol Rattanapongwisut

**Electronic Tongue as an Alternative Tool for Classifying Oil-Based Products****Speaker**

Mr Vittachai YUWAPHAN

**IR spectroscopy of O-related defects in CdSe**

**Speaker**

Ms Pimpika Pimsorn

**Comments on holographic star and the dual QGP**

**Speaker**

Dr Piyabut Burikham

**Stability Diagram of a Serial Quantum Dot System**

**Speaker**

Mr Angkhan Intanin

**The Determination of the Area of Origin in Medium Velocity Blood Spatters: Numerical Methods Approach**

**Speaker**

Mr Chalermwat PINNOI

**High pressure properties of I-III-VI<sub>2</sub> compounds from ab initio calculation**

**Speaker**

Mrs Sukanya Petchsirivej

**A Study of Capacitively Coupled Contactless Conductivity Detection (C<sup>4</sup>D) Electrode Configurations on Signal Detection Sensitivity**

**Speaker**

Mr Korkuson Masean

11:00