

## BRIEF SCIENTIFIC PROGRAM

Tuesday, 22/10/2019	
<b>13:00 – 15:00</b>	<b>Get to Thai Nguyen</b>
<b>15:00 – 17:00</b>	<b>Registration</b>
Wednesday, 23/10/2019	
<b>08:00 – 09:00</b>	<b>Registration</b>
<b>08:30 – 09:15</b>	<b>Opening Ceremony</b> <b>Opening speech from Institute of Physics</b> <b>Opening speech from Vietnam National University HCM city</b> <b>Opening speech from International Centre of Physics</b>
	<b>Photo Session</b>
<b>09:15 – 10:15</b>	<b>Chair: Prof. Nguyen Dai Hung</b>  <b>PL – 01 Dinh Van Trung</b> ..... <b>09:15 – 09:45</b> Introduction to Institute of Physics <b>PL – 02 Pham Hong Duong</b> ..... <b>09:45 – 10:15</b> 5S human centric lighting system
<b>10:15 – 10:30</b>	<b>COFFEE BREAK</b>
<b>10:30 – 12:00</b>	<b>Chair: Prof. Elmer Estacio</b>  <b>PL – 03 Jakrapong Kaewkhai</b> ..... <b>10:30 – 11:00</b> High density $WO_3$ - $Gd_2O_3$ - $B_2O_3$ glass doped with $Ln^{3+}$ ion for photonic and radiation detection martial application <b>PL – 04 Sib Krishna Ghoshal</b> ..... <b>11:00 – 11:30</b> Synergistic Effects of Erbium and Titania Nanoparticles Concoction on Improved Self-cleaning and Spectral Qualities of Amorphous Tellurite Host <b>PL – 05 Elizabeth Ann Prieto</b> ..... <b>11:30 – 12:00</b> Terahertz emission enhancement in gaas on Si(100) in reflection and transmission excitation geometries
<b>12:00 – 13:30</b>	<b>LUNCH BREAK</b>
<b>13:30 – 15:10</b>	<b>Chair: Prof. Jakrapong Kaewkhai</b>  <b>I – 01 Melvin John F. Empizo</b> ..... <b>13:30 – 13:55</b> Effects of deuterium-ion plasma irradiation on the optical properties of bulk zinc oxide single crystals. <b>I – 02 Nguyen Duc Ba</b> ..... <b>13:55 – 14:20</b> Application of liquid dielectric to development of cold atmospheric plasma jet <b>I – 03 Marilou Cadatal Raduban</b> ..... <b>14:20 – 14:45</b> Development of detectors based on wide band gap fluorides <b>I – 04 Meng-Hock Koh</b> ..... <b>14:45 – 15:10</b> New Skyrme Parametrization with Inclusion of Nuclear Tensor for Fission-Barrier

# The 6th International Conference on Applied and Engineering Physics

**15:10 – 15:25**

Calculations

**15:25 – 16:45**

## COFFEE BREAK

**Chair: Prof. Marilou Cadatal Raduban**

**I – 06 Seoyong Shin .....** **15:25 – 15:50**

Design of lens for led uniform illumination using freeform optics

**I – 07 Md Mokter Hossain .....** **15:50 – 16:15**

High performance of toluen decomposition at low temperature over Pd/ZSM-5 coupled with a dielectric barrier discharge

**O – 01 Saud Shirjana .....** **16:15 – 16:30**

Adsorption and plasma-catalytic oxidation of ethylene over zeolite-supported Palladium catalyst using corona discharge-coupled catalytic reactor

**O – 02 Bhattacharai Roshan Mangal .....** **16:30 – 16:45**

CoMoS@N-doped carbon nanocomposite as a high-performance anode material for lithium-ion batteries

**18:00 – 20:30**

Gala dinner

**Thursday, 24/10/2019**

**8:00 – 10:15**

**Chair: Dr. Jacque Lynn Gabayno**

**I – 08 Jiri Olejnicek .....** **8:00 – 8:25**

Co<sub>3</sub>O<sub>4</sub> and TiO<sub>2</sub> films prepared by multi-plasma jet system with hot hollow cathode discharge

**O - 03 Ika Puspita .....** **8:25 – 8:40**

Modified Structure Silica Optical Fiber for Detection of Edible Oils Adulterant

**O - 04 Mohd Syafiq Elias .....** **8:40 – 8:55**

Graphene Film on Metal Catalyst Substrate Via Chemical Vapor Deposition

**O - 05 Maria Herminia Balgos .....** **8:55– 9:10**

Locating the *n*<sup>+</sup>-GaAs/LT-GaAs interface using a cross-sectional scanning tunneling microscope

**O - 06 Thin Thin Kyu .....** **9:10 – 9:25**

Characterization of Biochar Materials Manufactured from Agricultural Waste Biomass for Direct Carbon Fuel Cell (DCFC)

**O - 07 Nguyen Dinh Vinh .....** **9:25 – 9:40**

Ultrasound-assisted preparation of activated carbon from sugarcane bagasse used for removal of Pb(II) from water

**O – 22 Nguyen Thanh Phuong .....** **9:40 – 9:55**

Design and realization of led equipment apply in neonatal jaundice treatment

**O – 09 Bui Thi Thu Phuong .....** **9:55 – 10:10**

Using soil hardener dhd-101 in building roads and making adobe bricks

**10:15 – 10:30**

COFFEE BREAK

**10:30 – 11:55**

**Chair: Dr. Pham Hong Minh**

**I – 09 Tran Minh Thai .....** **10:30 – 10:55**

Application of low-level semiconductor laser in treatment of atherosclerosis of internal carotid artery in type 2 diabetes as hemiplegia after cerebrovascular accident

**O – 10 Nguyen Nhat Huy .....** **10:55 – 11:10**

Nghiên cứu chế tạo vật liệu graphite ôxit dạng cầu gai từ lõi pin tái chế và ứng dụng làm

**12:00 – 13:30**

vật liệu hấp phụ xử lí nhuộm đồ 120 trong môi trường nước	
<b>O – 11 Trinh Ngoc Dieu .....</b>	<b>11:10 – 11:25</b>
Kết quả nghiên cứu bước đầu sử dụng từ trường cường độ cao trong phương pháp giâm rẽ và chiết cành cây hồng ăn quả không hạt Gia Thanh	
<b>O – 12 To Van Chieu .....</b>	<b>11:25 – 11:40</b>

Phát triển công nghệ mới và Chế tạo thiết bị lưu trữ năng lượng với dung lượng cao vượt trội

<b>O – 13 Pham Dong Bang .....</b>	<b>11:40 – 11:55</b>
Chế tạo gương quang học khẩu độ lớn sử dụng trong hệ đo lidar: các kết quả mới	

### LUNCH BREAK

**13:30 – 15:10**

**Chair: Dr. Meng Hock Koh**

**I – 10 Mohd Sanusi Mohamad Syazwan .....** **13:30 – 13:55**

Ligand field parameters evaluation of Samarium activated BaSO<sub>4</sub>-TeO<sub>2</sub>-B2O<sub>3</sub> glasses for laser applications.

**O – 14 Nuanthip Wantana .....** **13:55 – 14:10**

The near-infrared luminescence of Nd<sup>3+</sup>-doped tungsten gadolinium borate glasses for photonic material applications

**O – 15 Pham Huu Kien .....** **14:10 – 14:25**

The structural transition under compression and structural heterogeneity for liquid SiO<sub>2</sub> system

**O – 16 Phan Van Cuong .....** **14:25 – 14:40**

X-ray luminescence comparison of photonic nanomaterials: CdSeS, LaF<sub>3</sub>:Ce<sup>3+</sup>/CdSeS, and CsPbI<sub>3</sub>

**O – 23 Nguyen Nang Dinh .....** **14:40 – 14:55**

Using cross-polarization scheme microscope for photoluminescent application to point-of-care diagnostics

**O – 18 Dinh Van Trung .....** **14:55 – 15:10**

Proportional and Integral feedback control of a XY nanopositioning device

**15:10 – 15:25**

### COFFEE BREAK

**15:25 – 16:25**

**Chair: Prof. Pham Hong Duong**

**O – 19 Dang Nguyen Ngoc An .....** **15:25 – 15:50**

3d reconstruction of absorbing structure in biological tissue from single 2d near infrared transillumination image - blood vessel phantom study

**O – 20 Huynh Truc Phuong .....** **15:40 – 15:55**

Determination of the concentration of Fe, Se and Zn elements in nails of Vietnamese women with breast cancer using k0-INAA method

**O – 08 Tran Manh Cuong .....** **15:55 – 16:10**

Multiband metamaterial absorber creating by connecting inductance rings in the structure

**O – 17 Duong Thi Giang .....** **16:10 – 16:25**

Design and fabrication of led blackboard washing luminaire combined with linear freeform lens

**18:00 – 20:30**

### Gala dinner

**Friday, 25/10/2019**

**8:00 – 09:45**

**Chair: Prof. Yin Maung Maung**

**10:00 – 10:15**

## COFFEE BREAK

**10:15 – 11:30**

**Chair: Prof. Juniastel Rajagukguk**

**O – 30 Le Quang Vuong .....** **10:15 – 10:30**

Validation of coincidence summing corrections computed by the etna software and mcnp-cp code

**O – 31 Min Maung Maung .....** **10:30 – 10:45**

Modification and nanostructural characterization of Myanmar coal

**O – 32 Ulwiyatul Sa'adah .....** **10:45 – 11:00**

Preparation of Electrospinning Polyacrylonitrile/Titanium Dioxide Nanofibers and Their Optical Properties as a Candidate Material For Natural Dye Sensitized Solar Cells

**O – 33 Viengthong Xayavong .....** **11:00 – 11:15**

Study the possibility of applying the advanced 2d multi-electrode electrical exploration method to find groundwater in vientiane province, Laos

**O – 34 Tran Minh Thai .....** **11:15 – 11:30**

Application of low-level laser in treatment fatty blood disease

**12:00 – 13:30**

## LUNCH BREAK

**15:15 – 15:30**

## COFFEE BREAK

**15:30 – 16:25**

## Poster session

**Chair: Prof. Anusara Srisrual, Prof. Elizabeth Ann Prieto**

**16:25 – 18:05**

## Plenary Session

**Chair: Prof. Nguyen Dai Hung**

**PL – 06 Jongseok Lee .....** **16:25 – 16:50**

Research opportunities in GIST with high excellence

**PL – 07 Satoshi Mayama .....** **16:50 – 17:15**

Internship and PhD research at Sokendai and Inter-University research institute in Japan

**PL – 08 Le Hong Khiem .....** **17:15 – 17:40**

Research opportunities in Dubna

**PL – 09 Dinh Van Trung .....** **17:40 – 18:05**

Introduction to International Centre of Physics under the auspices of UNESCO  
**Closing Ceremony**

**18:30 – 20:30**

**Farewell party**

**Saturday, 26/10/2019**

**08:00 – 16:00**

**Thai Nguyen tour**