# THE 7<sup>th</sup> ACADEMIC CONFERENCE ON NATURAL SCIENCE FOR YOUNG SCIENTISTS, MASTER AND PHD STUDENTS FROM ASEAN COUNTRIES

**(CASEAN - 7)** 

Hanoi & Vinh City, Vietnam. 14-17 October 2021

### **ABSTRACTS & PROGRAM**

https://iop.vast.ac.vn/activities/conf\_asean/2021/index.html

**CASEAN - 2021** 

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**Sponsors** 

## THE 7<sup>th</sup> ACADEMIC CONFERENCE ON NATURAL SCIENCE FOR YOUNG SCIENTISTS, MASTER AND PHD STUDENTS FROM ASEAN COUNTRIES

**(CASEAN - 7)** 

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King Mongkut's University of Technology North Bangkok

(KMUTNB), Thailand

Nakhon Pathom Rajabhat University, Thailand (NPRU) Thailand
Vietnam National University, Ho Chi Minh (VNU HCM)
Vietnam Academy of Science and Technology (VAST)
Vietnam Physical Society (VPS)

Graduate University of Science and Technology (GUST-VAST)

Vinh University, Vietnam

Institute of Physics (IOP-VAST), Vietnam

International Centre of Physics (ICP), Vietnam

## THE 7<sup>th</sup> ACADEMIC CONFERENCE ON NATURAL SCIENCE FOR YOUNG SCIENTISTS, MASTER AND PHD STUDENTS FROM ASEAN COUNTRIES

**(CASEAN - 7)** 

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Nguyen Xuan Dung (Vinh University)

Phan Van Hoa (Vinh University)

## THE 7<sup>th</sup> ACADEMIC CONFERENCE ON NATURAL SCIENCE FOR YOUNG SCIENTISTS, MASTER AND PHD STUDENTS FROM ASEAN COUNTRIES

**(CASEAN - 7)** 

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Conference E-mail: CASEAN.2021@gmail.com Tel: (84)94 5656 799; Fax: (84 024) 37669 050

### **BRIEF PROGRAM**

Date	THURSDAY	FRIDAY	SATURDAY
Time	14 October 2021	15 October 2021	16 October 2021
8:30 - 12:00	- ONLINE REGISTRATION	- OFFICIAL OPENING - PLENARY SESSION	- ORAL PRESENTATION - POSTER PRESENTATION
BREAKS			
13:00 - 17:30	- ONLINE REGISTRATION	- ORAL PRESENTATION - POSTER PRESENTATION	- ORAL PRESENTATION - OFFICIAL CLOSING

### **PROGRAM**

#### **PROGRAM**

#### October 15, 2021 (Friday)

#### **08:30 - 09:00** Official Opening

Prof. Nguyen Dai Hung (Conference President, VPS, Vietnam)

Prof. Nguyen Huy Bang (Vinh University, Vietnam)

Prof. Jakrapong Kaewkhao (Nakhon Pathom Rajabhat University, Thailand)

Prof. Elmer Estacio (*University of the Philippines*, *Philippines*)

Prof. Meng-Hock Koh (Universiti Teknologi Malaysia, Malaysia)

Prof. Anusara Srisrual (KMUT North Bangkok, Thailand)

Prof. Dinh Van Trung (Institute of Physics, VAST, Vietnam)

#### **PLENARY SESSION**

#### Chairperson:

Prof. Dinh Van Trung (IOP, Vietnam)
Prof. Nguyen Huy Bang (Vinh Univ., Vietnam)

## PL-01 POSTGRADUATE TRAINING AND SCIENTIFIC RESEARCH 09:00 - 09:25 IN THE FIELDS OF PHYSICS, CHEMISTRY AND BIOLOGY AT VINH UNIVERSITY

Dinh Xuan Khoa, Luu Tien Hung, Le Canh Trung, Bui Dinh Thuan, Mai Van Chung, Nguyen Xuan Dung

Vinh University, 182 Le Duan Street, Vinh City, Viet Nam

### PL-02 RARE-EARTH DOPED SCINTILLATING GLASS FOR09:25 - 09:50 RADIATION DETECTION MATERIAL APPLICATIONS

Jakrapong Kaewkhao

Center of Excellence in Glass Technology and Materials Science (CEGM), Nakhon Pathom Rajabhat University, Nakhon Pathom, 73000, Thailand

## PL-03 GaAs TERAHERTZ PHOTOCONDUCTIVE ANTENNA 09:50 - 10:15 EMITTERS WITH INTEGRATED MICRON-SIZE METAMATERIAL

Elmer Estacio

National Institute of Physics, University of the Philippines, Diliman Quezon City 1101, Philippines

10:15 - 10:20

#### **BREAKS**

#### **Chairperson:**

Prof. Jakrapong Kaewkhao (NPRU, Thailand)
Prof. Nguyen Thanh Binh (IOP, Vietnam)

## PL-04 EFFECT OF GAMMA-RAY IRRADIATION ON THIN FILM 10:20 - 10:45 TITANIUM DIOXIDE VACUUM ULTRAVIOLET PHOTOCONDUCTIVE DETECTOR

Marilou Cadatal-Raduban, Jiří Olejníček, Kohei Yamanoi, Michal Kohout, Seiya Kato, Yusuke Horiuchi, Tomoki Kato, Yu Haoze, Nobuhiko Sarukura, and Shingo Ono

Centre for Theoretical Chemistry and Physics, School of Natural and Computational Sciences, Massey University, New Zealand

### PL-05 IN-VITRO CELLS RESPONSE OF STRONTIUM CO-DOPED10:45 - 11:10 SOL - GEL DERIVED S50P4 BIOGLASS

Thet Thet Swe, Hasmaliza Mohamad, Khairul Anuar Shariff, Kunio Ishikawa, Khin Khin Win and Aye Aye Thant

Department of Physics, University of Yangon, Myanmar

## PL-06 ESTIMATION OF PAIRING STRENGTHS BASED ON SINGLE 11:10 - 11:35 PARTICLE LEVEL DENSITY WITHIN A NUCLEAR BARDEEN-COOPER-SCHRIEFFER APPROACH

Meng-Hock Koh and P. Quentin

Department of Physics, Faculty of Science, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

#### PL-07 RESEARCH TRANSLATION & IMPLEMENTATION

**11:35 - 12:00** Nipon Pisutpaisal

Department of Agro-Industrial, Food, and Environmental Technology, Faculty of Applied Science, King Mongkut's University of Technology North Bangkok, Thailand

12:00 - 13:00

**BREAKS** 

### **ORAL PRESENTATION**

#### ORAL PRESENTATION

#### October 15, 2021 (Friday)

#### **Chairperson:**

Prof. Elmer Estacio (UP Diliman, Philippines)
Prof. Dinh Xuan Khoa (Vinh Univ., Vietnam)

## *O-01* FABRICATION AND INVESTIGATION ON SIZE AND 13:00 - 13:20 SURROUNDING MEDIUM OF THE ER<sup>3+</sup> - DOPED SILICA MICROSPHERES ON THE WHISPERING-GALEERY MODE LASERS

(*Invited talk*)

Quang Minh Ngo, Van Dai Pham, Thanh Son Pham, Thu Trang Hoang, Van An Nguyen

University of Science and Technology of Hanoi, Vietnam Academy of Science and Technology

#### O-02 NOVEL QUASI SOLID - STATE ELECTROLYTE BASED ON 13:20 - 13:40 ELECTROSPUN POLY(ACRYLONITRILE) /CARBON BLACK NANOFIBERS FOR DYE SENSITIZED SOLAR CELLS

(*Invited talk*)

Ulwiyatus Sa'adah, Markus Diantoro, Arif Hidayat, Nasikhudin

Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Malang, Malang 65145, Indonesia

## O-03 ASSESSMENT OF NATURAL RADIOACTIVITY IN SOIL 13:40 - 13:55 SAMPLES FROM SOME AREAS IN PHOUCHOMVOY PROVINCIAL PROTECTED AREA, BORLIKHAMXAY PROVINCE, LAO PDR

Sonexay Xayheungsy, Sacxay Somepaseurth, Nyphone Vorachack, Theingsamone Xuansuandao, Sounthone Sounthone Singsoupho and Lemthong Lathdavong

Department of Physics, Faculty of Natural Science, National University of Laos

### *O-04* MAGIC NUMBERS OF SUPERHEAVY ELEMENTS WITHIN 13:55 - 14:10 SKYRME MEAN-FIELD APPROACH

Mastura Syamimi Abdullah and Meng-Hock Koh

Department of Physics, Faculty of Science, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

#### O-05 EFFECT OF SILVER LAYER ON INTERMETALLIC 14:10 - 14:25 COMPOUND FORMATION AT SAC305/METAL PAD INTERFACE

Titipa Zunsuwan, Phakkhaphum Lethaisong, Anusara Srisrual

King Mongkut's University of Technology North Bangkok (KMUTNB), Thailand

## O-06 CALCULATION OF PERCOLATION THRESHOLDS OF 14:25-14:40 IRREGULAR LATTICES USING A NEW MONTE CARLO - BASED ALGORITHM

Miguel Aaron M. Bobadilla, Rayda P. Gammag

Department of Physics, Mapua University, 658 Muralla St., Intramuros, Manila 1002, Philippines

## *O-07* NUMBER OF BUBBLE OF SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-Na<sub>2</sub>O-CaO-ZnO 14:40 - 14:55 GLASSES: EFFECT OF Sb<sub>2</sub>O<sub>3</sub> CONCENTRATION AND MELTING TEMPERATURE

Nakarin Singkiburin, Nattapon Srisittipokakun, Jakrapong Kaewkhao

Physics Program, Faculty of Science and Technology, Nakhon Pathom Rajabhat University, 7300, Thailand

## $\it O-08$ OPTIMIZING THE PERFORMANCE OF FLEXIBLE 14:55 - 15:10 β-Ga<sub>2</sub>O<sub>3</sub> SOLAR-BLIND PHOTODETECTOR GROWN ON OHP SUBSTRATES BY INSERTING ADHESION LAYERS

Vu Thi Kim Oanh, Bui Thi Hoa, and Eun Kyu Kim

Institute of Physics, Vietnam Academy of Science and Technology

#### 0-09 CHROMATIC DISPERSION CONTROL IN LEAD-BISMUTH

## 15:10 - 15:25 GALLATE GLASS PHOTONIC CRYSTAL FIBERS WITH SELECTIVE HIGH NONLINEAR LIQUID INFILTRATION: APPLICATION TO ULTRA FLATTENED-NORMAL-DISPERSION

Quang Ho Dinh, Nguyen Dang Nguyen, Chin Hoang Van, Ngoc Vo Thi Minh, Trung Le Canh, Thao Nguyen Thi, Hieu Van Le

Faculty of Natural Sciences, Hong Duc University, 565 Quang Trung Street, Thanh Hoa City, Vietnam

#### 15:25 – 15:30

#### **BREAKS**

#### **Chairperson:**

Prof. Meng-Hock Koh (*UTM*, *Malaysia*) Prof. Ngo Quang Minh (*USTH*, *Vietnam*)

### *O-10* MOVING MAGNETIC DOMAIN WALLS IN Ni<sub>80</sub>Fe<sub>20</sub> 15:30 - 15:50 NANOWIRES – WIND THEM UP AND WATCH THEM GO

(*Invited talk*)

Duc Quang Hoang, Hoai Thuong Nguyen, Thanh Dung Hoang, Xuan Huu Cao

Faculty of Civil Engineering, Ton Duc Thang University, 19 Nguyen Huu Tho, District 7, Ho Chi Minh City 700 000, Vietnam

## *O-11* BLACK CARBON: FROM LABORATORY STUDIES TO 15:50 - 16:10 ATMOSPHERIC MEASUREMENTS

(*Invited talk*)

Kim Cuong Le

Division of Combustion Physics, Department of Physics, Lund University, Sweden

### *O-12* LIGHT BASED TECHNOLOGY METHOD FOR COVID-19 16:10 - 16:25 DETECTION

(*Invited talk*)

Ika Puspita, K. A. Madurani, M. Y. Syahputra, F. Kurniawan, A. M. Hatta, Sekartedjo

Department of Engineering Pysics, Institut Teknologi Sepuluh Nopember, Indonesia 60111

## *O-13* WHITE-LIGHT EMISSION AND CHROMATICITY 16:25 - 16:40 CHARACTERIZATION OF Dy<sup>3+</sup> DOPED OXYFLUORIDE GLASS FOR W-LEDS APPLICATION

Nawarut Jarucha, Piyachat Meejitpaisan, Yotsakit Ruangtaweep, Jakrapong Kaewkhao

Physics Program, Faculty of Science and Technology, Nakhon Pathom Rajabhat University, Nakhon Pathom 73000, Thailand

#### O-14 ELECTRICAL RESISTIVITY TOMOGRAPHY AND SEISMIC 16:40 - 16:55 REFRACTION METHODS FOR GROUNDWATER INVESTIGATION IN SAVANNAKHET PROVINCE, LAOS

Viengthong Xayavong, Minh Duc Vu, Nguyen Anh Duong, Vu Minh Tuan

University of Science, Vietnam National University, Hanoi, Vietnam

#### O-15 THREE-DIMENSIONAL STITCHING METHOD FOR NON-16:55 - 17:10 CONTACT ON-MACHINE SURFACE TOPOGRAPHY MEASUREMENT BY USING WHITE LIGHT SCANNING INTERFEROMETRY SYSTEM

Vo Quang Sang, Yiting Duan

Department of Optical Engineering, Le Quy Don Technical University, Ha Noi, Viet Nam

## *O-16* THE INVESTIGATION OF PHOTON, FAST NEUTRON 17:10 – 17:25 SHIELDING REMOVAL AND CHARGED PARTICALES SHIELDING PROPERTIES OF GALLIUM GADOLINUIM BOROSILICATE GLASS: THEORETICAL APPROACHES

Supakit Yonphan, Pruittipol Limkitjaroenporn, Jakrapong Kaewkhao

Physics program, Faculty of Science and Technology, Nakhon Pathom Rajabhat University, Nakhon Pathom 73000, Thailand

#### 13:30- 17:30 POSTER PRESENTATION I

#### ORAL PRESENTATION

#### October 16, 2021 (Saturday)

#### **Chairperson:**

Prof. Marilou Cadatal-Raduban (Massey Univ., New Zealand)
Prof. Pham Hong Minh (IOP, Vietnam)

## *O-17* ZnO NANOSTRUCTURES DECORATED Au 08:30 - 08:50 NANOPARTICLES FOR NON-ENZYMATIC GLUCOSE SENSING

(*Invited talk*)

Hanh Hong Mai, Ewald Janssens

Faculty of Physics, VNU University of Science, 334 Nguyen Trai, Hanoi, Vietnam

### *O-18* THE STUDY ON Dy<sup>3+</sup> DOPED Na<sub>2</sub>O-Gd<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub> GLASS 08:50 - 09:10 FOR PHOTONICS MATERIAL APPLICATIONS

(*Invited talk*)

E. Kaewnuam, N. Wantana, J. Kaewkhao

Physics Program, Faculty of Science and Technology, Muban Chombueng Rajabhat University, Ratchaburi, 70150, Thailand

## *O-19* A FEASIBILITY STUDY ON UTILIZATION TO REFUSE 09:10 - 09:25 DERIVED FUEL FOR MUNICIPAL SOLID WASTE OF THE PUBLIC DISTRICT IN LAOS

Bounkhong Keomounlath, Liping Ma, Jing Yang, Jie Yang

Faculty of Natural Science, National University of Laos, Vientiane, Laos

## *O-20* INVESTIGATION OF AN EXTRAORDINARY TERAHERTZ 09:25 - 09:40 TRANSMISSION THROUGH A ONE - DIMENSIONAL METAL LINE ARRAY

H. R. Bardolaza, N. I. F. Cabello, J. P. R. Ferrolino, I. C. M. Verona1, M. Y. Bacaoco, A. A. Somintac, A. A. Salvador, A. E. De Los Reyes, and E. S. Estacio

National Institute of Physics, College of Science, University of the Philippines Diliman, Quezon City, Philippines

## O-21 WAVEFORMS CLASSIFICATION OF NORTHERN 09:40 - 09:55 SUMATRA EARTHQUAKE BASED ON SEISMIC NETWORK STATION USING A RANDOM FOREST MACHINE LEARNING APPROACH

Sinambela Marzuki, Pham Hong Minh

Agency for Meteorology Climatology and Geophysics (BMKG), Indonesia

## *O-22* STUDY OF MANGANESE PROMOTED 09:55 - 10:10 COBALT/MESOPOROUS SILICA CATALYST FOR FISCHER-TROPSCH SYNTHESIS

Saowaluk Intarasiri, Monrudee Phongaksorn, Tanakorn Ratana, and Sabaithip Tungkamani

Faculty of Science, Energy and Environment, King Mongkut's University of Technology North Bangkok (Rayong Campus), Thailand

## *O-23* TERAHERTZ PCA - PCA QUASI - TIME DOMAIN 10:10 - 10:25 SPECTROSCOPY USING COMMERCIAL MULTIMODE-DIODE LASER

I. C. M. Verona, A. E. De Los Reyes, H. R. Bardolaza, N. I. F. Cabello, A. A. Somintac, A. A. Salvador, and E. S. Estacio

National Institute of Physics, College of Science, University of the Philippines Diliman, Quezon City, Philippines 1101

10:25 – 10:30 **BREAKS** 

#### **Chairperson:**

## Prof. Nipon Pisutpaisal (KMUTNB, Thailand) Prof. Mai Hong Hanh (VNU, Vietnam)

## O-24 INFLUENCE OF A COMPRESSIVE STRAIN ON THE HIGH 10:30-10:50 TEMPERATURE THERMOELECTRIC PROPERTIES OF EUROPIUM ORTHOFERRITE

(*Invited talk*)

Carlos F. Baldo, P. Iyyappa Rajan, S. Mahalakshmi and R. Jothi Ramalingam

Mapua University, Philippines

## O-25 FAST – RESPONSE SCINTILLATOR THROUGH CROSS – 10:50-11:10 LUMINESCENCE IN WIDE BAND GAP FLUORIDE CRYSTAL

(*Invited talk*)

Luong Viet Mui, Pham Hong Minh, Akira Yoshikawa, Toshihiko Shimizu, Nobuhiko Sarukura, Tadashi Togashi, and Kohei Yamanoi Marilou Cadatal-Raduban

Graduate School of Engineering, Osaka University, Osaka, Japan

## *O-26* Sm<sup>3+</sup> DOPED LITHIUM CALCIUMI ZINC BORATE GLASSES 11:10 - 11:25 FOR LASER APPLICATIONS

W. Boonpa, K. Kirdsiri, J. Kaewkhao

Physics Program, Faculty of Science and Technology, Nakhon Pathom Rajabhat University, Nakhon Pathom 73000, Thailand

## O-27 TERAHERTZ EMISSION AT 1.55 μm BELOW-BANDGAP 11:25-11:40 AND 780 nm ABOVE - BANDGAP FEMTOSECOND LASER EXCITATION OF LT - GaAs PHOTOCONDUCTIVE ANTENNA DEVICE

J. B. Publico, I. C. M. Verona, H. R. Bardolaza, N. I. F. Cabello, A. E. De Los Reyes, and E. S. Estacio

Materials Science and Engineering Program, College of Science, University of the Philippines Diliman, Quezon City 1101, Philippines

#### 0-28 DOPPLER RADAR SYSTEM IN MOTION DETECTION

11:40 - 11:55 Ha Minh Khue, Nguyen Hoang Quan, Pham Thien Luan

Dept. of Physics and Electronic Engineering, VNUHCM - University of Science, Vietnam

### *O-29* THERMAL DECOMPOSITION KINETIC ANALYSIS OF 11:55 - 12:10 SEVERAL OCTOGEN - BASED ENERGETIC MATERIALS

Toan Nguyen Trung, Huu Hoang Trung

Le Quy Don Technical University, 236 Hoang Quoc Viet, Ha Noi 100000, Vietnam

### *O-30* INVESTIGATION OF PLASMON RESONANCE IN 2D 12:10 - 12:25 METAL – DIELECTRIC - METAL NANOSTRUCTURES

Thu Trang Hoang, Thanh Son Pham, Xuan Bach Nguyen, Huu Tu Nguyen, and Quang Minh Ngo

Institute of Materials Science, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam

09:00 - 12:10 POSTER PRESENTATION II

12:25 - 13:00 BREAKS

#### **ORAL PRESENTATION**

#### October 16, 2021 (Saturday)

#### **Chairperson:**

Prof. Anusara Srisrual (KMUTNB, Thailand)
Assoc. Prof. Mai Van Chung (Vinh Univ., Vietnam)

### *O-31* BIOCOMPATIBLE RANDOM MICROLASERS BASED ON 13:00 - 13:20 INVERTED PHOTONIC GLASS STRUCTURE

(*Invited talk*)

Ta Van Duong

Department of Optical Devices, Le Quy Don Technical University, Hanoi 100000, Vietnam

### *O-32* LASER - FABRICATION MECHANISMS OF 13:20 - 13:40 NANOSTRUCTURES ON Au/Pd THIN FILM

(*Invited talk*)

Nguyen Thi Huyen Trang, Kudryashov Sergey Ivanovich, Doan Hoai Son

Ha Tinh University, No 447, street 26/3, precinct Dai Nai, city Ha Tinh, province Ha Tinh, Viet Nam

## *O-33* SYNTHESIS OF CdSe QUANTUM DOTS AND 13:40 - 13:55 PHOTOLUMINESCENCE ENHANCEMENT BY ZnO THIN FILM

Phan Van Cuong, Nguyen Thi Minh Nguyet

Department of Physics, Nha Trang University, 02 Nguyen Dinh Chieu Street. Nha Trang, Vietnam

## *O-34* CLOUD REMOVAL FROM LANDSAT IMAGERY USING 13:55 - 14:10 CLOUD COMPUTING PLATFORM GOOGLE EARTH ENGINE

Le Van Phu, Le Hung Trinh, Bui Van Hai

Le Quy Don Technical University, Hanoi, Vietnam

### *O-35* MULTI-CHANNEL ALL-OPTICAL SWITCHING IN A FIVE - 14:10 - 14:25 LEVEL TRIPOD ATOMIC MEDIUM

Nguyen Huy Bang, Dinh Xuan Khoa, Nguyen Thi Thu Hien, Hoang Minh Dong, Nguyen Tuan Anh, Thai Doan Thanh

Vinh University, 182 Le Duan Street, Vinh City, Vietnam

### *O-36* POLYMER BLEND BASED ON POLYAMIDE AND ITS 14:25-14:40 APPLICATIONS

Nguyen Trung Thanh

Institute of Technology, General Department of Defence Industry, No. 3 Cau Vong, Duc Thang, Bac Tu Liem, Hanoi, Vietnam

## *O-37* MACHINE LEARNING APPROACH FOR ACCURATE 14:40- 14:55 PREDICTION OF PEROVSKITE MATERIALS PROPERTIES

Dinh Ngoc Dung, Ngo Quang Minh

Department of Physics, Graduate University of Science and Technology, Vietnam

## *O-38* FIBER DISPERSION MEASUREMENTS USING 14:55-15:10 MACH-ZEHNDER INTERFEROMETER

Abstract
Le Canh Trung, Ha Minh Quan, Ho Dinh Quang,
Dinh Xuan Khoa, Do Thanh Thuy, Nguyen Tien Dung,
Nguyen Thi Ha Linh, Le Van Hieu, Phan Nhu Mai, Bui Dinh Thuan
Vinh University, 182 Le Duan Street, Vinh City, Viet Nam

15:10 – 15:15 BREAKS

#### **Chairperson:**

Assoc. Prof. Luu Tien Hung (Vinh Univ., Vietnam)
Dr. Do Hoang Tung (IOP, Vietnam)

### *O-39* SPATIO - TEMPORAL CHANGES IN AQUACULTURE 15:15 - 15:30 PONDS IN BEN TRE PROVINCE, SOUTHERN VIETNAM

(*Invited talk*)

Bijeesh Kozhikkodan Veettil, Xuan-Linh Tran, Nhat-Duc Hoang

Institute of Fundamental and Applied Sciences, Duy Tan University,
Ho Chi Minh City, Vietnam

## *O-40* BACILLUS LICHENIFORMIS MPC4 – A NOVEL 15:30 - 15:45 BACTERIAL STRAIN FOR DEGRADATION OF ORGANOPHOSPHORUS PESTICIDES IN TROPICAL SOIL

Hoang Kim Chi, Quang H. Tran, Cuong H. Le, Ha T. H. Tran, Quan T. Nguyen, Huong M. Le and Hang T. N. Tran

Institute of Natural Products Chemistry - Vietnam Academy of Science and Technology

## *O-41* SILVER MESO - PARTICLES APPLYING IN DETECTION 15:45 - 16:00 MELAMINE BY SURFACE ENHANCED RAMAN SPECTROSCOPY

Nguyen Thi Hang Nga, Nguyen Thi Bich Ngoc, Vu Duong *Thuyloi University, 175 Tay Son, Dong Da, Hanoi, Vietnam* 

## *O-42* SEGMENTATION OF VASCULAR PATTERN ON THE 16:00 - 16:15 CERVICAL SURFACE USING COLPOSCOPIC IMAGE

Vu Quoc Anh, Phan Ngoc Khuong Cat, Tran Van Tien, Tu Tuyet Dung, Ly Anh Tu

Department of Applied Physics, Ho Chi Minh City University of Technology, 268 Ly Thuong Kiet Street, District 10, Ho Chi Minh City, Vietnam

## *O-43* GENERATION OF ENTANGLED STATES IN THREE MODE 16:15 - 16:30 NONLINEAR KERR - LIKE OSCILLATORS SYSTEM

Thi Dung Nguyen, Thi Giang Le, Thi Thao Nguyen, Thi Dan Phan, Van Quang Nguyen

Hong Duc University, 565 Quang Trung Street, Dong Ve Ward, Thanh Hoa City, Vietnam

## *O-44* EFFECT OF ENDURANCE TRANING IN PATIENT WITH 16:30 - 16:45 HYPERTENSION ON BICYCLE ERGOMETERS

Nguyen The Thuong

Institut of Biomedical Physics, 109A Pasteur, Ben Nghe Ward, District 1, HoChiMinh City

## *O-45* COMPACT INTEGRATED EXPERIMENTAL SYSTEM FOR OBSERVATION OF FUNDAMENTAL ATOMIC SPECTRA

Nguyen Van Ai, Le Van Doai, Luong Thi Yen Nga, Phan Van Thuan, Dinh Xuan Khoa and Nguyen Huy Bang

Vinh University, 182 Le Duan Street, Vinh City, Vietnam

## *O-46* SYNTHESIS OF Ag@Cu-SiO<sub>2</sub> BIMETALLIC 17:00 - 17:15 NANOCOMPOSITES BY THE POLYOL METHOD

Man Vo Le Minh

Vietnam National University Ho Chi Minh City - University of Science

## *O-47* THEORETICAL AMBIGUITIES OF THE 12C(p,2p)11B 17:15 - 17:30 REACTION AT THE LOW-ENERGY LIMIT

Nguyen Tri Toan Phuc, Kazuyuki Ogata, Nguyen Hoang Phuc, Bui Duy Linh, Vo Hong Hai, Le Xuan Chung

Faculty of Physics and Engineering Physics, University of Science, VNU-HCM, Ho Chi Minh City, Vietnam

## *O-48* KEY FACTORS EXPLAINING SEVERE AIR POLLUTION 17:30 - 17:45 EPISODES IN HANOI DURING 2019 WINTER SEASON

Bao Anh Phung Ngoc, Hervé Delbarre, Karine Deboudt, Elsa Dieudonné, Dien Nguyen Tran, Son Le Thanh, Jacques Pelon, François Ravetta, Hai Van Bui

Laboratoire de Physique et Chimie Atmosphériques (LPCA), Université du Littoral Côte d'Opale, Dunkerque, France

#### 17:30 - 17:45

#### **OFFICIAL CLOSING**

#### POSTER PRESENTATION I

13:00 - 17:00, October 15, 2021 (*Friday*)

#### **Chairperson:**

Dr. Le Canh Trung(Vinh Univ., Vietnam)

Dr. Nguyen T. Huyen Trang (HaTinh Univ., Vietnam)

Dr. Nguyen Thi Mai Huong (IOP, Vietnam)

## PI-01 EFFECT OF THE γ-POLYOXYMETHYLENE FIRE RATARDANT ON THE CHEMICAL STABILITY OF THE DOUBLE BASE ENERGETIC MATERIAL USING LAVA THERMAL ANAYLYSIS TECHNIQUE

Duong Ngoc Co, Pham Van Toai, Nguyen Trung Toan, Nguyen Manh Tuong, La Duc Duong

Institute of Propellant and Explosives, 192 Duc Giang, Long Bien, Ha Noi, Viet Nam

## PI-02 ENHANCING THE EFFICIENCY INTERPRETATION GROUND PENETRATING RADAR DATA USING TWO-DIMENSIONAL CONTINUOUS WAVELET TRANSFORM

Tin Duong Quoc Chanh, Dau Duong Hieu, Van Nguyen Thanh, Thuan Nguyen Van, Minh Lam Thuy, Nhan Duong Trong, My Tran Diem

Can Tho University, Campus 2, 3/2, Ninh Kieu, Can Tho, Vietnam

### PI-03 DEEP LEARNING FOR WAVEFRONT CODING SYSTEM WITH RADIALLY SYMMETRIC PHASE MASK

Van Nhu Le, Van Sang Doan, Quoc Khanh Doan, Thanh Hai Do Le Quy Don Technical University, Vietnam

### PI-04 GASES TRANSPORT EQUATION WITH TEMPERATURE INVERSIONS IN THE ATMOSPHERE

Vu Ba Dung

Hanoi University of Mining and Geology, Vietnam

### PI-05 TRANSPORT PROPERITES OF ACOUSTIC FIBROUS MATERIALS BY MICROSTRUCTURE BASED MODELING

Van-Hai Trinh

Faculty of Vehicle and Energy Engineering, Le Quy Don Technical University, 236 Hoang Quoc Viet, Ha Noi, Viet Nam

### PI-06 THE EFECTS OF Ge OVERGROWTH TEMPERATURE ON THE STRUCTURAL PROPERTIES OF Ge /Mn<sub>5</sub>Ge<sub>3</sub>/Ge(111) SYSTEM

Thi Giang Le, Minh Tuan Dau, Thi Kim Phuong Luong, Thi Dung Nguyen, Viet Bau Le

Hong Duc University, 565 Quang Trung Street, Dong Ve Ward, Thanh Hoa City, Vietnam

## PI-07 MODEL AND PRACTICAL RESULTS APPLYING THE ATTRIBUTE OF ENERGY DIFFERENCE IN GROUND PENETRATING RADAR IN VIETNAM

Duy Hoang Dang, Cuong Van Anh Le

Faculty Geophysical, University of Science, Ho Chi Minh City, Vietnam

### PI-08 MODEL AND RESULTS OF THE GRADIENT METHOD IN GRAVITY DOCUMENT PROCESSING

Duy Hoang Dang, Nghia Huu Pham

Faculty Geophysical, University of Science, Ho Chi Minh City, Vietnam

### PI-09 APPLYING IMAGE PROCESSING TECHNIQUES INTO THE PROCESS OF READING AND CALIBRATING LEVELING STAFFS

Vu Khanh Phan, Vu Tien Dung, Ta Van Doanh, Nguyen Thi Kim Cuc

Hanoi University of Science and Technology, School of Mechanical Engineering, No. 1 Dai Co Viet - Hai Ba Trung - Ha Noi

### PI-10 CORRELATION OF ELECTRON-ELECTRON SCATTERING IN DIFFERENT SUBBANDS OF QUANTUM WELLS

Doan The Ngo Vinh, Nguyen Thanh Cong

School of Natural Sciences Education, Vinh University, 182 Le Duan, Vinh City, Nghe An Province, Vietnam

#### PI-11 POROUS SILICON USED IN OPTOELECTRONICS AND SENSORS

Le Dinh Vi, Tran Quang Dat, Pham Tien Hung, Dang Hai Ninh, Ngo Thi Lien

Department of Physics, Le Quy Don Technical University, 236 Hoang Quoc Viet - Ha Noi

## PI-12 DEVELOPMENT OF A CUSTOM PORTABLE ELECTROCHEMICAL ANALYTICAL DEVICE AND APPLY TO STUDY ELECTROCHEMICAL PROPERTIES OF CURCUMIN BIOACTIVE MATERIAL

Le Van Truyen, Nguyen Hai Binh

Institute of Physics;

Institute of Materials Science, Vietnam Academy of Science and Technology

## PI-13 DEVELOPMENT OF A DEVICE FOR AUTOMATICALLY MEASURING PARALLELISM OF A PLATE DURING PROCESSING

Phan Nguyen Nhue, Bui Dinh Bao

Department of Optical Devices Le Quy Don Technical University Hanoi, Vietnam

### PI-14 SYNTHESIS AND MICROWAVE ABSORPTION PERFORMANCE OF BaFe<sub>12</sub>O<sub>19</sub>/NiFe<sub>2</sub>O<sub>4</sub> NANOCOMPOSITE

Tran Quang Dat, Nguyen Kim Thanh, Le Dinh Vi, Nguyen Vu Tung, Pham Van Thin

Faculty of Physical & Chemical Engineering, Le Quy Don Technical University

### PI-15 MATERIAL CHARACTERIZATION OF BETULIN EXTRACTED FROM BIRCK BARK (BETULA UTILIS)

Le Thi Thu Huong, Nguyen Thi Mai Huong, Le Thi Huong, Nguyen Thanh Binh

Institute of Physics, Vietnam Academy of Science & Technology, Hanoi, Vietnam

### PI-16 RESEARCH AND DEVELOPMENT COLOR LASER SYSTEM FOR LIDAR TECHNOLOGY

Vu Duy Phuong, Nguyen Hai Anh and Phung Viet Tiep

Department of Space, University of Science and Technology anh Hanoi, 18 Hoang Quoc Viet, Cau Giay district, Hanoi, Vietnam

## PI-17 IDENTIFICATION OF Stephania spp. PLANTS COLLECTED IN LAO CAI PROVINCE OF VIETNAM BY MORPHOLOGY, COMPARATIVE ANATOMY AND DNA BARCODE METHODS

Hiep Hoang Phu, Thao Thi Phuong Cao, Danh Thuong Sy Thi Thanh Nhan Pham

School of Biology, Thai Nguyen University of Education

### PI-18 RESEARCHING THE RETRO-REFLECTION PHENOMENON IN OPTICAL AND OPTOELECTRONIC DEVICES

Nguyen Quang Hiep

Department of optical devices, Le Quy Don Technical University, Ha Noi, Viet Nam

#### PI-19 ASSESSMENT OF PREBIOTIC INDICATES IN SOYBEAN DRY: THROUGH PROBIOTIC GROWTH INDICATOR WITH SOYBEAN DRY SOURCE, COMPARISON WITH GLUCOSE SOURCE

Nguyen Tien Dat, Hoang Phuong Ha, Le Thi Nhi Cong

Institute of Biotechnology – Vietnam Academy of Science and Technology, 18C Hoang Quoc Viet Street, Cau Giay District, Ha Noi City, Vietnam

### PI-20 PHASE-DEPENDENCE OF OPTICAL PROPERTIES IN A THREE - LEVEL LAMBDA MEDIUM

Nguyen Thi Thu Hien, Nguyen Huy Bang, Luong Thi Yen Nga, Hoang Minh Dong, Nguyen Tuan Anh, Thai Doan Thanh, Le Thi Minh Phuong

Ho Chi Minh City University of Food Industry, Ho Chi Minh City, Vietnam

## PI-21 THE THIRD-ORDER NONLINEAR OPTICAL EFFECT OF ORGANIC COMPOUNDS WITH VERY LOW POWER CONTINUOUS LASER EXCITATION SOURCE

Duong Chi Tong, Nguyen Nang Binh, Phan Trung Vinh, Nguyen Thanh Lam, Nguyen Thi Thu Hien

Physics-Engineering Physics Department, University of Science, 227 Nguyen Van Cu Street, Ward 4, District 5, Ho Chi Minh City

## PI-22 INVESTIGATION OF THE THIRD-ORDER NONLINEAR OPTICAL EFFECT AND THE PHOTODYNAMIC EFFECT OF THE SAFRANIN O ORGANIC MATTER IN WATER AND METHANOL SOLVENTS

Nguyen Nang Binh, Duong Chi Tong, Nguyen Thi Thu Hien, Nguyen Hong Giang, Phan Trung Vinh, Nguyen Thanh Lam

Physics-Engineering Physics Department, University of Science, 227 Nguyen Van Cu Street, Ward 4, District 5, Ho Chi Minh City

### PI-23 SYNTHESIS AND THERMAL DEGRADATION OF NITRO-POLYSTYRENE (N-PS)

Pham Dinh Thang, Doan Minh Khai

Le Quy Don Technical University, 236 Hoang Quoc Viet, Hanoi, Vietnam

### PI-24 APPLICATION OF COASTAL BIOSHIELDS FOR SHORELINE PROTECTION IN QUANG NAM, CENTRAL VIETNAM

Bijeesh Kozhikkodan Veettil, Xuan-Linh Tran, Nhat-Duc Hoang

Institute of Fundamental and Applied Sciences, Duy Tan University, Ho Chi Minh City, Vietnam

### PI-25 DETERMINATION OF CAMPHOR CONCENTRATION PROFILE IN 5/7SFL DETERRED SINGLE BASE PROPELLANT

Pham Quang Hieu

Institute of Propellants and Explosives, 192, Duc Giang St, Ha Noi, 1000, Viet Nam

## PI-26 RESEARCH TECHNOLOGY FOR CREATION OF ENERGY MATERIALS, REQUIREMENTS TO PHLEGMATIZATION AND USE FOR CHARGES TO THE CARTRIDGE 23 MM AND 30 MM NAVY-PART 1

Pham Quang Hieu

Institute of Propellants and Explosives, 192, Duc Giang St, Ha Noi, 1000, Viet Nam

## PI-27 DETERMINATION OF THE INITIAL ELECTRON BEAM PARAMETERS IN THE 15MV SIEMENS PRIMUS MEDICAL LINEAR ACCELERATOR USING GATE/GEANT4 SIMULATION TOOLKIT

Tran Thi Thanh Vinh, Vo Hong Hai, Pham Nguyen Kim Ngan, Nguyen Tri Toan Phuc, Vu Ngoc Tu

Department of Nuclear Physics, Faculty of Physics and Engineering Physics, University of Science, VNU-HCM, Ho Chi Minh City, Vietnam

## PI-28 ANALYSIS OF NEUTRON/GAMMA DISCRIMINATION FOR STILBENE SCINTILLATOR DETECTOR USED TO MEASURE FROM WATER PHATOM IRRADIATED BY MEDIAL PROTON ACCELERATOR

Tran Ngoc Tien Phat, Tran Cong Thien, Vo Hong Hai

Department of Nuclear Physics, Faculty of Physics and Engineering Physics, University of Science, VNU-HCM, Ho Chi Minh City, Vietnam

## PI-29 NUMERICAL SIMULATION OF ALL-NORMAL DISPERSION SUPERCONTINUUM GENERATION IN SUSPENDED CORE FIBER INFILTRATED WITH ETHANOL

Astract

Le Canh Trung, Ha Minh Quan, Dinh Xuan Khoa, Do Thanh Thuy, Nguyen Tien Dung, Nguyen Thi Ha Linh, Le Van Hieu, Tran Thi Thanh Huyen, Bui Dinh Thuan

Vinh University, 182 Le Duan Street, Vinh City, Viet Nam

## PI-30 SYNTHESIS OF MnAIC/Fe SPRING EXCHANGE MAGNETIC MATERIALS

Nguyen Van Tang, Pham Van Dai

Aeronautics Department, University of Science and Technology of Hanoi, 18 Hoang Quoc Viet, Cau Giay, Hanoi

#### POSTER PRESENTATION II

08:30 - 12:00, October 16, 2021 (Saturday)

#### **Chairperson:**

Dr. Bui Dinh Thuan (Vinh Univ., Vietnam)
Prof. Pham Hong Minh (IOP, Vietnam)

### PII-01 CONSTRUCTION AND USE OF STUDY FILM IN TEACHING GENERAL PHYSICS EXPERIMENTS

Ho Xuan Huy, Nguyen Hong Hai

Faculty of Education, An Giang University, An Giang, Vietnam

### PII-02 GOLD CORE - SILVER SHELL NANORODS WITH DIFFERENT THICKNESS OF SILVER SHELL

Do Thi Hue, Tran Thi Thuc, Tran Khac Khoi

Department of Physics, Thai Nguyen University of Education

### PII-03 SYNTHESIS OF M<sub>0</sub>S<sub>2</sub> NANOPARTICLES BY HYDROTHERMAL ROUTE AND ITS CHARACTERIZATIONS

Vu Van Thu, Nguyen Dac Dien

Faculty of Occupational Safety and Health, Trade Union University, Hanoi, Vietnam

## PII-04 COMPARISON OF EFFECTIVE MODE AREA OF PHOTONIC CRYSTAL FIBERS WITH DIFFERENT AIR-HOLE DIAMETERS IN THE CLADDING FOR VARIOUS LATTICE TYPES

Trong Dang Van, Bao Tran Le Tran, Lanh Chu Van, Duc Hoang Trong, Thuy Nguyen Thi

Department of Physics, Vinh University, 182 Le Duan, Vinh City, Viet Nam

## PII-05 INVESTIGATING EFFECTIVE REFRACTIVE INDEX AND CONFINEMENT LOSS OF PCFs WITH HETEROGENEOUS RINGS IN THE CLADDING FOR VARIOUS LATTICE TYPES

Bao Tran Le Tran, Trong Dang Van, Lanh Chu Van, Duc Hoang Trong, Thuy Nguyen Thi

Department of Physics, Vinh University, 182 Le Duan, Vinh City, Viet Nam

### PII-06 FABRICATION OF SILVER NANOFLOWERS ON COPPER USING FOR SURFACE-ENHANCED RAMAN SCATTERING

Nguyen Manh Cuong, Luong Truc Quynh Ngan, Dao Tran Cao, Cao Tuan Anh, Kieu Ngoc Minh and Vu Thi Thu

Institute of Materials Science, Vietnam Academy of Science and Technology, Ha Noi, Viet Nam

## PII-07 CHARACTERISTIC ANALYSIS OF HEXAGONAL SILICA-BASED PHOTONIC CRYSTAL FIBERS WITH DIFFERENT RINGS STRUCTURES

Thuy Nguyen Thi, Duc Hoang Trong, Trong Dang Van, Bao Tran Le Tran, Lanh Chu Van

University of Education, Hue University, 34 Le Loi Street - Hue City, Viet Nam

#### PII-08 COMPARISON OF DISPERSION CHARACTERISTICS OF SILICA-BASED PHOTONIC CRYSTAL FIBERS WITH DIFFERENT LATTCES

Duc Hoang Trong, Trong Dang Van, Bao Tran Le Tran, Lanh Chu Van, Thuy Nguyen Thi

University of Education, Hue University, 34 Le Loi Street - Hue City, Viet Nam

#### PII-09 SYNTHESIS AND THERMAL DEGRADATION OF NITRO -FUNCTIONALIZED HYDROXYL-TERMINATED NATURAL RUBBER

Doan Minh Khai, Nguyen Minh Tuan, Phan Duc Nhan, Nguyen Tuan Anh Le Quy Don Technical University, 236 Hoang Quoc Viet, Hanoi, Vietnam

## PII-10 ANTIOXIDANT CAPACITY AND AQUEOUS SOLUBILITY OF TAXIFOLIN EXTRACTED FROM SIBERIAN LARCH (LARIX SIBIRICA)

Son Bach

Institute of Physics, Vietnam Academy of Science & Technology, Hanoi, Vietnam

## PII-11 GREEN SYNTHESIS ZNO NANOPARTICLEC BY PIPER CHAUDOCANUM L. EXTRACT FOR ENHANCED ANTIBACTERIAL ACTIVITY

Truong Thi Thao, Le Thi Ngoc Linh, Kieu Thi Van Anh, Nguyen Dieu Linh, Nguyen Van Hao

TNU - University of Sciences, Tan Thinh ward, Thai Nguyen city, Vietnam

## PII-12 MEASURING REFRACTIVE INDEX OF THE ALCOHOL LIQUIDS ACCORDING TO THE WAVELENGTH

Nguyen Tien Dung, Hoang Van Thuy, Doan The Ngo Vinh, Nguyen Duc Trong, Ha Minh Quan, Do Thanh Thuy, Dinh Xuan Khoa, Bui Dinh Thuan, Le Canh Trung

Vinh University, 182 Le Duan Street, Vinh City, Viet Nam

## PII-13 MEASUREMENT OF REFRACTIVE INDEX OF WATER WITH Abstract RESPECT TO TEMPERATURE USING BROAD SPECTRUM SOURCE INTERFERENCE

Le Canh Trung, Nguyen Tien Dung, Hoang Van Thuy, Le Van Hieu, Ha Minh Quan, Nguyen Thi Ha Linh, Dinh Xuan Khoa, Bui Dinh Thuan Vinh University, 182 Le Duan Street, Vinh City, Viet Nam

### PII-14 TREATMENT OF PERIARTHRITIS OF THE SHOULDER BY THERAPEUTIC ULTRASOUND

Nguyen The Thuong

Institut of Biomedical Physics, 109A Pasteur, Bến Nghé Ward, District 1, Ho Chi Minh City, Viet Nam

### PII-15 POTENTIAL APPLICATION OF SPINAL MOUSE IDIAG M360 FOR EVALUATING SCOLIOSIS IN ADOLESCENTS

Nguyen Duc Tri, Huynh Quang Linh, Nguyen The Thuong

Faculty of Applied Science, Ho Chi Minh City University of Technology, 268 Ly Thuong Kiet, District 10, Ho Chi Minh City, Viet Nam

### PII-16 THE DEVELOPMENT OF A LOW-TEMPERATURE HYDROGEN PEROXIDE PLASMA STERILIZER

Chu Thi Minh Hoa, Pham Trung Kien, Nguyen Minh Tan, Doan Thi Thu Thuy, Nguyen Tuan Anh

Center of Laser Technology, National Centre for Technological Progress, C6 Thanh Xuan Bac, Thanh Xuan, Hanoi, Vietnam

## PII-17 RESEACH AND DEVELOPMENT OF A SIMPLE AND HIGH-RESOLUTION FABRY-PEROT INTERFEROMETER FOR LASER LINEWIDTH MEASUREMENTS

Duong Van Pham, Diep Van Nguyen, Tu Xuan Nguyen, Kieu Anh Thi Doan, Marilou Cadatal-Raduban, Thong Huy Pham and Minh Hong Pham

Institute of Physics, Vietnam Academy of Science and Technology, Hanoi

### PII-18 CONTROLLING GROUP VELOCITY IN A FOUR-LEVEL INVERTED-Y ATOMIC SYSTEM VIA A SIGNAL LASER FIELD

Nguyen Huy Bang, Le Nguyen Mai Anh, Dinh Xuan Khoa, Le Thi Minh Phuong, Nguyen Tuan Anh, Nguyen Van Phu, Luong Thi Yen Nga, Nguyen Thanh Cong and Le Van Doai

Vinh University, 182 Le Duan Street, Vinh City, Vietnam

### PII-19 ELECTROMAGNETICALLY INDUCED TRANSPARENCY IN A FIVE-LEVEL TRIPLE ATOMIC SYSTEM

Le Thi Minh Phuong, Le Van Doai, Dinh Xuan Khoa, Hoang Minh Dong, Le Nguyen Mai Anh, Nguyen Van Phu, Luong Thi Yen Nga, Do Mai Trang and Nguyen Huy Bang

Sai Gon University, Ho Chi Minh City, Vietnam

### PII-20 INTERPRETING THE GRAVITY ANOMALY OF THE SOUTHERN VIETNAM USING DERIVATIVE METHOD

Nguyen Hong Hai

Experimental - Practical Area, An Giang University, An Giang, Vietnam

### PII-21 MAGNETIC DATA INVERSION FOR 3D GEOMETRY OF THE SHALLOW SOURCES IN THE SOUTHERN VIETNAM

Nguyen Hong Hai

Experimental - Practical Area, An Giang University, An Giang, Vietnam

### PII-22 TREATMENT METHOD FOR ARSENIC-CONTAMINATED WATER BY ACTIVATED CARBON FROM CASTOR PLANT

Nguyen Thi Minh Ngoc, Tran Thanh Dat, Vu Duc Chinh, Pham Nam Thang Department of Environmental Health, Faculty of Public Health, Haiphong University of Medicine and Pharmacy, Haiphong, Vietnam

### PII-23 STUDYING THE NONLINEAR OPTICAL PROPERTIES OF FLUORIDE MATERIALS IN THE ULTRAVIOLET REGION

Diep Van Nguyen, Kieu Anh Thi Doan, Duong Van Pham, Tu Xuan Nguyen, Mui Viet Luong, Marilou Cadatal-Raduban and Minh Hong Pham

Institute of Physics, Vietnam Academy of Science and Technology, Ha noi, Viet Nam

### PII-24 A THEORETICAL STUDY OF THE BAND STRUCTURE AND OPTI PROPERTIES OF TWO DIMENSIONAL MATERIAL Mo<sub>2</sub>CF<sub>2</sub>

Kieu Anh Thi Doan, Minh Hong Pham, Marilou Cadatal-Raduban, Linh Phan Thuy Tran and Mui Viet Luong

Institute of Physics, Vietnam Academy of Science and Technology, Viet Nam

### PII-25 GENERATION AND AMPLIFICATION OF PICOSECOND MODE - LOCKED Nd: YVO<sub>4</sub> LASER PULSES

Nguyen Xuan Tu, Pham Van Duong, Nguyen Van Diep, Phung Viet Tiep, Doan Thi Kieu Anh, Do Quoc Khanh, and Pham Hong Minh

Institute of Physics, Vietnam Academy of Science and Technology, Viet Nam

### PII-26 ISOMERIC RATIOS IN INVERSE $(\gamma, n)$ AND $(n, \gamma)$ REACTIONS ON Ce, Cd, Pd AND Se TARGETS

Bui Minh Hue and Tran Duc Thiep

Graduate University of Science and Technology, VAST, 18 HoangQuocViet, Hanoi

## PII-27 OPTIMAL STRUCTURE OF PHOTONIC CRYSTAL FIBER WITH CORE INFILTRATED BENZENE FOR ENHANCE SUPERCONTIMUUM GENERATION

Ngoc Vo Thi Minh, Bao Tran Le Tran, Trong Dang Van, Bao Le Xuan, Thao Tran Ngoc, Long Vu Dinh, Thanh Tran Viet, Oanh Truong Thi Chuyen, Thu Ho Thi Anh, Thuy Nguyen Thi, Vu Tran Quoc, Lanh Chu Van

Department of Physics, Vinh University, 182 Le Duan, Vinh City, Viet Nam

### PII-28 MEASURING MIXING OPTICAL THICKNESS USING AN ELEVATION LIDAR SYSTEM IN HANOI

Hai Van Bui, Thau Xuan Nguyen, Ha Tran Nguyen, Minh Hong Do, Ninh Hai Dang, Hai Thanh Nguyen, Linh Tuan Nguyen, Trung Van Dinh, Oanh Thi Kim Vu, Bao T. T. Nguyen, Tien Minh Pham, Bang Dong Pham, Anh Ngoc Bao Phung, Suu Van Tran

Le Quy Don Technical University, 236 Hoang Quoc Viet Str., North Tu Liem Dist., Hanoi

## PII-29 ALPHA/GAMMA DISCRIMINATION WITH PLASTIC SCINTILLATOR DETECTOR OF EJ-276

Phan Thanh Xuan, Tran Cong Thien and Vo Hong Hai

Department of Nuclear Physics, Faculty of Physics and Engineering Physics, University of Science, VNU-HCM, Ho Chi Minh City, Vietnam

## PII-30 CHEMICAL COMPOSITION OF ESSENTIAL OILS OF LITSEA ELONGATA (NEES) BENTH. & HOOK.F. IN PU HOAT NATURE RESERVE, NGHE AN PROVINCE

Nguyen Tien Cuong, Pham Hong Ban, Mai Van Chung

School of Natural Science Education, Vinh University