# THE FIRST ACADEMIC CONFERENCE ON NATURAL SCIENCE FOR MASTER AND PhD. STUDENTS FROM CAMBODIA – LAOS – VIETNAM

Vientiane, Laos. 23 - 27 MARCH 2010

# **ABSTRACT & PROGRAM**

## **Organizers**

**National University of Laos (NUOL)** 

**Royal University of Phnom Penh (RUPP)** 

Vietnam National University, Hanoi (VNU)
Vietnam National University, HO CHI MINH city (VNUH)
Vietnam Physical Society (VPS)

Vietnam Society of Optics & Spectroscopy (VSOS)

**Institute of Materials Science (IMS, VAST)** 

**Institute of Physics (IOP, VAST)** 

## **Sponsors**

National University of Laos
Vietnam Academy of Science and Technology
Vietnam National University, HO CHI MINH city
Vietnam National University, HANOI
Vietnam Society of Optics & Spectroscopy
Institute of Physics, VAST

## Co – Oganizers

**Conference President: Prof. Acad. Nguyen Van Hieu** (VAST)

**Prof. Dr. Somsy Gnophanxay,** Vice President of NUOL, Laos PDR (nophanxays@yahoo.com)

**Prof. Dr. Hang Chanthon**, Vice President of RUPP, Cambodia (caradvchthon@online.com.kh)

**Prof. Dr. Huynh Thanh Dat**, Vice President of VNU, HCM, Vietnam

(htdat@vnuhcm.edu.vn)

**Prof. Dr. Nguyen T. Thuc Hien**, Vice President of VSOS, VNU Hanoi, Vietnam (hienntt@vnu.edu.vn)

**Prof. Dr. Nguyen Dai Hung**, President of VSOS, Vietnam (<u>daihung@iop.vast.ac.vn</u>)

### **Conference Secretariat**

Prof. Dr. Vu Thi Bich Institute of Physics,

10 Dao Tan Str. Ba Dinh, Hanoi, Vietnam Phone: (84 4) 3756 2017; Fax: (84 4) 7669 050;

Email: clv10@iop.vast.ac.vn

#### **BRIEF PROGRAMME**

Date	Tuesday	Wednesday	Thursday	Friday	Saturday
Time	March 23, 2010	March 24, 2010	March 25, 2010	March 26, 2010	March 27, 2010
8:30 ÷ 12:00	<ul><li>ARRIVING AT VIENTIANE, LAOS</li><li>Check in</li></ul>	<ul> <li>Registration (7h:30-8h:03 AM)</li> <li>Official Opening</li> <li>PLENARY SESSION</li> </ul>	- PLENARY SESSION	- ONE-DAY TOURS TO VANG VIENG (150 km from Vientiane)	Return
		Buffet Lunch	Buffet Lunch		
13h:30÷ 17h	Registration	- PLENARY SESSION - POSTER	- PLENARY SESSION - POSTER	ONE-DAY TOURS TO VANG VIENG (150 km from Vientiane)	Return
18:30	<b>WELCOME PARTY</b> (offered by NUOL)	CONFERENCE PARTY  (offered by the Vietnam National University, Hanoi)	CONFERENCE PARTY  (offered by the Vietnam National University, Ho Chi Minh City)		Return

#### **PROGRAM**

Tuesday –	March	23.	2010
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10:00 Arriving at Vientiane. Check in.

17:00 Registration at NUOL

18:30 WELCOME PARTY (offered by NUOL).

#### Wednesday – March 24, 2010

07: 30 - 08: 30 Registration

**08: 30 - 09: 00 Official Opening** (*Dr. Nguyen Thanh Binh -VAST, Vietnam*)

- Opening Speech by Prof. Acad. Nguyen Van Hieu
   (Former President Vietnam Academy of Science and
   Technology, Honour President of the Vietnam Physical
   Society).
- Welcome Speech by **Prof. Dr. Somsy Gnophanxay**, *Vice President of NUOL, Laos PDR*
- Welcome Speech by **Prof. Dr. Hang Chanthon**, *Vice President of RUPP*, *Cambodia*
- Welcome Speech by Prof. Dr. Huynh Thanh Dat Vice President of VNU, HCM, Vietnam

#### REPORT SESSION

Chairperson: Vu Xuan Quang - VAST, Vietnam Somsathith Keophilavong - NUOL, Laos PDR

0-01 NANOSTRUCTURED POROUS TiO<sub>2</sub> FILMS: 09:00 - 09:30 ELECTROCHROMIC PROPERTIES AND POTENTIAL APPLICATION IN ENERGY-EFFICIENT WINDOWS

**Invited talk** 

<u>Nguyen Nang Dinh</u>, Nguyen Minh Quyen, Tran Thi Thao University of Engineering and Technology, VNU, Hanoi

# 0-02 THE VERTICAL ALIGNMENT GROWTH OF ZNO NANOWIRES ON GLASS SUBSTRATE BY OLLUTION METHOD

<u>Tran Quang Trung</u><sup>1</sup>; La Phan Phuong Ha<sup>2</sup>; Tran Viet Cuong <sup>1,3</sup>; Van Hoang Luan<sup>1,3</sup>, Duong Thi Thanh Truc<sup>1</sup>

<sup>1, 2</sup> Chi Minh City University of Natural Sciences, VNUH, Vietnam

# 0-03 09:50 – 10:10 STRONG PHOTOLUMINESCENCE OF THE N-TYPE DOPED AMORPHOUS SIC MATERIAL AFTER ANODIC ETCHING IN LOW HF-CONCENTRATION SOLUTION

Dao Tran Cao, <u>Cao Tuan Anh</u>, Nguyen Dinh Dung, Luong Truc Quynh Ngan, Pham Thi Mai Hoa

Institue of Materials Science, VAST, Vietnam

#### **10:10 – 10:30 COFFEE BREAK**

#### Chairperson: Nguyen Nhu Dat – VAST, Vietnam Viengthong Xayavong - NUOL, Laos PDR

# O-04 DETERMINATION OF SOME OPTICAL PARAMETERS 10:30 – 10:50 CHARATERIZING HOMOGENISED FRESH MILK WITH DOUBLE INTERGRATING SPHERE TECHNIQUE

Nguyen Tuan Anh, Dang Xuan Cu, Phung Quoc Bao, Bach Gia Duong, Vu Anh Phi

National Center for Technological Progress, Vietnam

# 0-05 10:50 - 11:10 EFFECTS OF THE ARGON GAS FLOW RATE ON THE FORMATION AND PROPERTIES OF THE TiO<sub>2</sub> COATING IN PLASMA SPRAYING PROCESS

Tran Quang Trung, <u>Nguyen Thi Anh Tho</u>, Tran Viet Cuong, Dang Thanh Cong

Ho Chi Minh City University of Technology, Vietnam

# *O-06* THE THERMOLUMINESCENCE CHARACTERISTICS OF LIF(Mg,Cu,P) AFTER EXPOSING THE ALPHA RADIATION

Nguyen Quang Mien and Trinh Nang Chung

Ho Chi Minh City University of Technology

<sup>&</sup>lt;sup>3</sup> Department of Chemical Engineering, University of Ulsan, Ulsan 680-749, South Korea

0-07
11:13 – 11:50
DEVELOPMENT OF A DIODE-PUMPED PASSIVELY MODE-LOCKED Nd:YVO<sub>4</sub> LASER OPERATED AT PULSE REPETITION RATES LOWER THAN 10 MHz

<u>Do Quoc Khanh,</u> Nguyen Dinh Hoang, Nguyen Trong Nghia, Nguyen Van Hao, Dao Duy Thang, Phung Viet Tiep, Trinh Dinh Huy, Pham Long and Nguyen Dai Hung

Institute of Physics, VAST, Vietnam

11:50 - 13:30 LUNCH

#### REPORT SESSION

Chairperson: Nguyen The Binh, VNU, Vietnam Vathsana KHAMVONGSA, NUOL, Laos PDR

*O-08* INVESTIGATION OF PHOTONICS FOR FIBEROPTIC 13:30 – 13:50 COMMUNICATIONS IN VIETNAM

**Invited talk** 

Pham Van Hoi

Institute of Materials Science, VAST, Vietnam

O-09 FABRICATION OF POROUS LAYER ON THE NONDOPED

13:50 – 14:10 AMORPHOUS SIC THIN FILM BY ANODIC ETCHING

METHOD IN THE HF/H<sub>2</sub>O/H<sub>2</sub>O<sub>2</sub> SOLUTION

Dao Tran Cao, <u>Luong Truc Quynh Ngan</u>, Cao Tuan Anh, Nguyen Dinh Dung, Pham Phu Thanh Son, Lam Duc Duong, Nguyen Thi Thu Ha, Pham Thi Mai Hoa

Institue of Materials Science, VAST, Vietnam

O-10 INSTRUMENTATION OF THERMOLUMINESCENCE RADIATION DOSIMETRY AND THERMOLUMINESCE DATING

Huynh Ky Hanh, Phan Tien Dung

Nhatrang Institute of Technology Research & Application-VAST, Vietnam

15:10 – 15:20 COFFEE BREAK

#### REPORT SESSION

# Chairperson: Nguyen Nang Dinh - VNU, Vietnam CHEY CHAN OEURN, RUPP, Cambodia

<i>O-11</i> 15:20 – 15:40	STUDY ON SOME INFLUENCES ON THE TECHNICAL PROCESS AND CHARACTERISTICS OF INFRARED EMISSION COMPOSITIONS
	<u>Tran Minh Cong</u> , Le Trong Thiep, Pham Quang Dinh, Bach Nhat Hong
	MilitaryAcademy of Science and Technology, Vietnam
<i>O-12</i> 15:40 – 16:00	OXYGEN DEPLETION AND RESISTANCE SWITCHING IN Cr-DOPED SrTiO $_3$ THIN FILMS
	Bach Thang Phan, Kim Ngoc Pham, Hoang Tuan Tong, Van Viet Pham, Van Hieu Le, Tuan Tran1 and Jaichan Lee
	University of Science - VNU – HCM, Vietnam
<i>O-13</i> 16:00 – 16:20	SURFACE MODIFICATION AND FUNCTIONALIZATION OF MULTISHELL CDSE QUANTUM DOTS FOR THE FLUORESCENCE-BASED BIOSENSOR FOR THE DETECTION OF ORGANOPHOSPHATE PESTICIDES
	<u>Vu Duc Chinh,</u> Pheng Xiong, Do Van Dung, Nguyen Hai Yen,Nguyen Xuan Nghia, Phan Tien Dung, Nguyen Van Hung, Pham Thu Nga
	Institute of Materials Science, VAST, Vietnam

#### 16:20 - 17:00 POSTER I

#### Chairperson: Nguyen Xuan Nghia - VAST, Vietnam Somsavath LEUANGTAKOUN, NUOL, Laos PDR Ing Heng, RUPP

- P-01 SOME RESULTS ON USING QUANTUM DOTS FOR BIOLABELING

  Chu Viet Ha, Tran Thanh Thuy, La Thi Huyen, Ung Thi Dieu Thuy Institute of Physics, VAST, Vietnam
- P-02 COMPOSITE TiO<sub>2</sub>-SnO<sub>2</sub> FILMS PREPARED BY SOL-GEL WITH HIGH PHOTOCATALYTIC PERFORMANCE IN VISIBLE LIGHT Huynh Chi Cuong, H. T. Bich Lieu, Duong Ai Phuong, <u>L. Quang. Vinh</u> University of Science VNU HCM, Vietnam
- P-03 SYNTHESIS AND OPTICAL PROPERTIES OF CdS / CdSe QUANTUM DOTS EMBEDDED IN TiO<sub>2</sub> THIN FILMS FOR PHOTONIC APPLICATIONS

  <u>Lam Quang Vinh</u>, Ha Thanh Tung, Huynh Thanh Đat
- P-04 APPLYING AAS METHOD TO DETERMINE LEAD CONCENTRATIONS IN SOME SAMPLE SOILS AND SUGGESTING SOME WAYS TO REDUCE THE POLLUTION OF LEAD IN THE ENVIRONMENT

Nguyen Truc Anh, Nguyen Thi Thu Thuy In-service University Center of Can Tho city

University of Science - VNU - HCM, Vietnam

- P-05 ACID BASED SYNTHESIS OF ERBIUM-DOPED COLLOIDAL SiO<sub>2</sub> MICROSPHERES

  <u>Do Thuy Chi</u>, Pham V. Hoi, Pham Thu Nga, Pham Thai Cuong, Bui Huy P-06Institue of Materials Science, VAST, Vietnam
- P-06 RAPID COMBUSTION SYNTHESIS OF NANOCRYSTALLINE PHOSPHORS MAI2O4: Eu<sup>2+</sup>, RE<sup>3+</sup> (M: Ca, Sr, Ba) AND THEIR SPECTRAL CHARACTERISTICS NANOCRYSTALLINE

  Le Thi Thao Vien, Nguyen Thi Minh Phuong, Nguyen Manh Son College of Sciences, Hue University, Viet nam

# P-07 INVESTIGATION OF THE FABRICATION AND OPTICAL PROPERTIES OF CdSe/ZnSe/ZnS AND CdSe/CdS/ZnS MULTISHELL QUANTUM DOTS

<u>Nguyen Ngoc Hai</u>, Vu Thi Hong Hanh, Do Van Dung, Vu Duc Chinh, Pheng Xiong, Nguyen Van Hung, Pham Thu Nga Institue of Materials Science, VAST, Vietnam

# P-08 SYNTHESIS TiO<sub>2</sub> THIN FILM ON GLASS SUBSTRATE BY ELECTROSTATIC SPRAY METHOD

<u>Nguyen Cao Khang</u>, **Do Thi Nga, Phan Ngoc Minh and Nguyen V. Minh** Hanoi National University of Education, Hanoi, Vietnam

## P-09 FABRICATING, DOMINATING THE SIZE OF TiO<sub>2</sub> PARTICLES AND STUDYING THEIR PROPERTIES

<u>Nguyen Cao Khang,</u> Kaisone Sonthikoumman, Phan Ngoc Minh and Nguyen van Minh

Hanoi National University of Education, Hanoi, Vietnam

# P-10 THE IMPACT OF NITROGEN AND TEMPERATURE SUBTRATE ON THE OPTICAL AND ELECTRICAL PROPERTIES OF P THIN FILM ZnO:(In,N) BY THE SPUTTERING MAGNETRON DC

Duong Anh Quang, Le Vu Tuan Hung

*University of Science - VNU – HCM, Vietnam* 

## P-11 KINETIC MONTE CARLO SIMULATION OF THIN FILM GROWTH OF PEROVSKITE STRUCTURE IN EARLY STAGE

Luu Thanh Phuc, Nguyen Hong Phong, Le Vu Tuan Hung University of Science - VNU – HCM, Vietnam

# P-12 RESEACHING AND MAKING ALPHA SOURCE U238,U234 ON ALUMINIUM FOIL FOR ALPHA SPECTROSCOPY USING ELECTROPLATE

Pham Thuy Dung, Le Cong Hao, Chau Van Tao

National center for technology progress- Center for Optoelectronics (CFOC), Vietnam

# P-13 PREPARATION AND CHARACTERRIZATION OF SrTi<sub>1-X</sub>Fe<sub>X</sub>O<sub>3</sub> NANO-COMPOSITE FILMS BY THE PULSED LASER DEPOSITION

<u>Doan Thi Thuy Phuong</u>, Kaisone Sonthikoumman and Nguyen Van Minh

Hanoi National University of Education, Hanoi, Vietnam

## P-14 CRYSTAL STRUCTURE OF VANADIUM PENTOXIDE THIN FILMS ON THE TRANSPARENT ELECTRODES

Le Van Hieu, Nguyen Duc Hao, Pham Van Viet

University of Science - VNU - HCM, Vietnam

# P-15 A METHOD TO CALCULATE TRACKING ACCURACY FOR TRAJECTORY MEASURING- TRACKING DOPPLER RADAR SYSTEM OF PROJECTILES

Bui Tuan Anh, Dao Hoa Viet and Tran Duc Trung

Academy of Military Science and Technology, Ha Noi, Viet Nam

# P-16 INCREASING THERMAL CONDUCTIVITY OF THERMAL PASTE USING CARBON NANOTUBES

<u>Bui Hung Thang</u>, Phan Ngoc Hong, Pham Van Trinh, Nguyen Van Tu, Nguyen Van Chuc and Phan Ngoc Minh

Institute of Materials Science, VAST, Vietnam

# P-17 APPLICATION OF NANO POLYANILINE/MULTI-WALLED CARBON NANOTUBES FOR PROTECTIVE PAINT

<u>Bui Hung Thang, Pham Van Trinh, Duong Ngoc Vinh, Dao Duc Khang and Phan Ngoc Minh</u>

Institute of Materials Science, VAST, Vietnam

## P-18 FABRICATION OF Cu MATRIX MATERIAL REINFORCED BY FUNCTIONALIZED CNTs

<u>Pham Van Trinh</u>, Bui Hung Thang, Tran Tien Dat, Duong Ngoc Vinh, Nguyen Van Tu, Phan Ngoc Minh

Institute of Materials Science, VAST, Vietnam

# P-19 STUDY AND PREPARATION THE CNTs/PANI COMPOSITE AS ANODE MATERIAL FOR ELECTROCHEMICAL ENERGY SOURCE

Duong Ngoc Vinh, Bui Hung Thang, <u>Pham Van Trinh</u>, Dao Duc Khang, Phan Ngoc Minh

Institute of Materials Science, VAST, Vietnam

# P-20 STUDY TO MANUFACTURE THE DEVICE FOR DISCOVERING MAGNETIC FLOW

Nguyen Tuan Hung, Pham Quoc Trieu

National Office of Intellectual Property of Vietnam

# P-21 THE HOME MADE METAL DETECTING DEVICE AND APPLICATION

Luu Tien Manh, Pham Quoc Trieu

National Institute of Labour Protection, Vietnam

# P-22 FABRICATION OF METAL NANOPARTICLES BY LASER ABLATION

Nguyen Thanh Dinh, Nguyen Quang Dong, Trinh Thi Hue, Vu Thi Khanh Thu, Pham Thi Thanh Van, Duong Thi Nguyet, <u>Nguyen The Binh</u> College of Science, VNU Hanoi, Vietnam

# P-23 HIGH-POWER SECURE MICROWAVE COMMUNICATION DEVICE

Dang Thi Thanh Thuy, and Bach Gia Duong

College of Science VNU Hanoi, Vietnam

#### 18:30 CONFERENCE PARTY

#### Thursday – March 25, 2010

#### REPORT SESSION

Chairperson: Le Vu Tuan Hung - VNUH, Vietnam Hang Sim, RUPP, Cambodia

<i>O-14</i> 08:30 – 09:00	PROBLEM OF SUSTAINABLE ENERGY AND THE TECHNOLOGICAL SOLUTIONS OF SOLAR POWER SATELLITE SYSTEM FOR SOLAR ENERGY RECEIVING, CONVERTING, AND TRANSMITTING IN FORM OF THE HIGH POWER MICROWAVE AND/OR LASER BEAM FROM THE SPACE ORBIT TO THE EARTH'S SURFACE (REVIEW)  Invited talk  Dao Khac An  Institute of Materials Science, VAST, Vietnam
<i>O-15</i> 09:00 – 09:20	IMPROVE ACCURACY OF TRANSMISSION IN AIRCRAFT GUNS
	Le Duc Hanh, Bui Ngoc Hoi, Nguyen Lac Hong
	Academy of Military Science and Technology, Hanoi, Vietnam
<i>O-16</i> 09:20 – 09:40	THE USING OF SPECTRAL METHODS TO INVESTIGATE ALUMINA AMORPHOUS THIN FILM AND ITS PHASE TRANSITION
	Giang van Phuc, Le Van Hieu, Huynh Thanh Dat
	AnGiang University, AnGiang, Vietnam
<b>O-1</b> 7	DETERMINING EXCITED SPECTRUM OF SOMI
09:40 - 10:00	HARMFUL ALGAE IN DO SON COAST, HAI PHONG CITY
	Nguyen Tuan Anh, Bui Thi Thanh Lan
	National Center for Technological Progress, Vietnam
<i>O-18</i>	COMBINING FREQUENCY MODULATION AND SINGLE SIDE BAND MODULATION TO DESIGN AN
10: 00 – 10:20	UNDERWATER REMOTE CONTROL SYSTEM.
	Chu Xuan Quang, <u>Le Minh Ngoc</u> , Vu Hai Lang, Nguyen T. Thuy
	Academy of Military Science and Technology, Hanoi, Vietnam

10: 00 – 10:20 COFFEE BREAK

#### **REPORT SESSION**

#### Chairperson: Pham Quoc Trieu – VNU, Vietnam Sonexay XAYHEUNGSY, NUOL, Laos PDR

<i>O-19</i> 10:30 – 10:50	THE SELF – ABSORPTION CORRECTIONS FOR MARINE SEDIMENT SAMPLE IN GAMMA – RAY SPECTROMETRY
	Tran Thien Thanh, Laurent Ferreux, Marie Christine Lépy, Chau Van Tao
	University of Science - VNU – HCM, Vietnam
<i>O-20</i> 10:50 – 11:00	MICROWAVE TREATMENT-A RAPID AND EFFICIENT WAY TO PREPARE GRAPHITE OXIDE BY MODIFIED HUMMERS METHOD
	<u>Tran Quang Trung</u> , Huynh Tran My Hoa, Tran Viet Cuong, Le Thi Thanh, Tran Vinh Son, Dang Thanh Cong
	University of Science - VNU – HCM, Vietnam
<i>O-21</i> 11:00 – 11:22	LARGE-AREA ULTRATHIN FILMS OF THERMO- REDUCED GRAPHENE OXIDE AS A TRANSPARENT AND ELECTRONIC MATERIAL
	<u>Tran Quang Trung</u> ,, Le Thi Thanh, Tran Viet Cuong, Nguyen Duy Khanh, Dang Thanh Cong
	University of Science - VNU – HCM, Vietnam
<i>O-22</i>	STUDY AND DESIGN RF SWITCH MEMS
11:20 – 11:40	Nguyen Van Toan, Nguyen Tu Tin, Dong Van Cuong, Bui Van Quang, Vu The Dang, Truong Cong Duan and Nguyen Van Hieu
	University of Science - VNU – HCM, Vietnam
11:40 - 13:30	LUNCH

#### **REPORT SESSION**

Chairperson: Pham Van Hoi - VAST, Vietnam Nguyen Thi Thu Thuy, Univ. of Cantho, Vietnam

<i>O-23</i> 13:30 – 13:50	DESIGNING, PRODUCING COMPUTER ASSISTED EXPERIMENTS AND PROGRAMMING SUITABLE SOFTWARE TO SUPPORT TEACHING SOME KNOWLEDGE OF MAGNETIC FIELD AND ELECTROMAGNETIC INDUCTION IN THE CURRICULUM OF THE POLYTECHNIC COLLEGE VEIN-CHAN, LAOS  Khamsoulin Chanthavong  Vientiane Polytechnic College, Laos
<i>O-24</i> 13:50 – 14:10	SYNTHESIS, OPTICAL PROPERTIES AND BIOAPPLICATIONS OF ORMOSIL NANOPARTICLES Vu Thi Thuy Duong, Chu Viet Ha, Tran Thanh Thuy, Nguyen Thi Van, Pham Minh Tan Institute of Physics, VAST, Vietnam
<i>O-25</i> 14:10 – 14:30	OPTIMIZATION OF ENDOGLUCANASE PRODUCTION BY ASPERGILLUS NIGER VTCC-F021 Thi Hoa Pham, <u>Dinh Thi Ouyen</u> , Ngoc Minh Nghiem, Institute of Biotechnology, VAST, Vietnam
<i>O-26</i> 14:30 – 14:50	PARTIAL PURIFICATION AND PROPERTIES OF A XYLANASE FROM ASPERGILLUS ORYZAE DSM1863 Thi Tuyen Do, <u>Dinh Thi Quyen</u> Institute of Biotechnology, VAST, Vietnam
14:50 – 15:00	COFFEE BREAK

#### 15:00 – 16:00 **POSTER II**

Chairperson: Vu Nhu Cuong – VNU, Vietnam

Tran Thi Tam – VNU, Vietnam

TEANG PANG - RUPP, Cambodia

## P-24 A RESEARCH ON UNTI – VIBRATION METHOD FOR WORKER OPERATING JACKHAMMERS

<u>Nguyen Anh Tuan</u>, Trieu Quoc Loc, Nguyen Van Khang National Institute of Labour Protection

# P-25 PHOTOLUMINESCENCE OF CePO<sub>4</sub>:Tb<sup>3+</sup> NANO PARTICLES SYNTHESIZED FROM (NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub> BY HYDROTHERMAL METHOD

Dinh Xuan Loc, Do Hung Manh, Tran Kim Anh and Le Quoc Minh Institute of Materials Science, VAST, Vietnam

# P-26 IMPLEMENTATION OF THE DIGITAL LOCK-IN AMPLIFIER FOR LOW SIGNAL MEASUREMENT

Nguyen Anh Duc, Pham Quoc Trieu College of Science VNU Hanoi, Vietnam

#### P-27 OPTIMIZING PHASED-ARRAY ANTENNA

Le Quang Thao, Nguyen Van Hai College of Science VNU Hanoi, Vietnam

#### P-28 GAMMA-GAMMA COINCIDENCE MEASUREMENT SETUP FOR NEUTRON ACTIVATION ANALYSIS AND NUCLEAR STRUCTURE STUDIES

Nguyen An Son, Pham Dinh Khang, Nguyen Xuan Hai, Vuong Huu Tan, Nguyen Van Kien, Ho Huu Thang, Nguyen Nhi Dien University of Dalat, Vietnam

## P-29 STUDY OF AN ELECTROCHEMICAL DNA SENSOR FOR DETECTION OF ESCHERICHIA COLI

Nguyen Tien Dai, Kim Thi Phuong Oanh and Nong Van Hai Institute of Materials Science, VAST, Vietnam

# P-30 ON THE SIMULTANEOUS DIFFUSION OF MULTI-SPICES AND SIMULATION OF THE DYNAMIC DIFFUSION PROCESSES OF DOPANTS ATOM AND POINT DEFECT IN NANO SIZED SILICON MATERIAL

Vu Ba Dung, Dao Khac An and Nguyen Ngoc Long

Ha noi Mining and Geology University

# P-31 COMPATIBLE INVESTIGATION OF THE COMPLEX DIFFUSION PROBLEM BASED ON FICK THEORY, IRREVERSIBLE THERMODYNAMIC THEORY AND GENERAL FORCE LAW

Vu Ba Dung, Dao Khac An and Nguyen Ngoc Long

Ha noi Mining and Geology University

#### P-32 DEPENDENCE OF PHOTOELECTRONIC CAPACITY ON CdS LAYER THICKNESS ON TiO2 THIN FILM SUBSTRATES

Dang Tran Chien, Pham Duy Long, Pham Van Hoi, Le Ha Chi

Institute of Materials Science, VAST, Vietnam

# P-33 SYNTHESIS OF DIAMOND FILMS ON COPPER SUBSTRATES USING MICROWAVE

PLASMA CHEMICAL VAPOUR DEPOSITION

Tran Tien Dat, Pham Van Trinh, Bui Hung Thang, <u>Dang Tran Chien</u>, Phan Ngoc Minh

Institute of Materials Science, VAST, Vietnam

# P-34 THE μM-DISPLACEMENT SENSOR AND APPLICATION Nguyen Huu Cuong\*, Pham Quoc Trieu

# P-35 PREPARATION SETUP A TCSPC SYSTEMS FOR LIFE-TIME MEASUREMENT

Dao Duy Thang, Nguyen Dinh Hoang, Phung Viet Tiep, Nguyen Thanh Binh and Dinh Van Trung

Institue of Physic, VAST, Vietnam

## P-36 MEASUREMENT OF Bi-Po DECAY IN THORIUM DECAY CHAIN

Doan Thi Hien, Tran Duy Tap, Vo Hong Hai, Masaharu Nomachi, <u>Tran Thien Thanh</u>

University of Science, VNU, HCM, Vietnam

# P-37 FABRICATION AND CHARACTERISTIC OF PLANAR OPTICAL AND ACTIVE OPTICAL WAVEGUIDE FOR TELECOMMUNICATION

Tran Thi Cham, Bui Huy, Pham Van Hoi

Institute of Materials Science, VAST, Vietnamese

## P-38 OPTICAL INTERFERENCE FILTER BASED ON POROUS SILICON

Bui Huy, Pham Van Hoi, Nguyen Thuy Van, Pham Duy Long, Do The Anh and Do Thuy Chi

Institute of Materials Science, VAST, Vietnamese

# P-39 REPARATION ALPHA SOURCE U<sup>234</sup>, U<sup>238</sup> FOR ALPHA SPECTROSCOPY BY ELECTROPLATING USING ISOPROPYL ALCOHOL

Le Cong Hao, Luu Xuan Tinh, Chau Van Tao, Nguyen Van Đong, Ho Nha Nghi, Pham Thuy Dung, Nguyen Thanh Liem.

University of Science VNU, HCM, Vietnam

# P-40 CHARACTERIZATION OF HIGH-POWER DIODE LASER BARS FOR PUMPING SOLID-STATE LASERS

Giang Manh Khoi, Do Xuan Tien

National Center for Technology Progress - NACENTECH, Hanoi, Vietnam

## P-41 CHARACTERISTICS OF A DIODE END – PUMPED PASSIVELY O-SWITCHED SOLID-STATE Cr<sup>3+</sup>:LiSAF LASER

Nguyen Dinh Hoang, Dao Duy Thang, Nguyen Van Hao, and Nguyen Dai Hung

Institute of Physics, VAST, Vietnam

#### P-42 NANOSECOND ENERGY-TRANFER BINARY DYE LASERS

Phung Viet Tiep, Nguyen Dinh Hoang, Nguyen Trong Nghia, Dao Duy Thang and Nguyen Dai Hung

Center for Quantum Electronics, Institute of Physics, VAST, Hanoi, Vietnam

# P-43 MODE-LOCKED Nd:YVO<sub>4</sub> LASER – INDUCED TWO PHOTON FLUORESCENCE OF BIOMEDICAL FLUOROPHORES

Trinh Dinh Huy,Nguyen Trong Nghia, Nguyen Thanh Binh, Do Quoc Khanh, Nguyen Dai Hung

Institute of Physics, VAST, Vietnam

# P-44 PREPARATION ALPHA SOURCE U<sup>234</sup>, U<sup>238</sup> FOR ALPHA SPECTROSCOPY BY ELECTROPLATING USING ISOPROPYL ALCOHOL

Le Cong Hao, Luu Xuan Tinh, Chau Van Tao, Nguyen Van Đong, Ho Nha Nghi, Pham Thuy Dung, Nguyen Thanh Liem University of Science VNU, HCM, Vietnam

# P-45 STRUCTURAL STUDY OF CARRAGEENAN EXTRACTED FROM RED SEAWEED EUCHEUMA DENTICULATUM

Thanh T. Thu Thuy, Tran T. Thanh Van, Phan Minh Phuong, Bui Minh Ly

Institute of Chemistry, VAST, Vietnam

#### P-46 STUDY ON LUMINESECENCE MATERIALS AT NITRA

Bui The Huy, Ha Xuan Vinh, Tong V. Tuat, Vinh Hao, Ngo Van Tam

Nha Trang Institute of Technology Research and Application, VAST, Vietnam

#### P-47 RESEARCH AND DEVELOPMENT OF DIODE-PUMPED SOLID-STATE Nd<sup>3+</sup>: DOPED LASERS

<u>Nguyen Trong Nghia,</u>Do QuocKkhanh,Nnguyen Dinh Hoang and Nguyen Dai Hung

Institute of Physics, VAST, Vietnam

## P-48 DEVELOPMENT OF MUON MEASUREMENT SYSTEM USING PLASTIC SCINTILLATORS

Nguyen Hoang Thoai Vi, Nguyen Qui Dao, Tran thien Thanh and Vo Hong Hai, <u>Tran Thien Thanh</u>

University of Science, VNU,HCM, Vietnam

# P-49 SPECTRO-TEMPORAL EVOLUTION AND TRANSIENT RESONATOR IN SOLID-STATE Cr3+: LISAF LASER EMISSIONS

<u>Nguyen Van Hao</u>\*, Nguyen Dinh Hoang, Phung Viet Tiep, Do Quoc Khanh and Nguyen Dai Hung.

Institute of Physics, Viet Nam. \* Thai Nguyen University of Science

#### 16:00 – 17:00 **CLOSING MEETING**

#### 18:30 CONFERENCE PARTY.

# **ABSTRACT**