

<b>SESSION C: OPTICS, LASER AND APPLICATIONS</b>
<i>November 28, 2012 (Wednesday)</i>

*Chairperson: Prof. Dr. Ho Quang Quy (Academy of Military Sci. & Tech, Hanoi)*

*Dr. Tran Quoc Tien(IMS, VAST)*

(C-13)

08:30 - 08:55

**DESIGN AND SIMULATION OF THE DIAL LIDAR SYSTEM FOR MEASURING TROPOSPHERIC OZONE**

*(Invited talk)*

**Pham Minh Tien and Dinh Van Trung**

Ho Chi Minh City Institute of Physics, VAST

(C-14)

08:55 - 09:20

**APPLICATION OF COLLIMATION TECHNOLOGY USING INFRARED IN THE HIGH-ACHIEVEMENT SHOOTING SIMULATOR**

*(Invited talk)*

**Pham Chi Hieu, Giang Manh Khoi, Vũ Văn Liệu, Trần Xuân Thịnh**

Center for Technology Development and Transfer, Hanoi

(C-15)

09:20 - 09:35

**DESIGN OF A VARIABLE MAGNIFICATION TELESCOPE**

**Ha Nguyen Binh, Pham Hong Tuan, Nguyen Ngoc Tu, Nguyen Tuan Vu**

National Center for Technology Progress- NACENTEC.

(C-16)

09:35 - 09:50

**LUMINESCENCE DATING OF ARCHAEOLOGICAL MATERIALS – DETERMINATION OF ANNUAL DOSE USING HIGH RESOLUTION GAMMA SPECTROMETRY**

**Bui Huu Thai, Le Hong Khiem**

*College of Military Aviation officers, Nha Trang, Khanh Hoa*

(C-17)

09:50 - 10:05

**MEASURING ON SIX EFFECTIVE PARAMETERS OF BIO-OPTICAL MATERIALS USING STOKES PARAMETERS**

**Pham Thi Thu Hien and Huynh Quang Linh**

Ho Chi Minh City University of Technology, HCM

(C-18)

10:05 - 10:20

**SIMULATION OF THE THERMAL QUENCHING EFFECT IN THERMOLUMINESCENCE STUDY**

**Bui Thi Bich Hanh, Le Hong Khiem, Le Thi Quynh Huong**

Nha Trang Pedagogic College, Nha Trang, Khanh HOa

- (C-19)  
**10:20 - 10:35**      **MOLECULAR CONSTANTS OF THE 21P STATE IN NaLi MOLECULE**  
 Le Canh Trung, Nguyen Tien Dung, Phan Van Thuan, Dinh Xuan Khoa, Nguyen Huy Bang  
 Vinh University
- 10:35 – 10:45**      **Coffee Break**

**Chairperson: Prof. Dr. Trinh Dinh Chien (VNU Hanoi)**  
**Prof. Dr. Ta Van Tuan (NACENTECH, Hanoi)**

- (C-20)  
**10:45 - 11:10**      **BISTABILITY CHARACTERISTICS OF THE REFLECTED SIGNAL THROUGH A SYMETRIC NONLINEAR MICHELSON INTERFEROMETER**  
*(Invited talk)*  
**Nguyen Manh An and Nguyen Van Hoa**  
 Hong Duc University, Thanh HOa City
- (C-21)  
**11:10 - 11:35**      **SOME MEDICAL IMAGING APPLICATIONS USING IRRADIATION OF NEAR INFRARED LED ON LIVING TISSUE**  
*(Invited talk)*  
**Huynh Quang Linh, Tran Van Tien, Nguyen Kim Chung, Nguyen Van Hung, Pham Thi Hai Mien**  
 Ho Chi Minh City University of Technology, HCM city
- (C-22)  
**11:35- 11:50**      **DEVELOPMENT OF A RAYLEIGH LIDAR SYSTEM FOR STUDYING CHARACTERISTICS OF STRATOSPHERIC LAYER ABOVE HANOI**  
**Nguyen Xuan Tuan, Dinh Van Trung, Dam Trung Thong, Bui Van Hai**  
 Institute of Physics. VAST
- (C-23)  
**11:50- 11:05**      **Q-SWITCH ACTIVE Nd:YVO<sub>4</sub> LASER WITH FAST CHOPPER MODULATION**  
**Do Quoc Khanh, Nguyen Dinh Hoang, Dinh Van Trung, Nguyen Van Hao, and Nguyen Dai Hung**  
 Institute of physics, VAST, HaNoi
- (C-24)  
**11:05- 12:20**      **THE NON- UNIFORMITY OF THE INFRARED IMAGING SYSTEMS USING FPA AND SOME ITS CORRECTION TECHNIQUES**

**Minh Nguyen Quang, Thanh Nguyen Van, Thi Nguyen Ba**

National Center for Technology Progress, Hanoi

(C-25)  
**12:20 -12:35**

**CONTROLLING ABSORPTION AND DISPERSION OF THE FIVE-LEVEL CASCADE SCHEME IN RUBIDIUM ATOMS BASED ON ELECTROMAGNETICALLY INDUCED TRANSPARENCY**

**Pham Van Trong, Le Van Doai, Le Nguyen Mai Anh, Nguyen Huy Bang and Dinh Xuan Khoa**

Vinh University

**12:35-13:30**

**Lunch Buffer**

**Chairperson: Prof. Dr. Pham Hong Tuan (NACENTECH, Hanoi)**  
**Dr. Le Hoang Hai (Le Quy Don Uni., Hanoi)**

(C-26)  
**13:30 – 13:55**

**SIMULATION THE DYNAMIC OF THE DIELECTRIC NANO-PARTICLE IN OPTICAL TWEEZER USING COUNTER-PROPAGATING PULSES**

*(Invited talk)*

**Quang Quy Ho, Dinh Hai Hoang and Mai Van Luu**

Pedagogical University Nghean, Vinh City, Nghe An

(C-27)  
**13:55 – 14:20**

**SELF-QUENCHING CAVITY IN PICOSECOND LASER PULSE GENERATION BY NOBLE METALLIC NANO-PARTICLES**

*(Invited talk)*

**N.T.H. Lien, N.T.M. An, V. Duong, D.Q. Hoa,**

Institute of Physic, VAST, Hanoi

(C-28)  
**14:20 – 14:35**

**THE APPLICATION OF LOW POWER SEMICONDUCTOR LASER THERAPY FOR THE REHABILITATE INJURED LIVER OF DIABETICS TYPE II**

**Tran Minh Thai, Can Van Be, Ngo Thi Thien Hoa, Tran Thien Hau**

University of Technology, Hochiminh City

(C-29)  
**14:35 – 14:50**

**AUTO FLUORESCENCE OF TUMOUR LIVER AND NORMAL LIVER TISSUE**

**Nguyen Dinh Hoang, Nguyen Thi Khanh Van and Nguyen Thanh Binh**

Institute of physics, VAST

(C-30)  
**14:50 – 15:05**      **DETERMINATION OF ATMOSPHERIC AEROSOL EXTINTION  
PROFILES WITH A RAMAN LIDAR SYSTEM OVER HANOI**  
**Bui Van Hai, Dinh Van Trung, Nguyen Xuan Tuan, Nguyen Dinh Hoang,  
Dam Trung Thong and Nguyen Thanh Binh**

Institute of physics, VAST

(C-31)  
**15:05 – 15:20**      **INVESTIGATION OF EIT ENHANCED KERR NONLINEARITY IN  
THE FIVE-LEVEL CASCADE SCHEME OF RB85 COLD ATOMS**  
**Le Van Doai, Pham Van Trong, Dinh Xuan Khoa and Nguyen Huy Bang**  
Vinh University

**15:20 – 15:35**      **Coffee Break**

**Chairperson: Prof. Dr. Nguyen Manh An ( Hongduc Uni. Thanh Hoa)**  
**Prof. Dr. Do quang Hoa (IOP, VAST)**

(C-32)  
**15:35 – 16:00**      **DESIGN CONSIDERATIONS OF A SIMPLE OPTICAL LWIR  
IMAGING SYSTEM**  
*(Invited talk)*

**Minh Nguyen Quang, Tuan Ta Van, Binh Nguyen Van**

National Center for Technology Progress, Hanoi

(C-33)  
**16:00 – 16:15**      **SOME CHARACTERISTICS OF THE SOLID-STATE LASER  
USING Nd:YVO<sub>4</sub> CRYSTAL PUMPED BY HIGH-POWER  
LASER DIODE**

**Nguyen Van Hao, Le Thị Kim Cuong, Liamorkamar Keryang,  
A.Grabtchikov, Pham Long and Nguyen Dai Hung**

Institute of Physics, VAST

(C-34)  
**16:15 – 16:30**      **CALCULATION OF THE INFRARED RADIATION CAVITY USING  
FOR NON-UNIFORMITY CORRECTION (NUC) OF THE LWIR  
CAMERA**  
**Minh Nguyen Quang, Thanh Nguyen Van, Thi Nguyen Ba, Tuan Ta Van,  
Binh Nguyen Van**

National Center for Technology Progress, Hanoi

**16:30 – 17:30**      **POSTER I**