

## List of posters

Please note that no posters have been submitted for topic 2 (Optoacoustic and thermoacoustic tomography) and topic 18 (Laser based IR thermography and ultrasound tomography)

- T1** = TOPIC 1 - SCANNING, IMAGING AND DEPTH PROFILING OF MATERIALS
- T3** = TOPIC 3 - PHOTOACOUSTIC AND PHOTOTHERMAL IMAGING IN BIOMEDICAL APPLICATIONS AND PHOTOTHERMAL THERAPY USING NANOPARTICLES
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- T5** = TOPIC 5 - ENVIRONMENTAL SENSORS AND APPLICATIONS
- T6** = TOPIC 6 - NON-DESTRUCTIVE TESTING AND INDUSTRIAL APPLICATIONS
- T7** = TOPIC 7 - SPECTROSCOPY, ANALYTICAL CHEMISTRY, NONLINEAR OPTICS AND PHOTOCHEMISTRY
- T8** = TOPIC 8 - STIMULATED AND SPONTANEOUS BRILLOUIN AND RAMAN SCATTERING (ACOUSTIC AND OPTICAL PHONONS)
- T9** = TOPIC 9 - ULTRAFast THERMO-ELASTIC PHENOMENA AND MOLECULAR DYNAMICS
- T10** = TOPIC 10 - THERMAL AND ELASTIC PROPERTIES ON NANO-SCALE AND IR MICRO-ANTENNAS
- T11** = TOPIC 11 - SEMICONDUCTORS, MEMS, NEMS AND PHONONIC BANDGAP MATERIALS
- T12** = TOPIC 12 - COMPLEX FLUIDS, PHASE TRANSITIONS AND GLASS TRANSITIONS
- T13** = TOPIC 13 - BIOLOGICAL MATERIALS, AGRICULTURAL AND FOOD SCIENCES
- T14** = TOPIC 14 - NEW INSTRUMENTATION AND METHODOLOGY
- T15** = TOPIC 15 - NONLINEAR EFFECTS, LARGE DEFORMATIONS AND SHOCK WAVE PHYSICS
- T16** = TOPIC 16 - DYNAMICS OF PHOTOINDUCED PROCESSES
- T17** = TOPIC 17 - NEW APPLICATIONS BASED ON PHOTOACOUSTIC AND PHOTOTHERMAL PHENOMENA
- T19** = TOPIC 19 - OTHER

<b>TOPIC 1 - SCANNING, IMAGING AND DEPTH PROFILING OF MATERIALS</b>
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- PO-T1-1**      **THERMAL IMAGING OF HOT SPOTS IN NANOSTRUCTURED MICROSTRIPES**  
E. Saïdi<sup>1</sup>, H. Diaf<sup>1</sup>, J. Lesueur<sup>1</sup>, A. Lionel<sup>1</sup>, M. Mortier<sup>2</sup>, J. Laberguerie-Egea<sup>2</sup>  
<sup>1</sup>ESPCI, PARIS, France  
<sup>2</sup>ENSCP/CNRS, PARIS, France
  
- PO-T1-2**      **PHOTOACOUSTIC DETECTION OF INHOMOGENEITIES IN TURBID MEDIA**  
F. Ranea-Sandoval<sup>1</sup>, P. Grondona<sup>2</sup>, G.M. Bilmes<sup>3</sup>, H.O. Di Rocco<sup>1</sup>, J.A. Pomarico<sup>1</sup>, D. I. Iriarte<sup>1</sup>  
<sup>1</sup>Universidad Nacional del Centro de la Provincia de Buenos Aires, TANDIL (BA), Argentina  
<sup>2</sup>Universidad Nacional de Rosario, Rosario (Santa Fe), ROSARIO (SF), Argentina  
<sup>3</sup>Centro de Investigaciones Ópticas (CONICET-CIC) and UN La Plata, LA PLATA, Argentina
  
- PO-T1-3**      **FAST NUMERICAL ALGORITHM FOR THE RECONSTRUCTION OF THE IN-DEPTH ACOUSTIC IMPEDANCE DISTRIBUTION USING LASER-INDUCED UNIPOLAR ULTRASONIC PULSES**  
A. Shtokolov<sup>1</sup>, I. Pelivanov<sup>2</sup>  
<sup>1</sup>M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation  
<sup>2</sup>Physics Department of M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation

- PO-T1-4**      **CORRELATION BETWEEN THERMAL AND MECHANICAL PROPERTIES OF HARDENED STEELS TREATED BY NITRIDING PROCESS**  
T. Ghrib, IPEIN Nabeul, EL FAHS, Tunisia
- PO-T1-5**      **PHOTOACOUSTIC SCAN TECHNIQUE TO MEASURE THERMAL WAVE DIFFUSION AND REFLECTION ACROSS COATING INTERFACES**  
J. Philip, O. Raghu, Cochin University of Science and Technology, COCHIN, India
- PO-T1-6**      **CHARACTERIZATION OF FUNCTIONALLY GRADED COATING BY LASER ULTRASONICS**  
Y. Pan<sup>1</sup>, X. Song<sup>1</sup>, Z. Zhong<sup>1</sup>, B. Bonello<sup>2</sup>  
<sup>1</sup>Tongji University, SHANGHAI, China  
<sup>2</sup>Université Pierre et Marie Curie, PARIS, France
- PO-T1-7**      **PHOTOTHERMAL RADIOMETRIC TIME-DOMAIN INSPECTION OF SOLID SPECIMEN BY MOVING LINE HEAT SOURCE**  
T. Hoshimiya, M. Suzuki, H. Endoh, Tohoku Gakuin University, TAGAJYO, Japan
- PO-T1-8**      **DEPTH PROFIOMETRY OF DENTAL RESINS BY PHOTOTHERMAL RADIOMETRY**  
A. Mandelis<sup>1</sup>, J.J. Alvarado-Gil<sup>2</sup>  
<sup>1</sup>University of Toronto, TORONTO, Canada  
<sup>2</sup>CINVESTAV-Unidad Merida, MERIDA, Mexico

**TOPIC 3 - PHOTOACOUSTIC AND PHOTOTHERMAL IMAGING IN BIOMEDICAL APPLICATIONS AND PHOTOTHERMAL THERAPY USING NANOPARTICLES**

- PO-T3-1**      **MEASUREMENTS ON LIQUID SOLUTIONS USING LOW COST, LOW POWER, L.E.D. PHOTO-ACOUSTICS**  
K. Williams, Kingston University, KINGSTON UPON THAMES, United Kingdom
- PO-T3-2**      **THERMAL DIFFUSIVITY OF CALCIUM PHOSPHATE FOR BIOMEDICAL USE**  
M. Mendez<sup>1</sup>, L. Santamaria<sup>1</sup>, A. Calderon<sup>2</sup>, A. Cruz-Orea<sup>3</sup>  
<sup>1</sup>National Polytechnic Institute, MEXICO CITY, Mexico  
<sup>2</sup>CICATAC-IPN, MEXICO CITY, Mexico  
<sup>3</sup>CINVESTAV, MEXICO CITY, Mexico
- PO-T3-3**      **THERMO-OPTICAL STUDY OF THE TIME-DEPENDENT AGING IN Cd/ZnS CORE-SHELL QUANTUM DOTS SOLUTION**  
T. Catunda<sup>1</sup>, V. Pilla<sup>2</sup>, R. Cruz<sup>3</sup>  
<sup>1</sup>Inst. de Física de Sao Carlos, SAO CARLOS, SP, Brazil  
<sup>2</sup>Unicastelo, SÃO PAULO, Brazil  
<sup>3</sup>IFSC, SAO CARLOS, Brazil

**TOPIC 4 - PHOTOACOUSTIC AND PHOTOTHERMAL IMAGING AND MICROSCOPY IN MATERIAL RESEARCH**

- PO-T4-1**      **NONDESTRUCTIVE EVALUATION OF TILTED SUBSURFACE DEFECTS BY PHOTOACOUSTIC MICROSCOPIC IMAGING**  
H. Endoh, R. Katoh, D. Shiraisi, T. Hoshimiya, Tohoku Gakuin University, TAGAJYO, Japan
- PO-T4-2**      **THE PHOTOACOUSTIC EFFECT IN THE SUPERFLUID HELIUM**  
T. Salikhov, Tajik National University, DUSHANBE, Tajikistan
- PO-T4-3**      **NOVEL APPROACHES TO MATERIAL EVALUATION OF THIN SURFACE LAYERS BY RESONANT ULTRASOUND SPECTROSCOPY**  
M. Landa<sup>1</sup>, P. Sedláček<sup>2</sup>, H. Seiner<sup>3</sup>, M. Ruček<sup>2</sup>, L. Bicanová<sup>2</sup>, M. Janovská<sup>2</sup>  
<sup>1</sup>Institute of Thermomechanics ASCR, v.v.i., PRAGUE, Czech Republic  
<sup>2</sup>IT ASCR, PRAGUE, Czech Republic  
<sup>3</sup>IT ASCR, PRAGUE, Czech Republic

- PO-T4-4**            **DETECTION OF SURFACE RESIDUAL, EXTERNAL AND TECHNOLOGICAL STRESSES IN VICKERS INDENTATED SOLIDS BY PHOTOACOUSTIC METHOD**  
K.L. Muratikov, A.L. Glazov, Ioffe Physical-Technical Institute, SAINT PETERSBURG, Russian Federation
- PO-T4-5**            **STRUCTURAL PHASE TRANSITIONS IMAGING IN SHAPE MEMORY ALLOYS BY PHOTOACOUSTIC MICROSCOPY**  
K.L. Muratikov, A.L. Glazov, V.I. Nikolaev, S.A. Pulnev, Ioffe Physical-Technical Institute, SAINT PETERSBURG, Russian Federation

#### TOPIC 5 - ENVIRONMENTAL SENSORS AND APPLICATIONS

- PO-T5-1**            **OPTICAL FIBER HYDROGEN SENSOR BASED ON PHOTOTHERMAL REFLECTANCE DETECTION TECHNIQUE**  
A. Yurai, Osaka Sangyo University, OSAKA, Japan
- PO-T5-2**            **PHOTOACOUSTIC DETECTION AND MONITORING OF POLLUTANT GASES FROM URBAN PUBLIC TRANSPORTS**  
D.U. Schramm, C.G. Teodoro, M.S. Sthel, G. R. Lima, M.V. Rocha, J.R. Tavares, H. Vargas, UENF, CAMPOS DOS GOYTACAZES, Brazil
- PO-T5-3**            **PHOTOACOUSTIC DETECTION OF GREENHOUSE GASES EMITTED BY ENGINES POWERED BY NATURAL GAS (GNV)**  
D.U. Schramm, G. R. Lima, M.S. Sthel, D.U. Schramm, L. Campos, M.V. Rocha, J.R. Tavares, H. Vargas, UENF, CAMPOS DOS GOYTACAZES, Brazil
- PO-T5-4**            **CHARACTERIZATION OF A PRECISE PHASE-READING CO<sub>2</sub> LASER-BASED PHOTOACOUSTIC SPECTROMETER**  
V. Slezak<sup>1</sup>, A. Peuriot<sup>2</sup>, N. Zajarevich<sup>2</sup>, M. González<sup>3</sup>, G. Santiago<sup>4</sup>  
<sup>1</sup>CITEFA-CONICET, VILLA MARTELLI, BUENOS AIRES, Argentina  
<sup>2</sup>CEILAP CITEFA CONICET, BUENOS AIRES, Argentina  
<sup>3</sup>Laboratorio Láser, Facultad de ingeniería, Universidad de Buenos Aires, BUENOS AIRES, Argentina  
<sup>4</sup>Laboratorio Láser, Facultad de Ingeniería, Universidad de Buenos Aires, BUENOS AIRES, Argentina
- PO-T5-5**            **A PHOTOACOUSTIC AEROSOL ABSORPTION SPECTROMETER WORKING FROM 420 NM TO 2200 NM**  
C. Haisch, P. Menzenbach, R. Niessner, Technische Universität München, MUNICH, Germany
- PO-T5-6**            **THERMAL PROPERTIES OF METALS ALLOY BY ELECTRICAL PYROELECTRIC (EPE) METHOD**  
N. Bennaji<sup>1</sup>, I. Mellouki<sup>2</sup>, N. Yacoubi<sup>1</sup>  
<sup>1</sup>IPEIN, TUNIS, Tunisia  
<sup>2</sup>IPEIT, TUNIS, Tunisia

#### TOPIC 6 - NON-DESTRUCTIVE TESTING AND INDUSTRIAL APPLICATIONS

- PO-T6-1**            **PHOTOPYROELECTRIC MEASUREMENTS OF THERMAL EFFUSIVITY AS A TOOL FOR BIODIESEL OILS STUDIES**  
E. Corrêa da Silva<sup>1</sup>, F. A. Léo Machado<sup>1</sup>, E. Bernabé Zanelato<sup>1</sup>, M.P. Pessanha de Castro<sup>1</sup>, P.C. Muniz de Lacerda Miranda<sup>2</sup>  
<sup>1</sup>Universidade Estadual do Norte Fluminense Darcy Ribeiro, CAMPOS DOS GOYTACAZES - RJ, Brazil  
<sup>2</sup>Instituto de Química Universidade Estadual de Campinas, CAMPINAS - SP, Brazil
- PO-T6-2**            **DETERMINATION OF THE LIFE TIME OF EXCESS CARRIERS IN SILICON WITH PHOTOACOUSTIC AND PHOTOCURRENT METHODS**  
M. Malinski<sup>1</sup>, L. Chrobak<sup>2</sup>  
<sup>1</sup>Technical University of Koszalin, KOSZALIN, Poland  
<sup>2</sup>Department of Electronics and Computer Science, KOSZALIN, Poland

- PO-T6-3**      **MULTI-PARAMETER ESTIMATION STRATEGY IN PHOTOTHERMAL AND PHOTO-CARRIER CHARACTERIZATION OF MATERIALS**  
B. Li, Institute of Optics and Electronics, CHENGDU, China
- PO-T6-4**      **NONDESTRUCTIVE IMPLANTATION DOSE DETERMINATION OF ANNEALED SEMICONDUCTOR BY INFRARED ELLIPSOMETRY**  
B. Li, X. Liu, Q. Huang, Institute of Optics and Electronics, CHENGDU, China
- PO-T6-5**      **INFLUENCE OF PROBE BEAM RADIUS ON SIGNAL ANALYSIS OF MODULATED FREE CARRIER ABSORPTION TECHNIQUE**  
B. Li, X. Liu, Q. Huang, Institute of Optics and Electronics, CHENGDU, China
- PO-T6-6**      **ACCURATE CHARACTERIZATION OF WEAK ABSORPTANCE OF AN OPTICAL COMPONENT USING A PRECISE TEMPERATURE MODEL**  
B. Li, Y. Wang, Institute of Optics and Electronics, CHENGDU, China
- PO-T6-7**      **LASER OPTOACOUSTIC METHOD OF QUANTITATIVE EVALUATION OF POROSITY INFLUENCE ON LOCAL ELASTIC MODULI OF SiC REINFORCED METAL-MATRIX COMPOSITES**  
N. Podymova<sup>1</sup>, A. Karabutov<sup>2</sup>, T. Chernyshova<sup>3</sup>, L. Kobeleva<sup>3</sup>  
<sup>1</sup>M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation  
<sup>2</sup>M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation  
<sup>3</sup>A.A. Baikov Institute of Metallurgy and Materials Science, MOSCOW, Russian Federation
- PO-T6-8**      **EVALUATION OF MICROSTRUCTURE OF SEVERELY PLASTICALLY DEFORMED METALS BY LASER ULTRASOUND**  
V. Kozhushko, G. Paltauf, H. Krenn, Karl-Franzens-Universitaet Graz, GRAZ, Austria
- PO-T6-9**      **CHARACTERIZATION OF BRAZILIAN RED CERAMICS MICROSTRUCTURE USING PHOTOTHERMAL TECHNIQUES**  
R.T. Faria Jr., L. Mota, H. Vargas, UENF, CAMPOS DOS GOYTACAZES, Brazil
- PO-T6-10**     **THERMOGRAPHIC ANALYSIS IN FRACTURE TOUGHNESS TESTS**  
S. Paoloni, Università di Roma „Tor Vergata“, ROMA, Italy
- PO-T6-11**     **PHOTOTHERMAL RADIOMETRY MEASUREMENT OF KBR/CNTs COMPOSITES THERMAL CONDUCTIVITY**  
M. Depriester<sup>1</sup>, A. Hadj Sahraoui<sup>1</sup>, P. Hus<sup>2</sup>, F. Roussel<sup>3</sup>  
<sup>1</sup>LTPMC - ULCO, DUN KERQUE, France  
<sup>2</sup>LTPMC-ULCO, DUNKERQUE, France  
<sup>3</sup>LDSMM - USTL, VILLENEUVE D'ASCQ, France
- PO-T6-12**     **PHOTOTHERMAL CHARACTERIZATION OF SOLID TWO-LAYER SPHERICAL STRUCTURES**  
C. Wang, Soochow University, SUZHOU, China
- PO-T6-13**     **THERMAL DIFFUSIVITY OF Al-Mg BASED METALLIC MATRIX COMPOUNDS REINFORCED WITH CERAMIC PARTICLES OF SiC, Al<sub>2</sub>O<sub>3</sub> and TiB<sub>2</sub>**  
A. Cruz-Orea<sup>1</sup>, J.E. Morales<sup>2</sup>, R. Saavedra<sup>2</sup>, C. Carrasco<sup>3</sup>  
<sup>1</sup>Centro de Investigación y de Estudios Avanzados del IPN, MEXICO CITY, Mexico  
<sup>2</sup>Departamento de Física, Facultad de Ciencias Físicas y Matemáticas, CONCEPCIÓN, Chile  
<sup>3</sup>Departamento de Ingeniería de Materiales, Facultad de Ingeniería, CONCEPCIÓN, Chile
- PO-T6-14**     **LASER PHOTOTHERMAL RADIOMETRIC INSTRUMENT FOR INDUSTRIAL STEEL HARDNESS CASE DEPTH INSPECTION**  
A. Mandelis<sup>1</sup>, X. Guo<sup>2</sup>  
<sup>1</sup>University of Toronto, TORONTO, Canada  
<sup>2</sup>University Toronto, Canada
- PO-T6-15**     **PHOTOACOUSTIC STUDY ON TRANSPARENT CONDUCTIVE OXIDE LAYER REMOVAL IN THIN FILM SOLAR CELLS**  
C.S. Jung<sup>1</sup>, S.Y. Eom<sup>2</sup>, E.H. Kwak<sup>1</sup>, J.H. Lee<sup>1</sup>, I.K. Lee<sup>3</sup>, C.J. Ahn<sup>3</sup>  
<sup>1</sup>Cheongju University, CHEONGJU, South-Korea  
<sup>2</sup>Cheongju university, CHEONGJU, South-Korea  
<sup>3</sup>Green Optics Co. Ltd., CHEONGWON, South-Korea

- PO-T6-16**      **STUDY THE PROPERTIES OF ULTRASONIC WAVES TRAVELING ON THE SAMPLE WITH DEFECT BY LAZER-INTRODUCED TRANSIENT THERMAL GRATING METHOD**  
D. Xu, Nanjing Univ., NANJING, China
- PO-T6-17**      **NON-DESTRUCTIVE TESTING OF PHOTOVOLTAIC MODULES BY IR-IMAGING**  
C. Buerhop<sup>1</sup>, U. Hoyer<sup>2</sup>  
<sup>1</sup>Bavarian Center for Applied Energy Research (ZAE Bayern), ERLANGEN, Germany  
<sup>2</sup>ZAE Bayern, ERLANGEN, Germany
- PO-T6-18**      **CHARACTERIZING THE ELASTIC PROPERTIES OF ADHESIVE IN BONDED STRUCTURE BY LASER ULTRASONICS METHOD**  
X. Xu<sup>1</sup>, X. Liu<sup>1</sup>, J. Cheng<sup>1</sup>, J. Gao<sup>1</sup>, G. Xu<sup>2</sup>  
<sup>1</sup>Institute of acoustics, NANJING, China  
<sup>2</sup>Hangzhou Applied Acoustics Research Institute, HANZHOU, China
- PO-T6-19**      **DETERMINATION OF THERMAL DIFFUSIVITY OF CERAMICS BY MEANS OF PBD**  
W. Faubel<sup>1</sup>, B. Dietrich<sup>2</sup>  
<sup>1</sup>Forschungszentrum Karlsruhe, EGGENSTEIN-LEOPOLDSHAFEN, Germany  
<sup>2</sup>University Karlsruhe, KARLSRUHE, Germany
- PO-T6-20**      **CHARACTERIZATION OF BURIED VERTICAL CRACKS BY LOCK-IN VIBROTHERMOGRAPHY**  
A. Mendioroz<sup>1</sup>, E. Apiñaniz<sup>2</sup>, A. Salazar<sup>1</sup>, P. Venegas<sup>3</sup>, I. Sáez de Ocáriz<sup>3</sup>  
<sup>1</sup>University of the Basque Country, BILBAO, Spain  
<sup>2</sup>University of The Basque Country, BILBAO, Spain  
<sup>3</sup>Centro de Tecnologías Aeronáuticas, MIÑANO, Spain
- PO-T6-21**      **DETERMINATION OF THERMAL EFFUSIVITY OF THE KNbO<sub>3</sub> FERROELECTRIC CERAMIC BY INVERSE PHOTOPYROELECTRIC TECHNIQUE**  
J.J.A. Flores-Cuautle, E. Suaste-Gómez, A. Cruz-Orea  
CINVESTAV, MEXICO, Mexico
- PO-T6-22**      **A SISTEMATIC ANALYSIS OF THE INFLUENCE OF THE SURROUNDING MEDIA IN THE PHOTOTHERMAL BEAM DEFLECTION SIGNAL**  
F. Macedo, P. Prior, A. Gören, Universidade do Minho, BRAGA, Portugal
- PO-T6-23**      **FERROELECTRIC THIN FILMS CHARACTERIZED BY PHOTOTHERMAL TECHNIQUES**  
S. Trujillo<sup>1</sup>, R. Medina-Esquivel<sup>1</sup>, A. Bartesyte<sup>2</sup>, C. Jimenez<sup>2</sup>, P. Quintana<sup>1</sup>, I. Oliva<sup>1</sup>, J.J. Alvarado-Gil<sup>1</sup>  
<sup>1</sup>CINVESTAV-Unidad Merida, MERIDA, Mexico  
<sup>2</sup>LMGP, INPGrenoble Minatec, GRENOBLE, France
- PO-T6-24**      **PHOTOACOUSTIC MEASUREMENT OF THERMAL PROPERTIES OF METAL OXIDES POLYSTYRENE COMPOSITE FILMS**  
H. Talaat<sup>1</sup>, T. El-Brolossy<sup>1</sup>, S. Ibrahim<sup>2</sup>  
<sup>1</sup>Ain Shams University, CAIRO, Egypt  
<sup>2</sup>King Faisal University, AL-AHSA, Saudi Arabia
- PO-T6-25**      **SPUTTER DEPOSITION OF THIN FILMS ON SI SUBSTRATES ANALYZED BY MEANS OF MODULATED IR RADIOMETRY**  
S. Chotikaprakhan<sup>1</sup>, P. Kijamnajsuk<sup>2</sup>, F. Vaz<sup>3</sup>, F. Macedo<sup>3</sup>, J. Gibkes<sup>2</sup>, J. Pelz<sup>2</sup>, B.K. Bein<sup>2</sup>  
<sup>1</sup>Kasetsart University, BANGKOK, Thailand  
<sup>2</sup>Ruhr University, BOCHUM, Germany  
<sup>3</sup>University of Minho, GUIMARAES, Portugal

- PO-T6-26 MODULATED IR RADIOMETRY AS A TOOL FOR THE THICKNESS CONTROL OF COATINGS**  
F. Macedo<sup>1</sup>, F. Vaz<sup>1</sup>, R. Faria Junior<sup>2</sup>, A.C. Fernandes<sup>1</sup>, P. Kijamnajsuk<sup>3</sup>, S. Chotikaprakhan<sup>3</sup>, J. Gibkes<sup>4</sup>, B. Bein<sup>4</sup>  
<sup>1</sup>Universidade do Minho, BRAGA, Portugal  
<sup>2</sup>Universidade Estadual do Norte Fluminense, RIO DE JANEIRO, Brazil  
<sup>3</sup>Kasetsart University, BANGKOK, Thailand  
<sup>4</sup>Ruhr-University, BOCHUM, Germany
- PO-T6-27 CHARACTERIZATION OF DIRT REFERENCE STANDARDS BY PHOTOACOUSTIC INDUCED BY LASER ABLATION**  
G.M. Bilmes<sup>1</sup>, D. Orzi<sup>2</sup>, F. Liporace<sup>3</sup>, E. Morel<sup>4</sup>, J. Torga<sup>5</sup>, A. Roviglione<sup>6</sup>  
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<sup>5</sup>Laboratorio de Optoelectrónica y Metrología Aplicada UTN Delta, CAMPANA, Argentina  
<sup>6</sup>Facultad de Ingeniería, Universidad de Buenos Aires, BUENOS AIRES, Argentina
- PO-T6-28 LASER ABLATION THRESHOLDS OF SURFACE DIRT DETERMINED BY PHOTOACOUSTICS**  
G.M. Bilmes<sup>1</sup>, D. Orzi<sup>2</sup>  
<sup>1</sup>Centro de Investigaciones Ópticas (CONICET-CIC) and UN La Plata, LA PLATA, Argentina  
<sup>2</sup>CIOp and UNLP, LA PLATA, Argentina
- PO-T6-29 LASER PHOTOTHERMAL NON-DESTRUCTIVE METROLOGY OF CRACKS IN UN-SINTERED POWDER METALLURGY MANUFACTURED AUTOMOTIVE TRANSMISSION SPROCKETS**  
A. Mandelis, University of Toronto, TORONTO, Canada

<b>TOPIC 7 - SPECTROSCOPY, ANALYTICAL CHEMISTRY, NONLINEAR OPTICS AND PHOTO-CHEMISTRY</b>
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- PO-T7-1 INFLUENCE OF INTERNAL REFLECTIONS OF LIGHT ON THE PHOTOACOUSTIC SIGNAL**  
M. Malinski, KOSZALIN, Poland
- PO-T7-2 ACOUSTIC DETECTION OF LASER-INDUCED PLASMA FOR SIZE DETERMINATION OF NANOPARTICLES**  
H. Jin, J. A. Son, J. W. Kim, E.M. Park, J.G. Choi, Yonsei University, SEOUL, South-Korea
- PO-T7-3 TERAHERTZ REFLECTION RESPONSE MEASUREMENT USING A PHONON POLARITON**  
H. Inoue<sup>1</sup>, K. Katayama<sup>1</sup>, Q. Shen<sup>2</sup>, T. Toyoda<sup>2</sup>, K. Nelson<sup>3</sup>  
<sup>1</sup>Chuo univ., TOKYO, Japan  
<sup>2</sup>The univ. of Electro-communications, TOKYO, Japan  
<sup>3</sup>MIT, CAMBRIDGE, United States of America
- PO-T7-4 APPLICATION OF MIRAGE EFFECT TO METHANE DETECTION AT 2.3 $\mu$ M**  
A. Hamdi<sup>1</sup>, F. Genty<sup>2</sup>, N. Yacoubi<sup>3</sup>, Y. Rouillard<sup>4</sup>, A. Vicet<sup>4</sup>  
<sup>1</sup>IES, MONTPELLIER, France  
<sup>2</sup>SUPELEC, METZ, France  
<sup>3</sup>IPEIN, NABEUL, Tunisia  
<sup>4</sup>IES - Uinersité Montpellier 2, MONTPELLIER, France
- PO-T7-5 DETECTION OF NUCLEIC ACID BASES USING MICRO-HPLC WITH MULTI-COLOR EXCITED THERMAL LENS SPECTROSCOPY**  
A. Nagashio, H. Katae, S. Hirashima, A. Harata, Kyushu university, KASUGA, Japan

- PO-T7-6**      **CRYSTALLIZATION MONITORING BY THERMAL LENS SPECTROMETRY**  
D.A. Nedosekin<sup>1</sup>, E.S. Ryndina<sup>2</sup>, M.A. Proskurnin<sup>2</sup>, Yu.A. Vladimirov<sup>3</sup>  
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- PO-T7-7**      **COMPARISON BETWEEN PHOTOACOUSTIC AND CONVENTIONAL SPECTROMETRY FOR MEASUREMENTS OF MOLAR ABSORPTIVITY FOR PIGMENTS IN LIQUID SOLUTION**  
J.A. Balderas-López, UPIBI-IPN, MÉXICO, D. F., Mexico
- PO-T7-8**      **STUDY OF THE TiO<sub>2</sub> THIN FILMS ON Si SUBSTRATES BY PHOTOACOUSTIC ELASTIC BENDING METHOD**  
D. Todorovic<sup>1</sup>, M. Franko<sup>2</sup>, U. Lavrencic \_tangar<sup>2</sup>, M. Rabasovic<sup>3</sup>, D. Markushev<sup>3</sup>  
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<sup>2</sup>Laboratory for Environmental Research, University of Nova Gorica, NOVA GORICA, Slovenia  
<sup>3</sup>Institute of Physics, BELGRADE-ZEMUN, Serbia
- PO-T7-9**      **PHOTOACOUSTIC AND PHOTOELECTROCHEMICAL SPECTRA OF CDS/CDSE QUANTUM DOT-ABSORBED NANOSTRUCTURED TiO<sub>2</sub> ELECTRODES**  
T. Toyoda, The University of Electro-Communications, TOKYO, Japan
- PO-T7-10**     **EFFECT OF RUTILE-TYPE CONTENT IN NANOSTRUCTURED ANATASE-TYPE TiO<sub>2</sub> ELECTRODE WITH CDSE QUANTUM DOTS ON PHOTOACOUSTIC AND PHOTOELECTROCHEMICAL SPECTREA**  
T. Toyoda, The University of Electro-Communications, TOKYO, Japan
- PO-T7-11**     **CRYSTAL GROWTH OF CDSE QUANTUM DOTS ABSORPBED ON NANOSTRUCTURED TiO<sub>2</sub> ELECTRODES WITH DIFFERENT MORPHOLOGIES CHARACTERIZED BY PHOTOACOUSTIC SPECTROSCOPY**  
T. Toyoda, The University of Electro-Communications, TOKYO, Japan
- PO-T7-12**     **PHOTOEXCITED CARRIER DYNAMICS OF NANOSTRUCTURED TiO<sub>2</sub> FILMS OF DIFFERENT CRYSTAL STRUCTURES TOGETHER WITH CDSE QUANTUM DOTS ADSORPTION**  
T. Toyoda, The University of Electro-Communications, TOKYO, Japan
- PO-T7-13**     **OPTICAL ABSORPTION SPECTRUM OF MATERIALS FOR BIOMEDICAL USE**  
M. Mendez<sup>1</sup>, L. Hernandez<sup>2</sup>, A. Cruz-Orea<sup>3</sup>  
<sup>1</sup>National Polytechnic Institute, MEXICO CITY, Mexico  
<sup>2</sup>National Polytechnic Institute, MEXICO CITY, Mexico  
<sup>3</sup>CINVESTAV, MEXICO CITY, Mexico
- PO-T7-14**     **INVESTIGATION OF OPTICAL PROPERTIES OF THE SULFOSALT NEW ABSORBER Sn<sub>2</sub>Sb<sub>2</sub>S<sub>5</sub> THIN FILMS USING THE PHOTOTHERMAL DEFLECTION SPECTROSCOPY**  
I. Gaied<sup>1</sup>, A. Gassoumi<sup>2</sup>, M. Kanzari<sup>2</sup>, N. Yacoubi<sup>1</sup>  
<sup>1</sup>Institut Préparatoire aux Etudes d'Ingénieur de Nabeul (IPEIN), NABEUL, Tunisia  
<sup>2</sup>Laboratoire de photovoltaïque et Matériaux Semiconducteurs ENIT BP 37 belvédère, TUNIS, Tunisia
- PO-T7-15**     **INFLUENCE OF THE TRIETHANOLAMINE CONCENTRATION ON THE OPTICAL PROPERTIES OF TIN SULPHIDE THIN FILMS BY THE PHOTOTHERMAL DEFLECTION SPECTROSCOPY**  
I. Gaied, Institut Préparatoire aux Etudes d'Ingénieur de Nabeul (IPEIN), NABEUL, Tunisia

- PO-T7-16**      **NUMERICAL ANALYSIS OF TRANSMISSION AND ABSORPTION PHOTOACOUSTIC SPECTRA OF SILICON**  
M. Malinski<sup>1</sup>, L. Chrobak<sup>2</sup>  
<sup>1</sup>Technical University of Koszalin, KOSZALIN, Poland  
<sup>2</sup>Department of Electronics and Computer Science, KOSZALIN, Poland
- PO-T7-17**      **PHOTOACOUSTIC AND PHOTOLUMINESCENT CHARACTERIZATION OF CO-DOPED BLENDS OF PC/PMMA WITH RARE EARTH Tb(1-x)Eu(x)**  
A. Bento<sup>1</sup>, D. Velasco<sup>2</sup>, M. Mauricio<sup>2</sup>, A. Rubira<sup>2</sup>, A. Medina<sup>1</sup>, M. Baesso<sup>1</sup>  
<sup>1</sup>UEM - Univ estadual de Maringá, MARINGÁ, Brazil  
<sup>2</sup>Univ Estadual de Maringá, MARINGÁ, Brazil
- PO-T7-18**      **DIRECT DETECTION OF GRADIENT-ELUTED NON-LABELED AMINO ACIDS USING MICRO-HPLC WITH ULTRAVIOLET THERMAL LENSING**  
A. Harata, H. Katae, S. Hirashima, Kyushu University, FUKUOKA, Japan
- PO-T7-19**      **THERMAL LENS DETERMINATION OF PROTEINS, CELLS, AND BACTERIAL CULTURES**  
M.A. Proskurnin<sup>1</sup>, D. Volkov<sup>1</sup>, K. Tishchenko<sup>1</sup>, D. Nedosekin<sup>1</sup>, B. Zuev<sup>2</sup>, Y. Vladimirov<sup>3</sup>, V. Zharov<sup>4</sup>  
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<sup>4</sup>Phillips Classic Laser and Nanomedicine Laboratories, UAMS, LITTLE ROCK, United States of America
- PO-T7-20**      **PHOTOACOUSTIC MEASUREMENTS OF EXCITONS IN CdSe NANORODS**  
H. Talaat<sup>1</sup>, H. Awad<sup>1</sup>, T. Abdallah<sup>1</sup>, M. Mohamed<sup>2</sup>, K. Easawi<sup>3</sup>, S. Negm<sup>3</sup>  
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<sup>2</sup>NILES, CAIRO, Egypt  
<sup>3</sup>Benha University, CAIRO, Egypt
- PO-T7-21**      **CHARACTERIZATION OF PbSe NANOCRYSTALS USING PHOTOACOUSTIC FT-IR SPECTROSCOPY**  
H. Talaat<sup>1</sup>, A. Shehata<sup>1</sup>, K. Easawi<sup>2</sup>, M. Mohamed<sup>3</sup>, T. Abdallah<sup>1</sup>, S. Negm<sup>2</sup>  
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<sup>2</sup>Benha University, CAIRO, Egypt  
<sup>3</sup>NILES, CAIRO, Egypt
- PO-T7-22**      **CHARACTERIZATION OF CORE/SHELL (Ag/CdSe) NANOSTRUCTURE USING PHOTOACOUSTIC SPECTROSCOPY**  
H. Talaat<sup>1</sup>, A. Okasha<sup>2</sup>, M. Mohamed<sup>3</sup>, T. Abdallah<sup>1</sup>, A. Basily<sup>2</sup>, S. Negm<sup>4</sup>  
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<sup>4</sup>Benha University, CAIRO, Egypt
- PO-T7-23**      **USE OF THE PHOTOACOUSTIC SPECTROSCOPY FOR CHARACTERIZATION OF MAGNETIC FLUID BASED MAMONA OIL**  
L. Silveira, Universidade Federal de Rondônia, JI-PARANÁ, Brazil
- PO-T7-24**      **INSTABILITY OF MAGNETIC COLLOID OF COPAIBA OIL**  
J.G. Santos, Unirversidade Federal de Rondônia, JI PARANA, Brazil
- PO-T7-25**      **SPECTROFOTOMETRIC STUDY OF WATER HIDROGEOCHEMISTRY URUPÁ'S MICROBASIN IN JI-PARANA RONDÔNIA BRAZIL**  
J.G. Santos, Unirversidade Federal de Rondônia, JI PARANA, Brazil
- PO-T7-26**      **DETERMINATION OF DRUG CONTENT IN SEMISOLID FORMULATIONS BY NON-INVASIVE SPECTROSCOPIC METHODS: FTIR - ATR, - PAS, PDS, RAMAN**  
W. Faubel<sup>1</sup>, B. Gotter<sup>2</sup>, S. Heissler<sup>1</sup>  
<sup>1</sup>Forschungszentrum Karlsruhe, EGGENSTEIN-LEOPOLDSHAFEN, Germany  
<sup>2</sup>Martin-Luther-University, HALLE, Germany

- PO-T7-27**      **DETERMINATION OF THE LASER BEAM SPATIAL PROFILE BY PULSED PHOTOACOUSTICS**  
D. Markushev, Institute of Physics, BELGRADE-ZEMUN, Serbia
- PO-T7-28**      **STUDY OF GLASSY DOPED SYSTEM: DIFFUSION TIME AND NON-RADIATIVE RELAXATION TIME OBTAINED FROM COMBINED MODEL THERMAL DIFFUSION WITH THERMAL EXPANSION**  
A. Bento<sup>1</sup>, N. SouzaFilho<sup>2</sup>, A. Nogueira<sup>2</sup>, A. Novatski<sup>2</sup>, A. Medina<sup>1</sup>, M. Baesso<sup>1</sup>, H. Vargas<sup>3</sup>  
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- PO-T7-29**      **ELECTRONIC AND THERMAL CONTRIBUTIONS TO THE NONLINEAR REFRACTIVE INDEX VERSUS TEMPERATURE OF LASER MATERIALS**  
C. Jacinto<sup>1</sup>, W. F. Silva<sup>1</sup>, A. Benayas<sup>2</sup>, A. Ródenas<sup>3</sup>, L. R. Freitas<sup>4</sup>, D. Jaque<sup>3</sup>, T. Catunda<sup>5</sup>  
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<sup>2</sup>Universidad Autónoma de Madrid, MADRID, Spain  
<sup>3</sup>Universidad Autónoma de Madrid, MADRID, Spain  
<sup>4</sup>IFSC, Universidade de São Paulo, SÃO CARLOS, Brazil  
<sup>5</sup>IFSC-Universidade de São Paulo, SÃO CARLOS, Spain
- PO-T7-30**      **MICROSTRUCTURATION INDUCED DIFFERENCES IN THE THERMO-OPTICAL AND LUMINESCENCE PROPERTIES OF ND:YAG FINE GRAIN CERAMICS AND CRYSTALS**  
C. Jacinto<sup>1</sup>, A. Benayas<sup>2</sup>, W. F. Silva<sup>1</sup>, T. Catunda<sup>3</sup>, D. Jaque<sup>4</sup>  
<sup>1</sup>Universidade Federal de Alagoas, MACEIÓ-AL, Brazil  
<sup>2</sup>Universidad Autónoma de Madrid, MADRID, Spain  
<sup>3</sup>IFSC-Universidade de São Paulo, SÃO CARLOS, Spain  
<sup>4</sup>Universidad Autónoma de Madrid, MADRID, Spain
- PO-T7-31**      **FINITE ELEMENT ANALYSIS PREDICTS FEATURES IN PHOTOTHERMAL SPECTROSCOPY SIGNALS**  
S. Bialkowski, P.R. Joshi, O.O. Dada, Utah State University, LOGAN, United States of America

<b>TOPIC 8 - STIMULATED AND SPONTANEOUS BRILLOUIN AND RAMAN SCATTERING (ACOUSTIC AND OPTICAL PHONONS)</b>
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- PO-T8-1**      **ACOUSTIC WAVES IN LAYERED MEDIA: COMPARATIVE STUDY OF RAMAN SCATTERING AND REFLECTION DELAY TIME**  
E.H. El Boudouti<sup>1</sup>, Y. El Hassouani<sup>2</sup>, B. Djafari-Rouhani<sup>3</sup>  
<sup>1</sup>Faculté des Sciences, OUJDA, Morocco  
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- PO-T8-2**      **THE INFLUENCE OF TEMPERATURE ON RAMAN MODES IN LEAD NITRATE CRYSTAL**  
P. Zverev, A.M. Prokhorov General Physics Institute Russian Academy of Sciences, MOSCOW, Russian Federation

<b>TOPIC 9 - ULTRAFAST THERMO-ELASTIC PHENOMENA AND MOLECULAR DYNAMICS</b>
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- PO-T9-1**            **EFFECTS OF THE SURROUNDING MEDIUM ON THE PHOTOEXCITED ELECTRON AND PHONON DYNAMICS OF Au NANOPARTICLES CHARACTERIZED USING TRANSIENT GRATING TECHNIQUE**  
Q. Shen<sup>1</sup>, K. Katayama<sup>2</sup>, T. Sawada<sup>3</sup>, T. Toyoda<sup>1</sup>  
<sup>1</sup>The University of Electro-Communications, TOKYO, Japan  
<sup>2</sup>Chuo University, TOKYO, Japan  
<sup>3</sup>Japan Science and Technology Agency, TOKYO, Japan
- PO-T9-2**            **HIGH FREQUENCY ACOUSTIC PULSE USING SEMICONDUCTOR QUANTUM DOTS**  
P.-A. Mante, A. Devos, A. Le Louarn, CNRS-IEMN, LILLE, France
- PO-T9-3**            **PICOSECOND MEASUREMENTS IN MO/SI SUPERLATTICES**  
L. Belliard<sup>1</sup>, B. Perrin<sup>2</sup>, A. Huynh<sup>3</sup>, A. Michel<sup>4</sup>, G. Abadias<sup>4</sup>, C. Jaouen<sup>4</sup>  
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<b>TOPIC 10 - THERMAL AND ELASTIC PROPERTIES ON NANO-SCALE AND IR MICRO-ANTENNAS</b>
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- PO-T10-1**        **INVESTIGATION OF THERMAL PROPERTIES OF SULFOSALT SnSb<sub>2</sub>S<sub>4</sub> THIN FILMS BY THE PHOTOTHERMAL DEFLECTION TECHNIQUE**  
I. Gaied<sup>1</sup>, A. Gassoumi<sup>2</sup>, M. Kanzari<sup>2</sup>, N. Yacoubi<sup>1</sup>  
<sup>1</sup>Institut Préparatoire aux Etudes d'Ingénieur de Nabeul (IPEIN), NABEUL, Tunisia  
<sup>2</sup>Laboratoire de photovoltaïque et Matériaux Semiconducteurs ENIT BP 37 belvédère, TUNIS, Tunisia
- PO-T10-2**        **INTERFACE RESISTANCE IN COPPER COATED CARBON DETERMINED BY FREQUENCY DEPENDENT PHOTOTHERMAL MEASUREMENTS**  
J. Pelzl<sup>1</sup>, P. Kijamnajsuk<sup>2</sup>, F. Giuliani<sup>3</sup>, M. Chirtoc<sup>4</sup>, N. Horny<sup>4</sup>, J. Gibkes<sup>1</sup>, S. Chotikaprakhan<sup>5</sup>, B. Bein<sup>1</sup>  
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<sup>2</sup>Ruhr-Universität, BOCHUM, Germany  
<sup>3</sup>Linköping University, LINKÖPING, Sweden  
<sup>4</sup>University Reims, REIMS, France  
<sup>5</sup>Kasetsart University, BANGKOK, Thailand
- PO-T10-3**        **STUDY OF THE EFFECTS OF UV IRRADIATION ON RHODAMINE R6G DYE SOLUTIONS, CONTAINING TiO<sub>2</sub> NANOPARTICLES, BY USING PHOTOTHERMAL TECHNIQUES**  
A. Cruz-Orea<sup>1</sup>, S.A. Lozano<sup>2</sup>, J.L. Jiménez Pérez<sup>2</sup>, J.F. Sánchez Ramírez<sup>2</sup>, C.J. Da Silva<sup>3</sup>, F. Sanchez-Sinencio<sup>1</sup>, R. Saavedra<sup>4</sup>, G. López-Bueno<sup>5</sup>  
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- PO-T10-4**        **PHOTOTHERMAL CHARACTERIZATION OF METALLIC OPALS**  
R. Li Voti<sup>1</sup>, G. Leahu<sup>2</sup>, L. Di Dio<sup>3</sup>, C. Sibilía<sup>2</sup>, M. Bertolotti<sup>2</sup>, A. Altube<sup>4</sup>, A. Blanco<sup>4</sup>, C. Lopez<sup>4</sup>  
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**TOPIC 11 - SEMICONDUCTORS, MEMS, NEMS AND PHONONIC BANDGAP MATERIALS**

- PO-T11-1 PULSED PHOTOTHERMAL TECHNIQUES: EFFECTIVE THERMAL PARAMETERS OF LAYERED FILMS**  
G. Gurevich, CINVESTAV-I.P.N., MEXICO D.F. 07000, Mexico
- PO-T11-2 SEMI-INFINITE PHOTOCARRIER RADIOMETRIC MODEL FOR THE CHARACTERIZATION OF SEMICONDUCTOR WAFERS**  
B. Li, X. Liu, Institute of Optics and Electronics, CHENGDU, China
- PO-T11-3 ION IMPLANTATION DOSE DEPENDENCE OF PHOTOCARRIER RADIOMETRY OF THERMALLY ANNEALED SILICON WAFERS**  
B. Li, X. Liu, Q. Huang, Institute of Optics and Electronics, CHENGDU, China
- PO-T11-4 ANALYSIS OF MODULATED FREE-CARRIER ABSORPTION MEASUREMENT OF ELECTRONIC TRANSPORT PROPERTIES OF SILICON WAFERS**  
B. Li<sup>1</sup>, W. Li<sup>2</sup>  
<sup>1</sup>Institute of Optics and Electronics, CHENGDU, China  
<sup>2</sup>Institute of Optics and Electronics, Chinese Academy of Sciences, CHENGDU, China
- PO-T11-5 DETERMINATION OF LAYERS AND INTERFACES THERMAL PARAMETERS IN SILICON-ON-DIAMOND STRUCTURES BY THE PHOTOTHERMAL METHOD**  
A. Klokov, P.N. Lebedev Physical Institute RAS, MOSCOW, Russian Federation
- PO-T11-6 OPTICAL PROPERTIES OF STARCH CAPPED CDS NANOPARTICLES**  
P. Rodríguez, G. González, S.A. Tomás, O. Zelaya, CINVESTAV-IPN, MEXICO CITY, Mexico
- PO-T11-7 PHOTOTHERMAL AND PL INVESTIGATION OF DOPED THIN LAYER SEMICONDUCTOR**  
S. Abroug, Photothermal laboratory IPEIN, NABEUL, Tunisia
- PO-T11-8 COMPARISON BETWEEN DIFFERENT PHOTOTHERMAL DEFLECTION METHODS TO DETERMINE THERMAL PROPERTIES OF BULK SEMICONDUCTORS SAMPLES**  
I. Gaied, Institut Préparatoire aux Etudes d'Ingénieur de Nabeul (IPEIN), NABEUL, Tunisia
- PO-T11-9 INVESTIGATION OF THERMAL AND OPTICAL PROPERTIES OF THIN WO<sub>3</sub> FILMS BY THE PHOTOTHERMAL DEFLECTION TECHNIQUE**  
I. Gaied<sup>1</sup>, S. Dabbous<sup>2</sup>, T. Ben Nasrallah<sup>2</sup>, N. Yacoubi<sup>1</sup>  
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- PO-T11-10 PHOTOTHERMAL DYNAMIC ELASTIC BENDING IN A SEMICONDUCTING CIRCULAR PLATE INDUCED BY A FOCUSED LASER BEAM**  
S. Galovic, The Vinca Institute of Nuclear Sciences, BELGRADE, Serbia
- PO-T11-11 PHOTOEXCITED CARRIER DYNAMICS OF ZnO NANOSTRUCTURED FILMS CHARACTERIZED USING TRANSIENT GRATING TECHNIQUE**  
Q. Shen<sup>1</sup>, K. Katayama<sup>2</sup>, T. Sawada<sup>3</sup>, T. Toyoda<sup>1</sup>  
<sup>1</sup>The University of Electro-Communications, TOKYO, Japan  
<sup>2</sup>Chuo University, TOKYO, Japan  
<sup>3</sup>Japan Science and Technology Agency, TOKYO, Japan
- PO-T11-12 MEASUREMENTS OF THE URBACH TAIL FOR A<sub>2</sub>B<sub>6</sub> MIXED CRYSTALS BY PHOTOTHERMAL METHOD**  
J. Zakrzewski<sup>1</sup>, M. Malinski<sup>2</sup>, K. Strzalkowski<sup>1</sup>, F. Firszt<sup>1</sup>, S. Legowski<sup>1</sup>, H. Meczynska<sup>1</sup>  
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- PO-T11-13 THE PHOTOACOUSTIC TECHNIQUE APPLIED TO THE STUDY OF THE CRYSTALLINE QUALITY AND INTERFACE OF InAs(1-x)Sb(x) EPITAXIAL LAYERS GROWN ON GaSb**  
 J.G. Mendoza-Alvarez<sup>1</sup>, M.L. Gomez-Herrera<sup>2</sup>, P. Rodriguez-Fragoso<sup>3</sup>, I. Riech<sup>4</sup>, Y.E. Bravo-Garcia<sup>5</sup>, A. Cruz-Orea<sup>3</sup>, F. Sanchez-Sinencio<sup>6</sup>, J.L. Herrera-Perez<sup>5</sup>  
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- PO-T11-14 PHOTOTHERMAL CHARACTERIZATION OF VANADIUM DIOXIDE PHOTONIC CRYSTAL**  
R. Li Voti<sup>1</sup>, G. Leahu<sup>2</sup>, L. Di Dio<sup>3</sup>, C. Sibilìa<sup>2</sup>, M. Bertolotti<sup>2</sup>, D. Kurdyukov<sup>4</sup>, V. Golubev<sup>4</sup>  
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- PO-T11-15 POLARIZATION PROPERTIES OF THE RESONANT ELASTIC MODES IN 1D PHONONIC CRYSTALS**  
F. Ramos-Mendieta, B. Manzanares-Martínez, L. Castro-Arce, Universidad de Sonora, HERMOSILLO, SONORA, Mexico
- PO-T11-16 INFRARED PHOTOCARRIER RADIOMETRY, MODULATED PHOTOVOLTAGE AND ELECTRICAL CHARACTERISTICS OF POLYCRISTALLINE Si SOLAR CELLS**  
A. Mandelis, University of Toronto, TORONTO, Canada

<b>TOPIC 12 - COMPLEX FLUIDS, PHASE TRANSITIONS AND GLASS TRANSITIONS</b>
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- PO-T12-1 PHASE TRANSITION STUDY IN MAGNETO CALORIC MATERIAL FROM A MAGNETO-GENERATED ACOUSTIC SIGNAL**  
A. Bento, W. Szpak, A. Medina, M. Baesso, UEM - Univ estadual de Maringá, MARINGÁ, Brazil
- PO-T12-2 THERMAL DIFFUSION IN NANOFUIDS: NEW FINDINGS ON THE INFLUENCE OF PARTICLE SIZE**  
J. Philip, M.R. Nisha, Cochin University of Science and Technology, COCHIN, India
- PO-T12-3 PHOTOPYROELECTRIC INVESTIGATION OF LIQUID CRYSTAL/POLYMER MIXTURES**  
S. Longuemart<sup>1</sup>, A. Daoudi<sup>1</sup>, D. Dadarlat<sup>2</sup>, S. Delenclos<sup>1</sup>, A. Hadj Sahraoui<sup>1</sup>  
<sup>1</sup>LTPMC, DUNKERQUE, France  
<sup>2</sup>National R&D Institute for Isotopic and Molecular Technologies, CLUJ-NAPOCA, Romania
- PO-T12-4 STUDY OF TiO<sub>2</sub> THIN FILMS BY LASER PULSED PHOTOACOUSTIC**  
A. Pérez<sup>1</sup>, R. Castañeda<sup>2</sup>, C. Oliva<sup>2</sup>, A. Esparza<sup>2</sup>  
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- PO-T12-5 KINETICS OF PHASE TRANSFORMATION IN COMPLEX FLUIDS ON THE BASE OF POLYMER PARTICLES-LIQUID CRYSTAL**  
D. Ibragimov<sup>1</sup>, M. Bayramov<sup>2</sup>, R. Imamaliyev<sup>2</sup>  
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- PO-T12-6** *(in Book of Abstracts: TU-PA-2A-1)*  
**TEMPERATURE DEPENDENCE OF THERMAL, STRUCTURAL, AND ACOUSTIC RELAXATION OF GLASS FORMING LIQUIDS STUDIED BY SURFACE ACOUSTIC WAVE CHARACTERIZATION, USING AN ALL-OPTICAL METHOD.**  
R. Salenbien, R. Côte, C. Glorieux, KULeuven, HEVERLEE, Belgium

**TOPIC 13 - BIOLOGICAL MATERIALS, AGRICULTURAL AND FOOD SCIENCES**

- PO-T13-1**      **PHOTOACOUSTIC ANALYSIS OF THE SOLUBILIZATION KINETICS OF PULMONARY SECRETIONS FROM CYSTIC FIBROSIS PATIENTS (SECRETOR AND NON SECRETOR PHENOTYPES)**  
P.R. Barja, UNIVAP, SAO JOSE DOS CAMPOS, Brazil
- PO-T13-2**      **PHOTOACOUSTIC STUDY OF THE PENETRATION KINETICS OF NIMESULID INTO HUMAN SKIN**  
P.R. Barja, D.J.D.V. Veloso, UNIVAP, SAO JOSE DOS CAMPOS, Brazil
- PO-T13-3**      **DIELECTRIC CONSTANT, THERMAL CONDUCTIVITY AND DIFFUSIVITY OF LOW TRANS INTERESTERIFIED FATS**  
A.M. Mansanares<sup>1</sup>, E.C. Silva<sup>2</sup>, M.L. Albuquerque<sup>3</sup>, M.E. Soffner<sup>3</sup>, D.F.S. Becker-Almeida<sup>4</sup>, L.A.G. Gonçalves<sup>4</sup>  
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- PO-T13-4**      **PHOTOACOUSTIC TECHNIQUE APPLIED TO DETECTION OF ETHYLENE EMISSION IN PASSION FRUITS EDIBLE COATED**  
M.G. Da Silva, G. Alves, W. Dos Santos, W. Waldman, J. Oliveira, H. Vargas, UENF, CAMPOS DOS GOYTACAZES, Brazil
- PO-T13-5**      **NATURAL ZEOLITES AND ZEOLITE CONCENTRATE AS NITROGEN FERTILIZER HOLDER: EFFICIENCY COMPARATIVE STUDY**  
M. Baptista-Filho<sup>1</sup>, F. Luna<sup>2</sup>, J. Polidoro<sup>3</sup>, M. Monte<sup>4</sup>, F. Souza-Barros<sup>5</sup>, A. Miklos<sup>6</sup>, M. Da Silva<sup>2</sup>, H. Vargas<sup>2</sup>  
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<sup>6</sup>FIB, STUTTGART, Brazil
- PO-T13-6**      **ABSORPTION SPECTROSCOPY OF ANIMAL AND VEGETABLE OIL**  
L. Silveira, Universidade Federal de Rondônia, JI-PARANÁ, Brazil
- PO-T13-7**      **PHOTOTHERMAL CHARACTERIZATION OF HYDROXYAPATITE COATINGS ON ROUGH Ti ALLOY SUBSTRATES USED FOR ORTHOPAEDIC PROSTHESES**  
M. Chirtoac<sup>1</sup>, J.S. Antoniow<sup>2</sup>, H. Bnhayoune<sup>3</sup>, R. Drevet<sup>3</sup>, N. Horny<sup>4</sup>, P. Grosselet<sup>4</sup>  
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<sup>4</sup>GRESPI, Univ. Reims, REIMS, France
- PO-T13-8**      **SPECTROPHOTOMETRY OF THE EXTRACT OF SEED CUPUACU**  
L. Silveira, Universidade Federal de Rondônia, JI-PARANÁ, Brazil
- PO-T13-9**      **TOTAL CAROTENOID CONTENT OF DRIED PASTA: THE PHOTOACOUSTIC SPECTROSCOPY VERSUS FEW OTHER METHODS**  
D.D. Bicanic<sup>1</sup>, O. Doka<sup>2</sup>, G. Vegvari<sup>3</sup>, J.G. Buijnsters<sup>4</sup>, R. Spruijt<sup>1</sup>, T.S. Marenjak<sup>5</sup>  
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- PO-T13-10**     **SPECTROSCOPIC MAGNETIC FLUID BASED OF BABACU**  
J.G. Santos, Universidade Federal de Rondônia, JI PARANA, Brazil

- PO-T13-11**      **AQUEOUS EXTRACT CURATELLA AMERICAN AND SCHINUS TEREBINTHIFOLIUS**  
J.G. Santos, Unirversidade Federal de Rondônia, JI PARANA, Brazil
- PO-T13-12**      **QUANTIFICATION OF LYCOPENE IN PROCESSED TOMATO-BASED PRODUCTS USING LIGHT-EMITTING DEVICE AND THE OPTOTHERMAL DETECTOR**  
D.D. Bicanic<sup>1</sup>, H. Skenderovic<sup>2</sup>, K. Markovic<sup>3</sup>, L. Pichler<sup>4</sup>, G. Pichler<sup>5</sup>, O. Doka<sup>6</sup>  
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<sup>6</sup>University of West Hungary, MOSONMAGYAROVAR, Hungary
- PO-T13-13**      **SOLVENT EFFECTS IN TLS DETERMINATION OF BETA-LACTOGLOBULIN**  
M. Franko, A. Cevdek, University of Nova Gorica, NOVA GORICA, Slovenia
- PO-T13-14**      **NATURAL AND LASER INDUCED CAVITATION IN CORN STEMS: ON THE MECHANISMS OF ACOUSTIC EMISSIONS**  
G.M. Bilmes<sup>1</sup>, E. Fernández<sup>2</sup>, R. Fernández<sup>2</sup>  
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<b>TOPIC 14 - NEW INSTRUMENTATION AND METHODOLOGY</b>
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- PO-T14-1**      **IN-SITU THERMOPROPERTIES MEASUREMENT OF PD FILM DEPOSITED ON OPTICAL FIBER PREPARED FOR PHOTOTHERMAL REFLECTANCE DETECTION**  
A. Yurai, Osaka Sangyo University, OSAKA, Japan
- PO-T14-2**      **CALORIMETRIC INVESTIGATIONS OF LIQUIDS BY COMBINED FRONT PHOTOPYROELECTRIC DETECTION CONFIGURATION (FPPE) AND THERMAL-WAVE RESONATOR CAVITY (TWRC) METHOD**  
M. Streza<sup>1</sup>, D. Dadarlat<sup>2</sup>, M.N. Pop<sup>2</sup>, V. Tosa<sup>2</sup>, S. Delenclos<sup>3</sup>, S. Longuemart<sup>3</sup>, A.H. Sahraoui<sup>3</sup>  
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<sup>2</sup>NIRDIMT Cluj-Napoca, CLUJ-NAPOCA, Romania  
<sup>3</sup>Universite du Littoral, DUNKERQUE, France
- PO-T14-3**      **THERMAL DIFFUSIVITY MEASUREMENT BY PHOTOTHERMAL RADIOMETRY UNDER RANDOM EXCITATION AND PARAMETRIC ANALYSIS**  
J.L. Bodnar<sup>1</sup>, P. Gossel<sup>1</sup>, S. Brahim<sup>2</sup>  
<sup>1</sup>University of Reims, REIMS, France  
<sup>2</sup>Université, REIMS, France
- PO-T14-4**      **PHOTONIC CRYSTAL LASER FOR PHOTOACOUSTIC SPECTROSCOPY**  
M. Wolff<sup>1</sup>, S. Gebhardt<sup>2</sup>  
<sup>1</sup>Hamburg University of Applied Sciences, HAMBURG, Germany  
<sup>2</sup>PAS-Analytik GmbH, HAMBURG, Germany
- PO-T14-5**      **A SINGLE NANOPARTICLE DETECTION: VIRTUAL PHOTOTHERMAL EXPERIMENT**  
D.A. Nedosekin<sup>1</sup>, M.A. Proskurnin<sup>2</sup>, V.P. Zharov<sup>3</sup>, Yu.A. Vladimirov<sup>4</sup>  
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<sup>4</sup>Faculty of Basic Medicine, M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation

- PO-T14-6 DEPTH PROFILING OF THERMOPHYSICAL PARAMETERS OF CURVED SOLIDS USING PHOTOTHERMAL TECHNIQUE**  
C. Wang, Soochow University, SUZHOU, China
- PO-T14-7 GAS CELL PHOTOACOUSTIC DETECTION OF ULTRASOUND ABSORPTION**  
U. Netzelmann, Fraunhofer IZFP, SAARBRÜCKEN, Germany
- PO-T14-8 MODEL OF RESONANT ACOUSTIC SPECTROSCOPY OF INTERACTION OF HIGH POWER SINGLE-MODE LASER RADIATION WITH CRYSTALS**  
D. Myasnikov<sup>1</sup>, A.V. Doronkin<sup>1</sup>, A.V. Konyashkin<sup>2</sup>, O.A. Ryabushkin<sup>2</sup>  
<sup>1</sup>NTO „IRE-Polus“, FRYAZINO, Russian Federation  
<sup>2</sup>IRE RAS, FRYAZINO, Russian Federation
- PO-T14-9 PHOTOACOUSTIC INVESTIGATION OF QCL MODULATION TECHNIQUES**  
M. Wolff, M. Germer, Hamburg University of Applied Sciences, HAMBURG, Germany
- PO-T14-10 PHOTOPYROELECTRIC DETECTION BASED ON PLZT CERAMIC**  
J.J.A. Flores-Cuautle, E. Suaste-Gómez, A. Cruz-Orea, CINVESTAV, MEXICO, Mexico
- PO-T14-11 DEVELOPMENT OF A PHOTOTHERMAL DOUBLE BEAM LASER SCANNING SYSTEM**  
W. Faubel<sup>1</sup>, S. Heissler<sup>1</sup>, B. Gotter<sup>2</sup>  
<sup>1</sup>Forschungszentrum Karlsruhe, EGGENSTEIN-LEOPOLDSHAFEN, Germany  
<sup>2</sup>Martin-Luther-University, HALLE, Germany
- PO-T14-12 FOURFOLD ELECTROSTATIC DEFLECTION FOR IN BEAM MASS SELECTION OF NANOCLOUDS PRODUCED WITH A LASER VAPORIZATION SOURCE**  
C. Romero<sup>1</sup>, K. Lauwaet<sup>2</sup>, D. N. Ilevlev<sup>3</sup>, P. Lievens<sup>2</sup>  
<sup>1</sup>KULeuven, HEVERLEE, Belgium  
<sup>2</sup>K.U. Leuven, LEUVEN, Belgium  
<sup>3</sup>Teer Coatings Ltd, WORCESTERSHIRE, United Kingdom
- PO-T14-13 RESONANT ACOUSTIC SPECTROSCOPY OF THE INTERACTION OF THE SINGLE-MODE HIGH-POWER LASER RADIATION WITH CRYSTALS**  
A.V. Konyashkin<sup>1</sup>, A.V. Doronkin<sup>2</sup>, V.A. Tyrtshnyy<sup>2</sup>, D.V. Myasnikov<sup>1</sup>, O.A. Ryabushkin<sup>3</sup>  
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- PO-T14-14 3-OMEGA MEASUREMENTS OF THERMAL CONDUCTIVITIES OF MATERIALS DESIGNED FOR LOW THERMAL RESISTANCES**  
P.-O. Chapuis<sup>1</sup>, M. Schmidt<sup>1</sup>, N. Kehagias<sup>1</sup>, J. Cuffe<sup>1</sup>, M. Prunnila<sup>2</sup>, J. Ahopelto<sup>2</sup>, C.M. Sotomayor Torres<sup>1</sup>  
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<sup>2</sup>VTT Micro and Nanoelectronics, ESPOO, Finland
- PO-T14-15 THERMAL WAVE INTERFEROMETRY OF GAS-LIQUID USING OF-TWRC TECHNIQUE**  
A.B. Zakaria, M. Noroozi, Z.A. Sulaiman, Z.A. Wahab, M.M. Moxsin, Universiti Putra Malaysia, SERDANG, Malaysia
- PO-T14-16 FREQUENCY-DOMAIN PHOTOTHERMOACOUSTIC IMAGING WITH A CW LASER AND NON-LINEAR FREQUENCY MODULATION CHIRPS**  
A. Mandelis, University of Toronto, TORONTO, Canada

<b>TOPIC 15 - NONLINEAR EFFECTS, LARGE DEFORMATIONS AND SHOCK WAVE PHYSICS</b>
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- PO-T15-1 THEORY OF THE SECOND HARMONIC OF THE PHOTOACOUSTIC SIGNAL OF THE OPAQUE SOLIDS**  
T. Salikhov, Tajik National University, DUSHANBE, Tajikistan

<b>TOPIC 16 - DYNAMICS OF PHOTOINDUCED PROCESSES</b>
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- PO-T16-1**      **POLYMER-MATRIX SILVER NANOCOMPOSITES: SYNTHESIS AND INVESTIGATION BY THERMAL LENSING**  
D.A. Nedosekin<sup>1</sup>, M.V. Galkin<sup>2</sup>, E.V. Ageeva<sup>2</sup>, N.A. Gavrilenko<sup>3</sup>, M.A. Proskurnin<sup>2</sup>  
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<sup>3</sup>Tomsk Polytechnic University, TOMSK, Russian Federation
- PO-T16-2**      **CONICAL DIFFRACTION DUE TO THERMALLY SELF-INDUCED PHASE MODULATION FOR THERMO-OPTICAL CHARACTERIZATION**  
V. Pilla<sup>1</sup>, M. Gesualdi<sup>2</sup>, E. Munin<sup>3</sup>  
<sup>1</sup>Universidade Camilo Castelo Branco- UNICASTELO, SÃO PAULO, Brazil  
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<sup>3</sup>UNICASTELO, SÃO JOSE DOS CAMPOS, Brazil
- PO-T16-3**      **INVESTIGATION OF REAL-TIME PHOTO-INDUCED CHEMICAL REACTION USING THERMAL LENS SPECTROSCOPY**  
N.A. Astrath<sup>1</sup>, F.B.G Astrath<sup>2</sup>, J. Shen<sup>2</sup>, K.H. Michaelian<sup>3</sup>, C. Fairbridge<sup>3</sup>, L.C. Malacarne<sup>4</sup>, P.R.B. Pedreira<sup>4</sup>, M.L. Baesso<sup>4</sup>  
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<b>TOPIC 17 - NEW APPLICATIONS BASED ON PHOTOACOUSTIC AND PHOTOTHERMAL PHENOMENA</b>
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- PO-T17-1**      **LASER OPTOACOUSTIC NONDESTRUCTIVE METHOD OF THICKNESS MEASUREMENT OF SUBSURFACE DAMAGED LAYER IN MACHINED SILICON WAFERS**  
N. Podymova<sup>1</sup>, A. Karabutov<sup>2</sup>  
<sup>1</sup>M.V. Lomonosov Moscow State University, MOSCOW, Russian Federation  
<sup>2</sup>M.V.Lomonosov Moscow State University, MOSCOW, Russian Federation
- PO-T17-2**      **THERMAL EFFUSIVITY MEASUREMENTS OF GRANULAR MATERIALS WITH PHOTOACOUSTIC TECHNIQUES AND THE RELATIONSHIP WITH GRANULAR SIZE**  
J.A. Balderas-López, Y.M. Gómez y Gómez, M.E. Bautista-Ramírez, UPIBI-IPN, MÉXICO, D. F., Mexico
- PO-T17-3**      **SELF-NORMALIZED PHOTOACOUSTIC TECHNIQUE FOR OPTICAL CHARACTERIZATION OF GREEN BIOPOLYMERS BASED ON GUMS OF GELANA**  
J.A. Balderas-López, I.S. Martínez-López, M. León-Martínez, J. Yañez-Fernández, UPIBI-IPN, MÉXICO, D. F., Mexico
- PO-T17-4**      **OPEN PHOTOACOUSTIC CELL APPLIED TO THE STUDY OF PHOTOSYNTHESIS IN MAIZE SEEDLINGS IRRADIATED WITH LASER**  
C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>2</sup>, J. Valcarcel M.<sup>3</sup>, A. Domínguez Pacheco<sup>1</sup>, R. Zepeda Bautista<sup>1</sup>  
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- PO-T17-5**      **PHOTOPYROELECTRIC MEASUREMENT OF THERMAL CONDUCTION IN HDPE-CeO2 COMPOSITES**  
J. Philip<sup>1</sup>, S. Uma<sup>1</sup>, P.S. Anjana<sup>2</sup>, M.T. Sebastian<sup>2</sup>  
<sup>1</sup>Cochin University of Science and Technology, COCHIN, India  
<sup>2</sup>NIIST, TRIVANDRUM 695 019, India

- PO-T17-6 GASEOUS CONTAMINANT DETECTOR IN COMPRESSED AIR SYSTEMS USING PHOTOACOUSTIC SPECTROSCOPY**  
N. Lopes<sup>1</sup>, R. Frese<sup>1</sup>, M. Andresen<sup>2</sup>, T. Fink<sup>3</sup>, H.G. Rubahn<sup>1</sup>  
<sup>1</sup>Mads Clausen Institute, Univ. of Sønderborg, SØNDERBORG, Denmark  
<sup>2</sup>PAJ Systemteknik, SØNDERBORG, Denmark  
<sup>3</sup>PAJ Systemteknik, SØNDERBORG, Denmark
- PO-T17-7 CHARACTERIZATION OF SEEDS WITH DIFFERENT COLOR BY PHOTOPYROELECTRIC MICROSCOPY**  
A. Dominguez Pacheco<sup>1</sup>, C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>2</sup>, R. Rosalba Zepeda Bautista<sup>3</sup>, F. Sánchez Sinéncio<sup>2</sup>  
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- PO-T17-8 CHARACTERIZATION OF SEEDS WITH DIFFERENT MOISTURE CONTENT BY PHOTOACOUSTIC MICROSCOPY**  
A. Dominguez Pacheco<sup>1</sup>, C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>2</sup>, E. Martínez Ortiz<sup>1</sup>, F. Sánchez Sinéncio<sup>2</sup>  
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- PO-T17-9 STUDY OF THE OPTICAL ABSORPTION COEFFICIENT OF MAIZE SEEDS FROM VALLEY OF MEXICO**  
C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>2</sup>, A. Domínguez Pacheco<sup>1</sup>, R. Zepeda Bautista<sup>1</sup>, F. Sánchez Sinéncio<sup>2</sup>  
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- PO-T17-10 STUDY OF OPTICAL ABSORPTION SPECTRUM OF LIQUID CHLOROPHYLLS BY PHOTOACOUSTIC SPECTROSCOPY**  
C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>2</sup>, A. Domínguez Pacheco<sup>1</sup>, A. Carballo Carballo<sup>3</sup>, R. Zepeda Bautista<sup>1</sup>  
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<sup>3</sup>COLPOS Edo. Mexico, MÉXICO TEXCOCO, Mexico
- PO-T17-11 ANNEALING TEMPERATURE EFFECT ON THERMOPHYSICAL PROPERTIES OF CuInS<sub>2</sub> USING PHOTOPYROELECTRIC TECHNIQUE**  
I. Abdellaziz<sup>1</sup>, I. Mellouki<sup>2</sup>, M. Ben Rabeh<sup>3</sup>, M. Kanzari<sup>3</sup>, N. Yacoubi<sup>2</sup>  
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- PO-T17-12 THERMAL PROPERTIES OF MAIZE KERNEL AND NIXTAMAL BY PHOTOTHERMAL TECHNIQUES**  
A. Dominguez Pacheco<sup>1</sup>, R. Rosalba Zepeda Bautista<sup>2</sup>, C. Hernández Aguilar<sup>1</sup>, A. Cruz Orea<sup>3</sup>, I. Peón Escalante<sup>1</sup>, E. San Martín Martínez<sup>4</sup>  
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- PO-T17-13 THERMO-OPTICAL PROPERTIES OF WATER SOLUTIONS OF BLUE AND RED METHYLENE BY THERMAL-LENS SPECTROSCOPY, THERMAL WAVE RESONATOR CAVITY AND UV-VIS SPECTROSCOPY**  
J.A. Balderas-López<sup>1</sup>, O. Gómez-Guzmán<sup>2</sup>, A. Galindo Maldonado<sup>3</sup>, J.M. Yañez-Limón<sup>4</sup>  
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- PO-T17-14 LASER CLEANING MONITORING BY PHOTOACOUSTIC**  
M. Villagrán-Muniz<sup>1</sup>, C. Aldama-Reyna<sup>2</sup>, E. Mejia-Urriarte<sup>1</sup>, Z. Ramirez-Maldonado<sup>1</sup>,  
M. Villagrán-Muniz<sup>1</sup>  
<sup>1</sup>UNAM, MÉXICO D.F., Mexico  
<sup>2</sup>UNT, TRUJILLO, Peru
- PO-T17-15 PHOTOACOUSTIC RESPONSE OF LiNbO<sub>3</sub>:Nd<sup>3+</sup>:MgO SINGLE-CRYSTALS EXCITED IN OPTICAL CENTRES OF Nd AND Nd-Mg**  
R. Quispe Siccha<sup>1</sup>, M. Villagran Muniz<sup>2</sup>, J. Hernández Alcántara<sup>3</sup>, E. Camarillo García<sup>3</sup>, P. Molina<sup>4</sup>, J. García Solés<sup>5</sup>, M. Navarrete Montesinos<sup>6</sup>, H. Del Castillo Gonzales<sup>3</sup>, I. Camarillo<sup>7</sup>, H. Murrieta<sup>3</sup>  
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- PO-T17-16 PHOTOTHERMAL CHARACTERIZATION OF ELASTOMERS**  
J. Alvarado-Gil, D. Macias, R. Medina-Esquivel, Cinvestav-Unidad Merida, MERIDA, Mexico
- PO-T17-17 PHOTOTHERMAL WAVE PHENOMENA BASED ON HYPERBOLIC HEAT TRANSPORT**  
J. Alvarado-Gil, J. Ordonez-Miranda, Cinvestav-Unidad Merida, MERIDA, Mexico
- PO-T17-18 THIN FILM ADHESION CHARACTERISATION BY SURFACE ACOUSTIC WAVE SPECTROSCOPY**  
C. Glorieux<sup>1</sup>, X. Luo<sup>2</sup>, R. Salenbien<sup>2</sup>, T. Van der Donck<sup>2</sup>, J.P. Celis<sup>2</sup>, M. Wevers<sup>2</sup>  
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<sup>2</sup>K.U. Leuven, HEVERLEE, Belgium
- PO-T17-19 FOURIER TRANSFORM INFRARED PHOTOACOUSTIC SPECTROSCOPY FOR DISCRIMINATION OF TRANSGENIC AND CONVENTIONAL SOYBEAN SEEDS**  
S.M. Lima<sup>1</sup>, L.H.C. Andrade<sup>1</sup>, A.R.L. Caires<sup>2</sup>, Y.R. Suárez<sup>1</sup>, M.R.O. Teixeira<sup>3</sup>  
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<sup>2</sup>Universidade Federal da Grande Dourados, DOURADOS, Brazil  
<sup>3</sup>EMBRAPA, DOURADOS, Brazil

<b>TOPIC 19 - OTHER</b>
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- PO-T19-1 THERMAL PROPERTIES OF CALCIUM PHOSPHATES BY HOT WIRE TECHNIQUE**  
M. Mendez<sup>1</sup>, A. Cruz-Orea<sup>2</sup>, A. Calderon<sup>3</sup>  
<sup>1</sup>National Polytechnic Institute, MEXICO CITY, Mexico  
<sup>2</sup>CINVESTAV, MEXICO CITY, Mexico  
<sup>3</sup>CICATAC-IPN, MEXICO CITY, Mexico
- PO-T19-2 SENSITIVITY OPTIMIZATION OF A CANTILEVER-ENHANCED PHOTOACOUSTIC DETECTOR**  
J. Saarela, J. Toivonen, A. Manninen, T. Sorvajärvi, R. Hernberg, Tampere University of Technology, TAMPERE, Finland
- PO-T19-3 CHARACTERIZATION OF RAW MATERIAL PRODUCT OF THE REGION OF CERAMIC JI-PARANA RONDONIA BRAZIL**  
J.G. Santos, Unirversidade Federal de Rondônia, JI PARANA, Brazil
- PO-T19-4 COMPARISON OF THERMAL WAVES EXCITED BY THE PHOTOTHERMAL AND THE PELTIER EFFECT**  
J. Leys, C. Glorieux, J. Thoen, Katholieke Universiteit Leuven, LEUVEN, Belgium

**PO-T19-5            PHOTOTHERMAL TRANSFORMATION OF THE BESSEL LIGHT BEAM IN  
GYROTROPIC SUPERLATTICES**

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**PO-T19-6            EXCITING OF A PHOTODEFLECTION SIGNAL BY THE BESSEL LIGHT BEAM IN  
MAGNETOACTIVE MEDIA WITH INNER STRESSES**

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