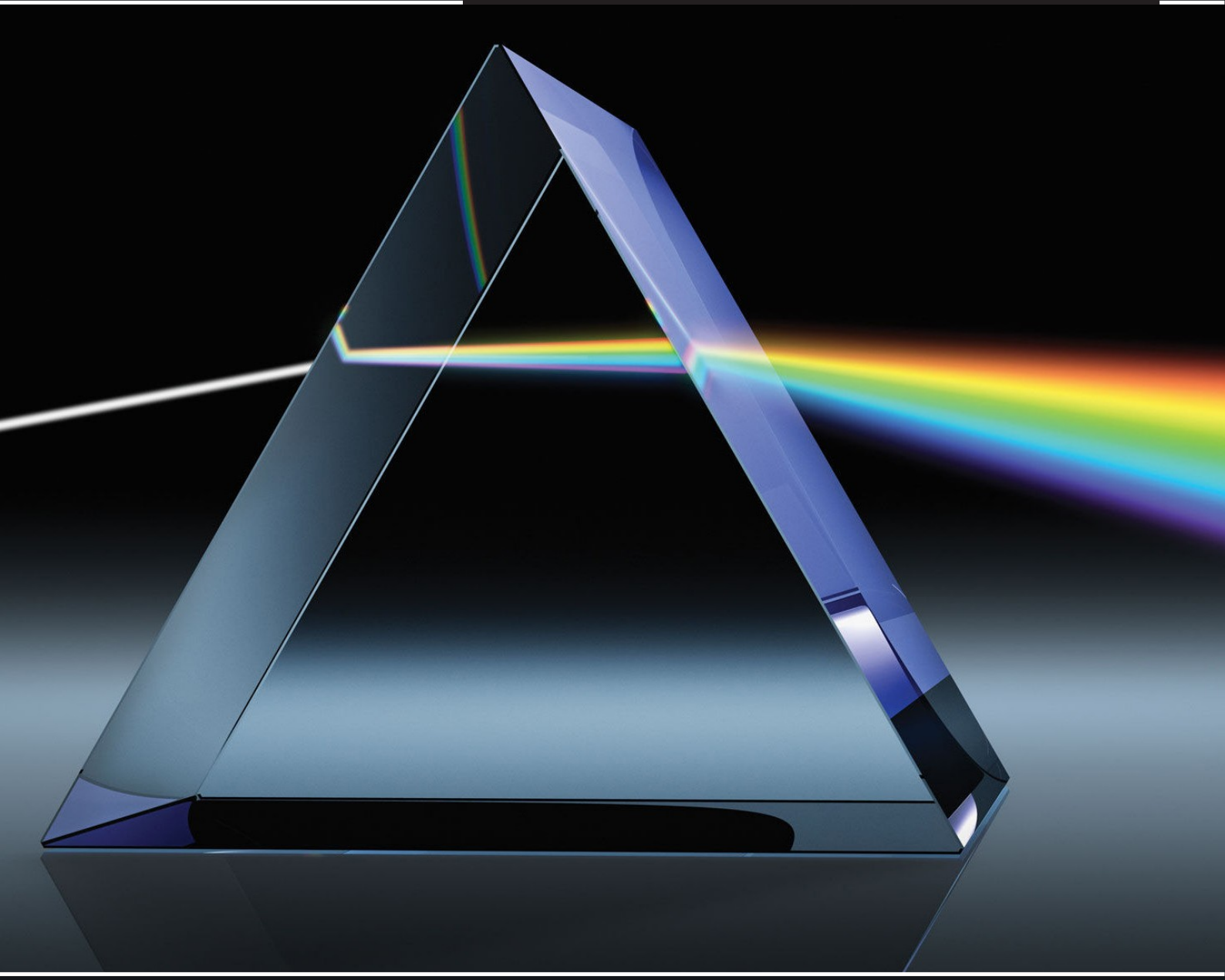
# Scientific Program

## 3rd International Conference and Exhibition on

# Lasers, Optics and Photonics

**September 01-03, 2015 Valencia, Spain**



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# Scientific Program

**Day1 September 01,2015**

**7:30-8:30** Registrations

**Valentia B**

**8:30-8:55** **Opening Ceremony**

## KeynoteForum

**08:55-09:00** **Introduction**

**09:00-09:25** **Manijeh Razeghi,** Northwestern University, USA

**09:25-09:50** **AnthonyKrier,** LancasterUniversity, UK

**09:50-10:15** **MichaelAFiddy,** UniversityofNorthCarolina(Charlotte), USA

**10:15-10:40** **JohnMichaelDallesasse,** UniversityofIllinois, USA

Coffee Break 10:40-11:00 @ Foyer

Track 1: Advanced Science and Technology for Laser Systems

**Session Chair: Anthony Krier,** Lancaster University, UK
**Session Co-Chair: Joachim Wagner,** Fraunhofer Institute for Applied Solid State Physics (IAF), Germany

Session Introduction

| | |
|---|---|
| **11:00-11:20** | **Title: Optical feedback interferometry in quantum cascade lasers** |
| | **Gaetano Scamarcio,** UniversitàdegliStudi di Bari "Aldo Moro", Italy |
| **11:20-11:40** | **Title: Influence of the InAs/GaSb super lattice period composition on the electro-optical performances of T2SL infrared photodiode** |
| | **Philippe Christol,** University of Montpellier, France |
| **11:40-12:00** | **Title:Recentadvancesinwidelytunablequantumcascadelasersandtheiruseinspectroscopic sensing** |
| | **Joachim Wagner,** Fraunhofer Institute for Applied Solid State Physics (IAF), Germany |
| **12:00-12:20** | **Title: Coherency for a better detection** |
| | **Besnard Pascal,** University of Rennes 1, France |
| **12:20-12:40** | **Title: Linear-cavity fiber lasers investigation and application** |
| | **Shien-KueiLiaw,** National Taiwan University of Science and Technology, Taiwan |
| **12:40-13:00** | **Title: 16 µm InP-related quantum cascade laser** |
| | **Anna Szerling,** Institute of Electron Technology, Poland |

GroupPhoto&LunchBreak13:00-13:45@AquaRestaurant

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|---|---|
| **13:45-14:05** | **Title: Photonic engineering and micro-cavity tuning of THz quantum cascade laser resonators** |
| | **Miriam S Vitiello,** NEST, CNR -IstitutoNanoscienze and ScuolaNormaleSuperiore, Italy |
| **14:05-14:25** | **Title: In-situ study on optical properties and continuous laser tuning in cholesteric liquid crystal laser array** |
| | **Mi-Yun Jeong,** Gyeongsang National University,Korea |
| **14:25-14:35** | **Title: Type-II quantum wells for InP-based surface and edge emitting lasers** |
| | **Stephan Sprengel,** TechnischeUniversitaetMuenchen, Germany |

| Track 5: Advancements in Photonics | |
|---|---|
| **Session Chair: Dan Botez,** University of Wisconsin, USA<br>**Session Co-Chair: Weidong Chen,** Université du Littoral Côte d'Opale, France | |
| | Session Introduction |
| **14:35-14:55** | **Title: $BaTiO_3$ Photonic crystal electro-optic devices for 50 GHz applications** |
| | **Bruce Wessels,** Northwestern University, USA |
| **14:55-15:15** | **Title:High-index-contrastphotonic-crystalquantumcascadelasers:Watt-rangecoherentmid-infrared powersources** |
| | **Dan Botez,** University of Wisconsin, USA |
| **15:15-15:35** | **Title: Advanced photonic technologies for atmospheric measurements** |
| | **Weidong Chen,** Université du Littoral Côte d'Opale, France |
| | Coffee Break 15:35-15:55 @ Foyer |
| **15:55-16:15** | **Title: Frequency doubling in AlGaAsmicrodisks at 1.55 µm** |
| | **Giuseppe Leo,** University Paris Diderot, France |
| **16:15-16:35** | **Title: Can OLED light-quality be good enough to justify lighting renaissance?** |
| | **Jwo-HueiJou,** National Tsing Hua University, Taiwan |
| **16:35-16:55** | **Keynote Talk** |
| | **Nasser Peyghambarian,** University of Arizona, USA |
| **16:55-17:15** | **Title: Photon management assisted by surface waves on an all-dielectric platform** |
| | **Angelo Angelini,** Polytechnic of Turin, Italy |
| Panel Discussion | |

| **Day2 September 02,2015** | |
|---|---|
| **Valentia B** | |
| Track 3: Optoelectronics | |
| **Session Chair: Michael A Fiddy,** University of North Carolina (Charlotte), USA<br>**Session Co-Chair: Nicholas Kioussis,** California State University Northridge, USA | |
| | Session Introduction |
| **09:00-09:20** | **Title: Low index optical materials** |
| | **Michael A Fiddy,** University of North Carolina (Charlotte), USA |
| **09:20-09:40** | **Title: Identification of point defect candidates in strained-layer type-II super lattices for infrared detectors: *Ab initio* electronic structure studies** |
| | **Nicholas Kioussis,** California State University Northridge, USA |
| **09:40-10:00** | **Title: InP-based antimony-free lasers and photodetectors in 2-3 µm band** |
| | **Zhang Yong-Gang,** Chinese Academy of Sciences, China |
| **10:00-10:20** | **Title: Telluride glass fibers for mid-infrared sensing: From medical diagnosis to the detection of exo-planet** |
| | **Bruno Bureau,** Université de Rennes 1, France |

| | |
|---|---|
| 10:20-10:40 | **Title: Optical design and analysis of inorganic and organic nano/microscale structures for light harvesting and sensing applications** |
| | **Jae Su Yu,** Kyung Hee University, Republic of Korea |
| | Coffee Break 10:40-11:00 @ Foyer |
| 11:00-11:20 | **Title: Unconventional thiophene materials for optoelectronics** |
| | **Ewa Schab-Balcerzak,** University of Silesia, Poland |
| 11:20-11:40 | **Title: ZnO-based plasmonics** |
| | **Sergey Sadofev,** Humboldt-Universitätzu Berlin, Germany |
| 11:40-12:00 | **Title: Optical fibre chemical sensors: Bio-medical application** |
| | **Sergiy Korposh,** The University of Nottingham, UK |
| Track 4: Optical Communications and Networking<br>Track 7: Quantum Science and Technology<br>Track 9: Applications and Trends in Optics and Photonics | |
| **Session Chair: Dan Sporea,** National Institute for Laser, Plasma and Radiation Physics, Romania | |
| | Session Introduction |
| 12:00-12:20 | **Title: Ionizing radiation dosimetry with optical fibers** |
| | **Dan Sporea,** National Institute for Laser, Plasma and Radiation Physics, Romania |
| 12:20-12:40 | **Title: Photonics technologies for 100 Gbps wireless communications** |
| | **Juan Sebastián Rodriguez Páez,** Technical University of Denmark, Denmark |
| 12:40-13:00 | **Title: Polybinary modulation for bandwidth limited optical links** |
| | **J J Vegas Olmos,** Technical University of Denmark, Denmark |
| | Lunch Break 13:00-13:45 @ AquaRestaurant |
| 13:45-14:05 | **Title: Málaga statistical distribution: The new universal analytical propagation model for atmospheric optical communications** |
| | **Antonio Jurado-Navas,** University of Malaga, Spain |
| 14:05-14:25 | **Title: A transmission of Ethernet signals via VLC link based on using LEDS in a double role** |
| | **Marcin Kowalczyk,** Warsaw University of Technology, Poland |
| 14:25-14:45 | **Title: Nonlinear pulse dynamics in passive and active optical fibers** |
| | **Mousumi Basu,** Indian Institute of Engineering Science & Technology, India |
| 14:45-15:05 | **Title: QEPAS- New developments in quartz enhanced photoacoustic gas sensing** |
| | **Vincenzo Spagnolo,** Università e Politecnico di Bari, Italy |
| | Coffee Break 15:05-15:25 @ Foyer |
| 15:25-15:45 | **Title: Single Mode Interband Cascade Lasers** |
| | **Sven Höfling,** UniversitätWürzburg, Germany |
| 15:45-16:05 | **Title: Observation the exciton and Urbach band tail in low-temperature-grown GaAs using coherent ultrafast spectroscopy** |
| | **Kimberley C Hall,** Dalhousie University, Canada |

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|---|---|
| 16:05-16:25 | **Title: Optical applications of single crystals and transparent ceramics fabricated by high pressure process** |
| | **MythiliPrakasam,** Institut de Chimie de la MatièreCondensée de Bordeaux (ICMCB), France |
| 16:25-16:35 | **Title: Generation of triangular optical pulses through a normally dispersive highly nonlinear fiber** |
| | **Debasruti Chowdhury,** Indian Institute of Engineering Science & Technology, India |
| 16:35-16:45 | **Title: Shipbuilding application of laser equipment and technologies** |
| | **Nikolay A Nosyrev,** JSC Shipbuilding and Shiprepair Technology Center, Russia |
| Poster Session **17:05-17:35** @ Foyer | |
| OP-001 | **Title: Testing of ZnSe, $CaF_2$, $BaF_2$, and sapphire windows under alpha particles irradiation** |
| | **Dan Sporea,** National Institute for Laser, Plasma and Radiation Physics, Romania |
| OP-002 | **Title: Semiconductor-integrated-Fiber-Bragg-Gratings for multi-parameter network sensing** |
| | **Shien-KueiLiaw,** National Taiwan University of Science and Technology, Taiwan |
| OP-003 | **Title: Integration of metal nano-particles in organic waveguides** |
| | **MattiaSignoretto,** University of Valencia, Spain |
| OP-004 | **Title: 10 GHz orthogonally polarized dual frequency VECSEL at 1550 nm** |
| | **Lea Chaccour,** IFSTTAR, France |
| OP-005 | **Title: Photonic-assisted systems for the generation, modulation and measurement of microwave signals** |
| | **Danqi Feng,** Huazhong University of Science and Technology, China |
| OP-006 | **Title:Simultaneousexperimentalobservationofthequantizationandinterferenceofanano-confined plasmonicnear-field** |
| | **Aziz N Mina,** Beni-Suef University, Egypt |
| OP-007 | **Title: Optical spectroscopy in photodynamic therapy for superficial skin malignancies and actinic keratosis** |
| | **I.A.Sianoudis,** Technological Educational Institute (TEI) of Athens, Greece |
| Panel Discussion | |

| **Day3 September 03,2015** | |
|---|---|
| **Valentia B** | |
| Track 2: Optics and Lasers in Medicine<br>Track 6: Nanophotonics and Biophotonics<br>Track 8: Featured Technologies in Lasers, Optics and Photonics | |
| **Session Chair: Ching-Fuh Lin,** National Taiwan University, Taiwan<br>**Session Co-Chair: Edik U Rafailov,** Aston University, UK | |
| Session Introduction | |
| 09:00-09:20 | **Title: Organic bio-electronic sensors for ultra-sensitive chiral differential detection** |
| | **Luisa Torsi,** UniversitàdegliStudi di Bari "Aldo Moro", Italy |
| 09:20-09:40 | **Title: Environmentally affordable fluorescent nanotechnology for efficient lighting** |
| | **Ching-Fuh Lin,** National Taiwan University, Taiwan |
| 09:40-10:00 | **Title: Sub-wavelength optical propagation in passive and active 1D-nanostructures** |
| | **NolwennHuby,** University of Rennes 1, France |

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|---|---|
| 10:00-10:20 | **Title: Growth of semiconductor nanoparticles in polymer matrices by nanosecond laser** |
| | **Damian C Onwudiwe,** North-West University (Mafikeng Campus), South Africa |
| 10:20-10:40 | **Title: Novel compact laser sources for biomedical photonics: Diagnostics and treatment** |
| | **Edik U Rafailov,** Aston University, UK |
| Coffee Break 10:40-11:00 @ Foyer | |
| 11:00-11:20 | **Title: Advanced fiber grating devices fabricated for all-optical signal processing** |
| | **Xuewen Shu,** Huazhong University of Science and Technology, China |
| 11:20-11:40 | **Title: Optics on nano-structured surfaces** |
| | **Valerio Pruneri,** The Institute of Photonic Sciences, Spain |
| 11:40-12:00 | **Title: Transport at spin-orbit and exchange-split interfaces: Giant universal asymmetry** |
| | **Drouhin Henri-Jean,** University Paris Saclay, France |
| 12:00-12:20 | **Title:Ultrahighresolutionspectroscopyandultra-fastTHzmeasurementsusingcoherentsynchrotron radiation** |
| | **Pascale Roy,** Synchrotron SOLEIL, France |
| 12:20-12:40 | **Title: Dye-sensitized solar cells using ethynyl-linked porphyrin trimers for NIR photoelectric conversion** |
| | **TomofumiHamamura,** University of Bordeaux, France |
| 12:40-12:50 | **Title: Polarization-tuned dynamic color filters exploiting a dielectric-loaded one dimensional aluminum grating** |
| | **Vivek Raj Shrestha,** Kwangwoon University, South Korea |
| 12:50-13:00 | **Title: Fabrication of homogenous microstructures by femtosecond laser micromachining** |
| | **K M TanvirAhmmed,** McGill University, Canada |
| Lunch Break 13:00-13:45 @ AquaRestaurant | |
| Panel Discussion | |
| Best Poster Award | |
| Closing Ceremony | |

Bookmark your dates

## 4th International Conference and Exhibition on

# Lasers, Optics and Photonics

**December01-03,2016 Chicago,USA**

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