

09:00 – 10:00

Reception and Registration

10:00 – 10:30

Opening Ceremony

Welcome address by:

representatives of : *University of Ibn Tofail, University Chouaib Doukkali, Ministry of Morocco*  
and  
*Marian Marciniak, Ridha Rejeb, Roger J. Green, Otto Strobel, Mark S. Leeson, Mina Bakasse, Mohammed Addou, Ali Missaoui, Bouchta Sahraoui*

SESSION Th1 (10:30 – 12:10)

Opening Session

Chairs: *Roger J. Green and Mohammed Addou*

- Th1.1** FP 7 opportunities for international cooperation Europe-Mediterranean partner countries: Dissemination of ToK NANOTEC-EST project – final research results *(Invited)*  
**A. Meghea**
- Th1.2** About nanometer sized analogues of basic electronic and optical components *(Invited)*  
**A. Quandt, C. Özdoğan, M. Ferrari, G. Speranza**
- Th1.3** Novel chromophores for biphotonic related applications *(Invited)*  
**Ch. Andraud**
- Th1.4** An integrated availability analysis of RoF networks *(Invited)*  
**G. Castañón, A. Aragón-Zavala, R. Ramirez-Velarde, G. Campuzano, O. Tonguz**

12:10 – 14:00

Lunch break

SESSION Th2A (14:00 – 16:10)

SESSION Th2B (14:00 – 16:10)

OCST I

Chair: *Elzbieta Beres-Pawlik*

- Th2A.1** Design principles of injection-locked semiconductor laser structures *(Invited)*  
**G. Campuzano**
- Th2A.2** Photonic-corrall-mode quantum ring lasers investigated by laser scanning microscopy and near field microscopy *(Invited)*  
**G. A. Stanciu, S.G. Stanciu, R. Hristu, D. K. Kim O'Dae Kwon**
- Th2A.3** Monolithically integrated DFB-EAT for transmission faster than 50 Gb/s  
**M. Chaciński, U. Westergren, B. Stoltz, L. Thylén**
- Th2A.4** Comparison of external intensity modulators for multicarrier optical wireless communication systems  
**H. Joshi, R. J. Green, M. S. Leeson**
- Th2A.5** Active and passive modulation methods for management of passive mode-locked fiber lasers  
**A. Komarov, K. Komarov, A. Haboucha, F. Sanchez**
- Th2A.6** A novel design of MMI 1530/1565 nm wavelength division demultiplexer based on effective method  
**S. Triki, M. Najjar, H. Rezig**

AMPA I

Chair: *Chantal Andraud*

- Th2B.1** Energy conversion by thermoelectric properties of alloys *(Invited)*  
**Yu. Stadnyk, Yu. Gorelenko, A. Horyn, L. Romaka, E.K. Hlil, D. Fruchart**
- Th2B.2** Functional materials based on TTF amino-acids/peptides *(Invited)*  
**A. El-Ghayoury, C. Mézière, L. Zorina, S. Simonov, P. Batail**
- Th2B.3** Study of nonlinear-optical properties and roughness surface of ZnO:Zr thin films  
**K. Bahedi, M. Addou, M. El Jouad, Z. Sofiani, S. Bayoud, B. Sahraoui, Z. Essaidi**
- Th2B.4** DUV interferometry for micro and nanopatterning  
**H. Ridaoui, A. Dirani, O. Soppera**
- Th2B.5** Creep rupture in fiber bundle model  
**A. Lahyani, Y. Boughaleb, M. Qjani, R. Nassif**
- Th2B.6** Vibrational and thermal properties of poly (vinyl alcohol) / multiwall carbon nanotubes nanocomposite  
**N. Diouri, M. Baïtoul**

16:10 – 16:40

Coffee break

16:10 – 16:40

Coffee break

SESSION Th3A (16:40 – 18:05)

SESSION Th3B (16:40 – 18:10)

FON I

Chair: *Yousef Seifi Kavian*

- Th3A.1** Characteristics of radar images in radio vision systems of the automobile *(Invited)*  
**A. Ananenkov, A. Konovaltsev, V. Nujdin, V. Rastorguev, P. Sokolov**
- Th3A.2** All-optical packet-switched routing scheme using OCDMA label and all-optical flip-flop  
**H. Brahmi, M. Menif**
- Th3A.3** Comparison of unipolar codes for DS-OCDMA system  
**A. Farhat, M. Menif, C. Lepers, H. Rezig, P. Gallion**
- Th3A.4** Comparison of synthesis techniques for SPE-OCDMA encoders/decoders based on FBGs  
**M. Mathlouthi, M. Menif, C. Lepers, H. Rezig**

AMPA II

Chair: *Maurizio Ferrari*

- Th3B.1** Spatial solitons in chiral nematic liquid crystals *(Invited)*  
**U.A. Laudyn, M. Kwasny, M.A. Karpierz**
- Th3B.2** Nonlinear optical properties of some Au nanostructures *(Invited)*  
**S. Couris**
- Th3B.3** Nonclassical phenomena in cavity polariton systems  
**G. Manzacca, G. Cincotti**
- Th3B.4** The magneto-optic rotation in magnetised plasma study of magneto-optic isolator  
**S.N. Ghoutia, B. Tayeb**

Friday, December 12

SESSION Fr1A (9:00 – 10:45)

SESSION Fr1B (9:00 – 10:55)

OCST II

Chair: *George A. Stanciu*

- Fr1A.1** Characterisation of the semiconductor optical amplifier for amplification and photonic switching employing segmentation model *(Invited)*  
**M.H. Aly, M.F. Chiang, A.A. El Aziz, Z. Ghassemlooy**
- Fr1A.2** Polymer-optical-fiber data bus technologies for MOST applications in vehicles  
**D. Seibl, M. Böhm, O. Strobel**
- Fr1A.3** FlexRay with polymer-clad-silica fiber as transmitting medium in aviation electronics  
**J. Lubkoll, U. Strauß, N. Pollakis, O. Strobel**
- Fr1A.4** Influence of wavelength and launching condition on frequency response of optical silica fibers  
**H. Mrabet, I. Dayoub, R. Attia**
- Fr1A.5** Design of temperature-strain tunable UDWDM, DWDM, WDM FBG filter for passive optical network access  
**M. Ferchichi, M. Najjar, H. Rezig**

AMPA III

Chair: *Khalil Benkhrouja*

- Fr1B.1** Erbium-activated silica-hafnia: a reliable photonic system *(Invited)*  
**G. Alombert-Goget, C. Armellini, S.N.B. Bhaktha, B. Boulard, A. Chiappini, A. Chiasera, C. Duverger-Arfulso, P. Féron, M. Ferrari, R.R. Gonçalves, P.T. Huy, Y. Jestin, T.N. Khiem, L. Minati, A. Monteil, E. Moser, G. Nunzi Conti, R. Osellame, S. Pelli, A. Quandt, R. Ramponi, D.N. Rao, G.C. Righini, G. Speranza, K.C. Vishnubhatla**
- Fr1B.2** New optical materials based on natural extracts immobilized in different silica polymeric matrices *(Invited)*  
**I. Lacatusu, N. Badea, A. Murariu, B. Sahraoui, A. Meghea**
- Fr1B.3** Transparent ITO substrate of seeded nanoparticles and formation of photo-induced gratings *(Invited)*  
**R. Miedzinski, J. Ebothe, I. Kityk, I. Fuks-Janczarek**
- Fr1B.4** Entanglement dynamics for two interacting superconducting qubits coupled to independent reservoirs  
**R. Migliore, M. Scala, M. Guccione, A. Messina**
- Fr1B.5** Non-Markovian master equation for the XX central spin model  
**E. Ferraro, H.-P. Breuer, A. Napoli, M. Guccione, A. Messina**

10:45 – 11:10

Coffee break

10:55 – 11:30

Coffee break

SESSION Fr2A (11:10 – 12:35)

SESSION Fr2B (11:30 – 12:40)

FON II

Chair: *Mark S. Leeson*

- Fr2A.1** Step-size distribution strategy in SSFM simulation of DWDM links *(Invited)*  
**M. Jaworski**
- Fr2A.2** Simulation of mm-wave over fiber employing optical single sideband modulation combined with subcarrier multiplexing  
**R. Avó, P. Laurêncio, M.C.R. Medeiros**

AMPA IV

Chair: *Mohammed Regragui*

- Fr2B.1** Photochemical properties of side-chain coumarin polymers *(Invited)*  
**O. Krupka, F. Le Derf, D. Gindre, M. Salle**
- Fr2B.2** Growth, luminescence and photoacoustic characterization of Zn<sub>1-x</sub>Be<sub>x</sub>Mn<sub>y</sub>Se crystals for optoelectronic applications *(Invited)*  
**F. Firszt, K. Strzałkowski, H. Męczyńska, S. Łęgowski, A. Marasek, J. Zakrzewski**

<b>Fr2A.3</b>	Raman amplification in the context of next-generation passive optical networks <b>J. Andrade, B. Neto, A.M. Rocha, C. Reis, A. Teixeira, P. André</b>	<b>Fr2B.3</b>	Photonic crystal nanomaterials with arsenic sulphide chalcogenide and silicon for optical telecommunications <b>I. Aboudihab, E. Ech-chamikh, A. Outzourhit</b>
<b>Fr2A.4</b>	Raman amplification in high 10 Gbit/s and 40 Gbit/s packet optical networks <b>C. Reis, A.M. Rocha, B. Neto, N. Wada, P. André</b>		
12:35 – 14:30	Lunch break	12:40 – 14:30	Lunch break
SESSION Fr3A (14:30 – 16:20)		SESSION Fr3B (14:30 – 15:30)	
<b>FON III</b> <i>Chair: Zabih Ghassemlooy</i>		<b>AMPA V (ToK)</b> <i>Chairs: Aurelia Meghea and Mina Bakasse</i>	
<b>Fr3A.1</b>	Integrated networks of wireless and fixed telecommunication ( <b>Invited</b> ) <b>Y. Gramakov, V. Shevtsov</b>	<b>Fr3B.1</b>	Alkynyl-ruthenium complexes for nonlinear optical applications <b>B. Sahraoui, J. Luc, A. Meghea, R. Czaplicki, J-L. Fillaut, A. Migalska-Zalas</b>
<b>Fr3A.2</b>	Full modal analysis of the Brillouin gain spectrum of an optical fiber ( <b>Invited</b> ) <b>L. Tartara, Ch. Codemard, J.-N. Maran, R. Cherif, M. Zghal</b>	<b>Fr3B.2</b>	Phototransformation of oxamyl in the presence of natural phosphate in aqueous solution <b>L. El Gaini, A. Meghea, Z. Hatim, M. Bakasse</b>
<b>Fr3A.3</b>	Performance study of high bit rate indoor wireless optical networks <b>M. Najjar, H. Rezig</b>	<b>Fr3B.3</b>	Encapsulating the green tea extract by templated sol-gel procedure based on nonionic tensioactive agent of alkenyl succinic anhydrides class <b>I. Lacatusu, M.N. Badea, A. Murariu, C. Vaca Garcia, M. Giurginca, A. Meghea</b>
<b>Fr3A.4</b>	Information sequences of bound solitons <b>A. Komarov, K. Komarov, A. Haboucha, F. Sanchez</b>	<b>Fr3B.4</b>	Third order nonlinear optical properties of phenylazo-azulene derivatives investigated by DFWM technique <b>Z. Essaïdi, E.-M. Ungureanu, A. Meghea, A.C. Razus, L. Birzan, O. Krupka, B. Sahraoui</b>
<b>Fr3A.5</b>	Estimation of multimode optical fiber network size <b>E. Bereś-Pawlik, G. Budzyń, T. Duchiewicz, G. Lis</b>	<b>Fr3B.5</b>	Theoretical simulation of the third order nonlinear optical properties of some selected organometallics complexes <b>A. Migalska-Zalas, A. Meghea, B. Sahraoui, J-L. Fillaut</b>
		<b>Fr3B.6</b>	Electrochemistry of functionalized azo-azulenes <b>E.-M. Ungureanu, D.I. Caval, G.O. Buica, E. Diacu, D. Giol, C.A. Amarandei, A.C. Razus, L. Birzan</b>
16:20 – 16:50	Coffee break	15:30 – 16:50	Coffee break
SESSION Fr4B (16:50 – 17:55)			
<b>RTON</b> <i>Chair: Marian Marciniak</i>			
<b>Fr4A.1</b>	QoS-based RWA in DWDM optical networks using genetic algorithms ( <b>Invited</b> ) <b>Y.S. Kavian, H.F. Rashvand, M.S. Leeson, W. Ren, E.L. Hines, M. Naderi</b>		
<b>Fr4A.2</b>	Performance evaluation of virtual concatenation (VCAT) enabled optical circuits provisioning in multi-domain layer 1 VPN <b>R. Triantoro, D. Benhaddou, S. Dandu, N. Ghani</b>		
<b>Fr4A.3</b>	A new dynamic path computation algorithm for multi-domain optical networks <b>D. Benhaddou, S. Dandu, N. Ghani, J. Subhlok</b>		
SESSION FrP (14:30 – 18:00)			
<b>Poster Session</b>			
<b>FrP.1</b>	Batteries with a mixed pyrophosphates of lead and alkalis in vitreous state for use on storage energies <b>N. Antari, K. Benkhouja, M. Taibi, Ouadih, A. Arbaoui, Y. Boughaleb</b>		
<b>FrP.2</b>	Self assembled gold nanoparticles wires by discontinuous vertical colloidal deposition <b>A. Arbaoui, M. Reeves, Z. Hesham, J. Dumas</b>		
<b>FrP.3</b>	Parametric characterization of Mathieu-Gauss beams <b>A. Chafiq, Z. Hricha, A. Belafhal</b>		
<b>FrP.4</b>	Propagation of generalized Mathieu-Gauss beams through paraxial misaligned optical system <b>A. Chafiq, Z. Hricha, A. Belafhal</b>		
<b>FrP.5</b>	Structural features of ternary Al-Fe-Ti alloys <b>L. Bendjeddou, M.Y. Debili, A. Fekrache, S. Boukhessaim</b>		
<b>FrP.6</b>	ZnSe nanocrystals embedded in KDP crystals <b>A. Bensouici, A. Chaieb, O. Halimi, M. Sebais</b>		
<b>FrP.7</b>	Structural phase transition and nonlinear optical properties in p-nitroaniline <b>K. Bouchouit, Z. Essaidi, E. Bendeif, N. Benali-cherif, B. Sahraoui</b>		
<b>FrP.8</b>	Optical properties of the ZnSe nanocrystals embedded in PMMA matrix <b>A. Chaieb, O. Halimi, A. Bensouici, B. Boudine, M. Sebais, B. Sahraoui</b>		
<b>FrP.9</b>	Effect of the substitution of calcium by potassium on the dielectric properties in La <sub>0.7</sub> Ca <sub>0.3-x</sub> K <sub>x</sub> MnO <sub>3</sub> compounds <b>M. Bejar, L. Costa, E.K. Hlil, E. Dhahri</b>		
<b>FrP.10</b>	Optical properties of indium sulphide thin films deposited by thermal evaporation <b>R. El Aamri, A. Oueriagli, A. Abouelaoualim, E. Ech-chamikh, A. Outzourhit</b>		
<b>FrP.11</b>	Electrochemical growth and physico-chemical characterization in organic medium of Nb <sub>2</sub> O <sub>5</sub> thin films <b>V. Figà, B. Kulyk, B. Sahraoui</b>		
<b>FrP.12</b>	Physical limitations effects on optical transmission systems <b>Y. Hamaizi, H. Triki, A. El-Akrmi</b>		
<b>FrP.13</b>	Spectroscopic analysis of hyper-spectral images of <i>plasmodium falciparum</i> -infected red blood cells <b>A.M. Kouacou, T.J. Zoueu, S. Safi</b>		
<b>FrP.14</b>	Optical study of porous p-type GaAs by spectroscopic ellipsometry <b>A. Missaoui, L. Beji, A. Bouazizi</b>		
<b>FrP.15</b>	Effect of RF-power on the optical properties of indium nitride thin films deposited RF-sputtering <b>A. Outzourhit, A. Abouelaoualim, R. El Aamri, A. Essafti, A. Oueriagli</b>		
<b>FrP.16</b>	Optical properties of zinc nitride thin films deposited by RF-sputtering <b>A. Outzourhit, A. Abouelaoualim, R. El Amri, A. Essafti, I. Aboudihab, A. Oueriagli</b>		
<b>FrP.17</b>	Photochemistry and photophysics in phenyloxazolones <b>V. Smokal, O. Krupka, A. Kolendo</b>		
<b>FrP.18</b>	Compensating the effects of light attenuation in confocal microscopy by histogram modelling techniques <b>S.G. Stanciu, J. Friedmann</b>		
<b>FrP.19</b>	Neodymium doped fiber laser <b>J. Szela, M. Napierała, E. Bereś-Pawlik, K. Jędrzejewski</b>		
<b>FrP.20</b>	DFT description on electronic structure of Fe,Co and Ni doped rutile <b>B. Anak, L. Bencharif, M. Bencharif</b>		
<b>FrP.21</b>	Development of some bio-composite materials hydroxyapatite/chitosan and TiO <sub>2</sub> /chitosan <b>S. Essakali, A. Kheribech, M. Bakasse, Z. Hatim</b>		
19:30	Conference Gala Dinner in Restaurant “Chez Ali” with Fantasia show		

SESSION Sa1 (9:00 – 10:40)

**Plenary Session I**  
*Chair: N. Calabretta*

- Sa1.1** Pre-planned optical burst switching routing strategies (*Invited*)  
**A.L. Barradas, M.C.R. Medeiros**
- Sa1.2** Digitization of chaotic signal for reliable communication in non-ideal channels (*Invited*)  
*R. Kharel, Z. Ghassemlooy, K. Busawon, S. Rajbhandari*
- Sa1.3** Security in all-optical networks: failure and attack avoidance using self-organization (*Invited*)  
**G. Castañón, I. Razo-Zapata, C. Mex, O. Tonguz**
- Sa1.4** Fault Management extensions in support of generalized MPLS (*Invited*)  
**R. Rejeb, M.S. Leeson, R.J. Green**

10:40 – 11:10 Coffee break

SESSION Sa2 (11:10 – 12:25)

**Plenary Session II**  
*Chair: Ridha Rejeb*

- Sa2.1** Sub-wavelength information photonics: materials, phenomena, and functional devices (*Invited*)  
**M. Marciniak**
- Sa2.2** Spectrum slicing for low cost wavelength division multiplexing (*Invited*)  
**M.S. Leeson, S. Sun**
- Sa2.3** All-optical packet switching techniques with label rewriting for optical packet at bit-rate beyond 160 Gb/s (*Invited*)  
**N. Calabretta, H.-D. Jung, J.H. Lorente, E. Tangdiongga, T. Koonen, H. Dorren**

SESSION Sa3 (12:25 – 13:00)

**Debate and Closing Ceremony**  
*Chair: Marian Marciniak*

*Ridha Rejeb, Mohammed Addou, Mina Bakasse, Roger J. Green, Otto Strobel, Mark S. Leeson, Ali Missaoui and Bouchta Sahraoui*

13:00 – 14:00 Lunch  
*Tour outside the Marrakech*