

Monday  
05.09.2016

14.00-19.00 Registration

Tuesday  
06.09.2016

8.00-9.00 Breakfast and Registration

9.00-9.30 Conference Opening

**Invited Talks 1 – Congress Centrum (9:30-10:30)**

**Chairman: Dušan Pudiš**

**9.30-10.00** *SILICON PHOTONICS AND ITS APPLICATIONS IN LIFE SCIENCE*  
**R. Baets**

**10.00-10:30** *ON-CHIP KERR FREQUENCY COMBS FOR SCALABLE QUANTUM STATE GENERATION*  
M. Kues, Ch. Reimer, P. Roztocky, B. Wetzl, F. Grazioso, B. E. Little, S. T. Chu, T Johnston, Y. B, L. Caspani, D. J. Moss, **R. Morandotti**

10.30-11.00 Coffee break

**Invited Talks 2 – Congress Centrum (11:00– 12:30)**

**Chairman: Waclaw Urbanczyk**

**11.00-11.30** *COHERENCE AND DIMENSIONALITY OF INTENSE TWIN BEAMS*  
**J. Peřina Jr.**, O. Haderka, A. Allevi, M. Bondani

**11:30-12:00** *TISSUE VIABILITY MONITORING - A MULTI-SENSOR WEARABLE PLATFORM APPROACH*  
N. Mathur, A. Davidson, A. Buis , **I. Glesk**

**12:00-12:30** *ULTRAFAST LASER SPECTROSCOPY OF DIAMOND*  
**P. Malý**

12:30-14:00 Lunch

**Hot Topics – Congress Centrum (14:00– 15:30)**

**Chairman: Ivan Glesk**

**14:00-14:15** *SCAFFOLDS DESIGNED BY 3D TWO PHOTON PHOTOPOLYMERISATION FOR LIVE CELL STUDIES*  
T. Teplický, B. Čunderlíková, A. M, D. Chorvát Jr., **A. Marček-Chorvátová**

**14:15-14:30** *GENETICALLY ENCODED FLUORESCENT PROTEINS AS TOOLS FOR BREAKING THE OPTICAL RESOLUTION BARRIER AND REVEALING CELL METABOLIC ACTIVITY*  
**M. Cagalinec**, A. Zahradnikova Jr., T. Spacek

**14:30-14:45** *DIRECTED EVOLUTION OF ENZYMES USING MICROFLUIDIC CHIPS*

**Z. Pilát**, J. Ježek, P. Zemánek, T. Buryška, J. Damborský, Z. Prokop, M. Fischlechner, F. Hollfelder, A. Zinchenko, K. Souček, R. Fedr

**14:45-15:00** *ELECTRO-OPTICAL CHARACTERIZATION OF BIOLOGICAL TISSUE AGEING*

**E. Prokopyeva**, M. Spohner, P. Tománek

**15:00-15:15** *RAMAN SPECTROSCOPY TO MONITOR THE EFFECTS OF TEMPERATURE REGIME AND MEDIUM COMPOSITION ON MICROORGANISM GROWTH*

**O. Samek**, J. Ježek, S. Obruča, S. Bernatová, P. Sedláček, A. Haroniková, I. Márová, M. Šerý, K. Hrubanová, V. Krzyžanek, M. Šiler, P. Zemánek

**15:15-15:30** *SEMI-AUTOMATED SORTING USING HOLOGRAPHIC OPTICAL TWEEZERS REMOTELY CONTROLLED BY EYE TRACKING CAMERA*

**Z. Tomori**, P. Keša, M. Nikorovič, J. Kaňka, P. Zemánek

**15:30-16:00** Coffee break

### **Lasers and Optical Trapping – Small Conference Room (14:00– 15:30)**

**Chairman: Pavel Honzátko**

**14:00-14:15** *ANALYSIS OF FREQUENCY NOISE PROPERTIES OF 729 NM EXTENDED CAVITY DIODE LASER WITH UNBALANCED MACH-ZEHNDER INTERFEROMETER*

**T. Pham Minh**, M. Čížek, V. Hucl, J. Lazar, J. Hrabina, Š. Řeřucha, A. Lešundák, P. Obšil, L. Slodička, O. Číp

**14:15-14:30** *OPTICALLY MANIPULATED EMULSION DROPLET LASERS*

**P. Zemánek**, A. Jonáš, A. Kiraz, M. Aas, Z. Pilát, J. Ježek, O. Brzobohatý, S. Bernatová, P. Jákl, M. Šiler

**14:30-14:45** *THE DYNAMICS OF TWO SPIN-1 PARTICLES CONFINED IN AN OPTICAL LATTICE AND ITS MODIFICATION BY AN ANCILLA PARTICLE*

**A. Barasiński**, W. Leoński

**14:45-15:00** *OPTICAL MANIPULATION OF CHIRAL PARTICLES USING A DUAL-BEAM TRAP*

**O. Brzobohatý**, R. J. Hernández, S. Simpson, A. Mazzulla, G. Cipparrone, P. Zemánek

**15:00-15:15** *LASER COOLING OF TRAPPED IONS FOR METROLOGY OF TIME AND FREQUENCY*

**O. Číp**, T. Pham Minh, A. Lešundák, V. Hucl, M. Čížek, J. Hrabina, Š. Řeřucha, J. Lazar, P. Obšil, R. Filip, L. Slodička

**15:15-15:30** *OPTICAL TRAPPING OF A NANOPARTICLE IN AIR*

**V. Svak**, P. Jákl, J. Ježek, J. Kaňka, M. Šiler, O. Brzobohatý, P. Zemánek

### **Lasers - Congress Centrum (16:00– 17:45)**

**Chairman: Václav Kubeček**

**16:00-16:15** *HIGH-POWER THULIUM-DOPED FIBER LASER IN AN ALL-FIBER CONFIGURATION*

**Y. Baravets**, F. Todorov, P. Honzátko

**16:15-16:30** ANALYSIS OF PUMPING SCHEMES FOR HIGH BRIGHTNESS DIODE-SIDE PUMPED LASERS

J. Jabczyński, **M. Kašków**, K. Koczyński, W. Zendzian, Z. Puzewicz

**16:30-16:45** LASER LINEWIDTH NARROWING BY OPTICAL FREQUENCY COMB

**A. Lešundák**, M. Čížek, V. Hucl, J. Lazar, J. Hrabina, Š. Řeřucha, T. Pham Minh, P. Obšil, L. Slodička, O. Číp

**16:45-17:00** SPATIAL AND SPECTRAL COHERENCE IN PROPAGATING HIGH-INTENSITY TWIN BEAMS

**R. Machulka**, O. Haderka, J. Peřina Jr., A. Allevi, M. Bondani

**17:00-17:15** TOWARDS LASER-BASED OPEN-PATH HYDROGEN SULFIDE DETECTION

**M. Nikodem**, D. Stachowiak, P. Jaworski

**17:15-17:30** PUMP ABSORPTION ENHANCEMENT IN DOUBLE-CLAD FIBER LASERS BY COILING AND TWISTING

P. Kořka, **P. Peterka**, P. Honzátko, O. Podrazký, J. Aubrecht, F. Todorov, Y. Baravets, I. Kařík

**17:30-17:45** KERR-LIKE BEHAVIOR OF SECOND-HARMONIC GENERATION IN THE FAR-OFF RESONANT REGIME

**V. Peřinová**, A. Lukř, W. Leoński, J. Peřina Jr., J. Pácalt

### **Quantum Optics - Small Conference Room (16:00 – 17:45)**

**Chairman: Karol Bartkiewicz**

**16:00-16:15** NONCLASSICALITY INVARIANT OF TWO-MODE GAUSSIAN STATES

**I. I. Arkhipov**, J. Peřina Jr., J. Svozilík, J. Peřina, A. Miranowicz

**16:15-16:30** TWO-PHOTON PHOTOPOLYMERIZATION WITH MULTIPLE LASER BEAMS

**P. Jákł**, J. Skalický, J. Jeřek, P. Zemánek

**16:30-16:45** QUANTUM STEERING IN A CHAIN OF KERR-LIKE OSCILLATORS

**J. K. Kalaga**, W. Leoński

**16:45-17:00** QUANTUM STATE ENGINEERING VIA PULSED NONLINEAR OSCILLATORS

**A. Kowalewska-Kudřaszuk**, W. Leoński, T. D. Nguyen

**17:00-17:15** RANDOM MOTION OF COLLOIDAL PARTICLE IN AN OPTICALLY CREATED CUBIC POTENTIAL

**M. řiler**, P. Jákł, V. Svak, R. Filip, P. Zemánek

**17:15-17:30** EXTRAORDINARY OPTICAL MOMENTUM

**S. Simpson**, M. Antognozzi, M. Dennis, Ch. Bermingham, A. Bekshaev, K. Bliokh, F. Nori

**17:30-17:45** MEAN-FIELD AND QUANTUM DYNAMICS IN THE DISPERSIVE JAYNES-CUMMINGS MODEL

**P. Szafulski**, T. Mavrogordatos, M. Szymańska

## Poster Session 1 (17:45 – 19:00)

*AUTOMATIC DEVICE FOR MEASURING BIOMECHANICAL PROPERTIES OF CADAVERIC LUMBAR VERTEBRAE OF THE HUMAN SPINE*

**L. Bartoněk**, V. Janák, **J. Kepřt**

*INFLUENCE OF LOAD BY HIGH POWER ON THE OPTICAL COUPLER*

**L. Bednarek**, A. Vanderka, L. Hajek, J. Nedoma, R. Poboril, V. Vasinek

*AXIAL ASYMMETRY IN HOLOGRAPHIC AND INCOHERENT CORRELATION IMAGING*

**J Běhal**, P. Bouchal, P. Schovánek, T. Fordey, Z. Bouchal

*TUNABLE SOURCE OF TWO INDEPENDENT ENTANGLED PHOTON PAIRS*

**A. Černoch**, K. Lemr, K. Bartkiewicz

*FIXING METHODS FOR THE USE OF OPTICAL FIBERS IN INTERFEROMETRIC ARRANGEMENTS*

**J. Cubik**, S. Kepak, M. Fajkus, O. Zboril, J. Nedoma, A. Davidson, V. Vasinek

*SOLITON-BASED SPECTRAL SWITCHING IN HIGHLY NONLINEAR DUAL-CORE MICROSTRUCTURED OPTICAL FIBER*

**L. Curilla**, I. Bugar, I. Astrauskas, A. Baltuska

*INFLUENCE OF POLYMERIZATION PROCESS ON OPTICAL AND THERMAL CHARACTERISTICS OF POLYMETHYL METHACRYLATE*

**L. Czyzewska**, M. Gil, J. Pedzisz, P. Mergo

*REFLECTANCE MEASUREMENTS OF GaP-ZnO CORE-SHELL NWS*

**J. Ďurišová**, D. Pudiš, J. Novák, A. Dujavová-Laurenčíková, L. Šušlik

*MICROFLUIDIC STRUCTURES FOR LOC DEVICES DESIGNED BY LASER LITHOGRAPHY*

**M. Figuřova**, D. Pudis, I. Cimrak

*OPTIMIZATION OF PASSIVELY MODE-LOCKED Nd:GdVO<sub>4</sub> LASER IN CONTINUOUS REGIME*

**M. Frank**, M. Jelínek, D. Vyhřídál, V. Kubeček

*DELIVERY OF 1.9  $\mu$ M- LASER RADIATION USING AIR-CORE BRAGG FIBERS*

**M. Frank**, M. Jelínek, V. Kubeček, V. Matějec, O. Podrazký, I. Kašík

*NEW APPROACH TO IDENTIFYING THE ZERO-ORDER FRINGE IN VARIABLE WAVELENGTH INTERFEROMETRY*

**J. Galas**, D. Litwin, M. Daszkiewicz

*SUPERCONTINUUM DYNAMICS IN SOLID-STATE DIELECTRIC MEDIA PUMPED WITH PICOSECOND LASER PULSES*

**J. Galinis**

*3D, 2.5D AND 2D PHOTONIC CRYSTALS FABRICATED BY LASER LITHOGRAPHY*

**P. Gaso**, D. Pudis, D. Jandura

*PDMS BASED WAVEGUIDES WITH SURFACE RELIEF BRAGG GRATING*

**M. Goraus**, D. Pudis, D. Jandura, S. Berezina

*SIMULATION OF THE SHAPE FROM FOCUS METHOD USING POLYCHROMATIC POINT SPREAD FUNCTION*

**I. Hamarová**, P. Šmíd, P. Horváth

*HC-PCF BASED OPTICAL FREQUENCY REFERENCES*

**M. Holá**, J. Hrabina, B. Mikel, J. Lazar, O. Číp

*IODINE ABSORPTION CELLS QUALITY EVALUATION METHODS*

**J. Hrabina**, M. Zucco, M. Holá, M. Šarbort, O. Acef, F. Du-Burck, J. Lazar, O. Číp

*MOLECULAR ORIENTATION IN BINARY LIQUID MIXTURES FROM EXCESS COTTON-MOUTON CONSTANT*

M. Pochylski, **I. Iwazkiewicz-Kostka**, M. Kaczmarek, Z. Woźniak, H. Drozdowski

*MINIATURE FIBER TEMPERATURE SENSOR BASED ON FABRY-PEROT INTERFEROMETER*

**D. Kacik**, I. Martincek, N. Tarjanyi

*MOLDING OF SOFT GLASS REFRACTION LENSES WITH HOT EMBOSsing PROCESS IN REDUCED PRESSURE*

**R. Kasztelaníc**, I. Kujawa, R. Stepień, K. Harasny, D. Pysz, R. Buczynski

*FIBRE OPTIC PORTABLE RAIL VEHICLE DETECTOR*

**S. Kepak**, J. Cubik, P. Zavodny, S. Hejduk, J. Nedoma, A. Davidson, V. Vasinek

*EFFECT OF PULSE CHIRP PARAMETER ON THE SOLITON HIGH-SPEED TRANSMISSION SYSTEM*

**L. Ladanyi**, L. Scholtz, J. Mullerova

**19:00 – Welcome Reception**

**Wednesday,  
07.09.2016**

**8:00-9:00** Breakfast

**Invited Talks 3 – Congress Centrum (9:00-10:30)**

**Chairman: Jan Peřina**

**9:00-9:30** *SPATIOTEMPORAL OPTICAL COHERENCE PHASE MANIPULATION*  
**M. Wojtkowski**

**9:30-10:00** *HOW TO MEASURE THE QUANTUM PROPERTIES OF POLARIZATION-CORRELATED PHOTON PAIRS BY INTERFERENCE*  
**K. Bartkiewicz**

**10:00-10:30** *OPTICAL VORTICES IN MICROSCOPIC IMAGING*  
**A. Popiołek-Masajada**, J. Masajada, Ł. Płociniczak

**10:30-11:00** Coffee break

## **Invited Talks 4 – Congress Centrum (11:00– 12:00)**

**Chairman: František Uherek**

**11:00-11:30** *COHERENT SOURCES FOR MID-INFRARED LASER SPECTROSCOPY*

**P. Honzatko**, Y. Baravets, S. Mondal, P. Peterka, F. Todorov

**11:30-12:00** *FEMTOSECOND DIODE-PUMPED MODE-LOCKED NEODYMIUM LASERS*

**V. Kubeček**, M. Jelínek, M. Čech, D. Vyhřídál, L. Su, D. Jiang, F. Ma, X. Qian, J. Wang, J. Xu

**12:00-13:30** Lunch

**13:30** Social Programme

# Thursday,

# 08.09.2016

**8:00-8:45** Breakfast

## **Invited Talks 5: Congress Centrum (9:00 – 10:30)**

**Chairman: Tomasz Stefaniuk**

**9:00-9:30** *GaP NANOWIRES – PROPERTIES AND APPLICATIONS*

**J. Novák**

**9:30-10:00** *SPECTROSCOPY OF MATERIALS FOR TERAHERTZ PHOTONICS*

**K. Postava**

**10:00- 10:30** *SILOXANE BASED PHOTONIC STRUCTURES AND THEIR APPLICATION IN OPTOELECTRONIC DEVICES*

**D. Pudiš**, L. Šušlik, D. Jandura, M. Goraus, M. Figurová, I. Martinček, P. Gašo

**10:30-10:45** Coffeee break

## **Invited Talks 6: Congress Centrum (11:00 – 12:30)**

**Chairman: Jozef Novák**

**11:00-11:30** *SILVER GRAIN METAMATERIAL FOR SHG GENERATION*

**T. Stefaniuk**, N. Olivier, Aleksandra. A. Wronkowska, A. Wronkowski, T. Szoplík, A. V. Zayats

**11:30-12:00** *HYBRID ORGANIC-INORGANIC INTEGRATED PHOTONICS*

**F. Uherek**

**12:00-12:30** *ANALYSIS OF LINEAR AND NONLINEAR EFFECTS IN OPTICAL FIBER*

**S. Jurečka**

**12:30-13:45** Lunch

## **Fiber Optics, NLO: Congress Centrum (14:00 – 15:30)**

**Chairman: Stanislav Jurečka**

- 14:00-14:15** *SENSING CHARACTERISTICS OF A SIDE-HOLE FIBER WITH SQUEEZED MICROSTRUCTURE*  
**A. Anuszkiewicz**, T. Martynkien, J. Olszewski, P. Mergo and W. Urbańczyk
- 14:15-14:30** *CHARACTERIZATION AND NUMERICAL MODELING OF HOLMIUM-DOPED FIBERS WITH VARIOUS CONCENTRATIONS FOR FIBER LASERS*  
**J. Aubrecht**, P. Peterka, I. Kašík, O. Podrazký, J. Cajzl, A. Benda, Y. Baravets and P. Honzátko
- 14:30-14:45** *SIMULTANEOUS TRANSFER OF OPTICAL FREQUENCY AND TIME OVER 306 KM LONG-HAUL OPTICAL FIBRE LINK*  
**V. Hucl**, M. Cizek, L. Pravdova, S. Rerucha, J. Hrabina, B. Mikel, V. Smotlacha, J. Vojtech, J. Lazar, O. Cip
- 14:45-15:00** *ALL-NORMAL DISPERSION SILICA FIBERS FOR SUPERCONTINUUM PUMPED AT 1.55  $\mu\text{m}$*   
**K. Tarnowski**, T. Martynkien, G. Soboń, A. Anuszkiewicz, K. Poturaj, P. Mergo, W. Urbańczyk
- 15:00-15:15** *COHERENT AND NONLINEAR OPTICS WITH NITROGEN VACANCY COLOR CENTERS IN DIAMOND*  
W. Gawlik, M. Mrózek, D. Rudnicki, **K. Sycz**, A. Wojciechowski, J. Zachorowski
- 15:15-15:30** *OPTICAL BISTABILITY IN THE DRIVEN DISPERSIVE JAYNES-CUMMINGS MODEL*  
**T. Mavrogordatos**, M. Szymańska
- 15:30-15:45** Coffee break

## **Measurements 1, Small Conference Room (14:00 – 15:30)**

**Chairman: Pavel Peterka**

- 14:00-14:15** *PHYSICAL – OPTICAL METHODS FOR NON-DESTRUCTIVE ANALYSIS AND TESTING OF CULTURAL HERITAGE*  
**M. Hain**, J. Bartl, V. Jacko
- 14:15-14:30** *MULTISCALE CHARACTERIZATION OF SOLAR CELL STRUCTURES*  
P. Škarvada, L. Škvarenina, **P. Tománek**, D. Sobola, R. Macku, J. Brüstlová, L. Grmela
- 14:30-14:45** *DESIGNING WATER QUALITY SENSOR BASED ON FLUORESCENCE PROPERTIES OF ALGUAES*  
**T. Teplický**, M. Danišová, D. Chorvát jr, A. Marček Chorvátová
- 14:45-15:00** *SURFACE FLATNESS MEASUREMENT OF QUASI-PARALLEL PLATES EMPLOYING THREE-BEAM INTERFERENCE WITH STRONG REFERENCE BEAM*  
**Z. Sunderland**, K. Patorski
- 15:00-15:15** *OPTICAL BINDING FORCES IN RETRO-REFLECTED BEAM GEOMETRY*  
**J. Damková**, L. Chvátal, O. Brzobohatý, and P. Zemánek

**15:15-15:30** *INTERGRATED POLYMERIC INTERFEROMETER FOR PHOTONICS SENSING*  
**J. Chovan**, F. Uherek

**15:30-15:45** Coffee break

### **Measurements 2, Congress Centrum (16:00 – 17:45)**

**Chairman: Petr Hlubina**

**16:00-16:15** *CHANGES IN OPTICAL PROPERTIES OF BIOLOGICAL TISSUE: EXPERIMENT AND MONTE CARLO SIMULATION*

**P. Kaspar**, E. Prokopyeva, P. Tománek, L. Grmela

**16:15-16:30** *SHACK-HARTMANN DETECTOR BASED ON A HEXAGONAL MATRIX OF NANOSTRUCTURED GRIN MICRO LENSES*

**R. Kasztelanic**, A. Filipowski, R. Stepień, D. Pysz, R. Buczyński

**16:30-16:45** *PREPARATION AND MEASUREMENT OF FBG BASED LENGTH, TEMPERATURE AND VIBRATION SENSORS*

**B. Mikel**, R. Helan, Z. Buchta, M. Jelinek and O. Číp

**16:45-17:00** *LENGTH MEASUREMENT IN ABSOLUTE SCALE VIA LOW-DISPERSION OPTICAL CAVITY*

**L. Pravdová**, A. Lešundák, R. Šmíd, J. Hrabina, O. Číp

**17:00-17:15** *THE MEASUREMENTS OF BLOCH-SIEGERT EFFECT IN ATOMIC VAPORS*

**J. Sudyka**, S. Pustelny and W. Gawlik

**17:15-17:30** *AUTOMATIC SYSTEM FOR GAUGE BLOCK CALIBRATION OPTIMIZED TO MEET LEGAL LENGTH METROLOGY REQUIREMENTS*

**Z. Buchta**, M. Šarbort, M. Čížek, V. Hucl, Š. Řeřucha, Š. Dvořáčková, F. Dvořáček, J. Kůr, P. Konečný, J. Lazar, O. Číp

**17:15-17:30** *VORTEX SELF-IMAGING EXPERIMENTS ON ABERRATION INSENSITIVE LOCALIZATION OF MICROOBJECTS*

**M. Baránek**, P. Bouchal, Z. Bouchal

### **Interference - Diffraction, Small Conference Room (16:00 – 17:45)**

**Chairman: Agnieszka Popiołek-Masajada**

**16:00-16:15** *DIFFERENTIAL INTERFEROMETRY FOR HIGH CYCLE FATIGUE MEASUREMENT*

**J. Lazar**, M. Holá, J. Hrabina, O. Číp, M. Čížek, J. Oulehla

**16:15-16:30** *FAST WHITE-LIGHT INTERFEROMETRY WITH HILBERT TRANSFORM EVALUATION*

**P. Pavlíček**, E. Mikeska

**16:30-16:45** *COPLANAR THREE-BEAM INTERFERENCE AND PHASE EDGE DISLOCATIONS*

**K. Patorski**, L. Sluzewski, M. Trusiak, K. Pokorski

**16:45-17:00** *DIGITAL ALGORITHMS FOR PARALLEL PIPELINED SINGLE-DETECTOR HOMODYNE FRINGE COUNTING IN LASER INTERFEROMETRY*

**Š. Řeřucha**, M. Holá, M. Čížek, V. Hucl, O. Číp and J. Lazar



**17:00-17:15** *SURFACE PLASMON RESONANCE SYSTEM WITH MAGNETO-OPTIC GARNET*

**J. Vlček**, J. Pištora, L. Halagačka

**17:15-17:30** *LOCAL AND NONLOCAL RESPONSES IN NANOPLASMONICS*

M. Burda, P. Kwiecien, J. Fiala, **I. Richter**

**17:30-17:45** *2D PHOTONIC CRYSTAL AND ITS ANGULAR REFLECTION AZIMUTHAL SPECTRUM*

**D. Senderakova**, M. Drzik, J. Tomekova

### **Poster Session 2 (17:30 – 19:00)**

*SIMULATION OF TURBULENCES AND FOG EFFECTS ON THE FREE SPACE OPTICAL LINK INSIDE OF EXPERIMENTAL BOX*

**J. Latal**, J. Vitasek, L. Hajek, A. Vanderka, P. Koudelka, V. Vasinek

*TWO PROPOSALS OF QUANTUM CHAOS INDICATORS FOR A PULSED KERR-LIKE OSCILLATOR SYSTEM*

J. K. Kalaga, **W. Leoński**

*OPTICAL PROPERTIES OF GaAs-BASED LED WITH FRESNEL STRUCTURE IN THE SURFACE*

**I. Lettrichova**, D. Pudis, A. Laurencikova, J. Novak, L. Suslik

*NOISE REDUCTION IN AN OPTICAL EMISSION SPECTROMETER WITH ROTATING DIFFRACTION GRATING*

**D. Litwin**, S. Sitarek, A. Tyburska-Staniewska, A. Ramsza, H. Kowalski, Ł. Dątek, J. Galas, M. Daszkiewicz

*POLYSILOXANE OPTICAL FIBERS AND FIBER STRUCTURES*

**I. Martinec**, D. Pudis

*INFLUENCE OF TECHNOLOGY AND EXTERNAL SHAPE OF MICROSTRUCTURED OPTICAL FIBERS ON THEIR OPTICAL CHARACTERISTICS*

G. Wojcik, K. Poturaj, A. Walewski, **P. Mergo**

*SPECTRAL INTERFEROMETRIC FIBER OPTIC TEMPERATURE SENSOR WITH ENHANCED SENSITIVITY*

**J. Militký**, M. Kadulová, P. Hlubina

*DETAILED ANALYSIS OF ROUTING PROTOCOLS WITH DIFFERENT NETWORK LIMITATIONS*

**M. Masood**, M. Abuhelala, I. Glesk

*TERAHERTZ TIME DOMAIN SPECTROSCOPY OF POLYMERS USING PLASMA*

**E. Noskovičová**, L. Slušná, D. Lorenc, Juraj Darmo, D. Velič

*DESIGNING OF MO-SPR BIOCHIP WITH PHOTONIC CRYSTAL*

**P. Otipka**, J. Vlček, M. Lesňák

*DESIGN OF AN ALL-FIBER ERBIUM-DOPED LASER SYSTEM FOR SIMULATING POWER LOAD IN BACKBONE NETWORKS*

**R. Pobořil**, L. Bednárek, A. Vanderka, L. Hájek, O. Zbořil, V. Vašinek

*LASER TREATMENT OF ALUMINA BASED CERAMICS USING Q-SWITCH SHG ND:YLF LASER*

**L. Rihakova**, H. Chmelickova, H. Hiklova

*SELF-REFERENCED INTERFEROMETER FOR FORM MEASUREMENT OF HOLLOW CYLINDERS*

**M. Šarbort**, Š. Řeřucha, M. Holá, Z. Buchta, J. Lazar

*NONLINEAR FIBRE BRAGG GRATING BASED ALL-OPTICAL SWITCHING*

**L. Scholtz**, L. Ladanyi, J. Mullerova

*OPTICAL CHARACTERIZATION OF POLYMER BASED ON BENZO[1,2-B;4,5-B']DITHIOPHENE DERIVATIVES FOR PHOTOVOLTAIC APPLICATIONS*

**L. Slušná**, E. Noskovičová, R. Balogh, D. Végh, V. Milata, Ľ. Haizer, D. Lorenc, D. Velič

*STUDY OF THE NONLINEAR MAGNETO-OPTIC EFFECTS*

**J. Soubusta**, A. Černoch, Jaroslav Hamrle, J. Peřina Jr., K. Postava

*COMPARISON OF IN-LINE FIBER INTERFEROMETERS FABRICATED IN HIGHLY BIREFRINGENT MICROSTRUCTURED FIBER FOR SENSING APPLICATIONS*

**G. Statkiewicz-Barabach**, A. Anuszkiewicz, P. Mergo, W. Urbanczyk

*PDMS BASED PHOTONIC AND QUASI-PHOTONIC CRYSTAL FOR LED APPLICATION*

**L. Suslik**, D. Pudis, M. Goraus, J. Durisova, M. Hyll, J. Kovac

*OPTICAL VORTEX SENSITIVITY*

**M. Szatkowski**, A. Popiołek-Masajada, J. Masajada

*HOLOGRAPHIC LENS FORMED IN A SELF-DEVELOPING PHOTOPOLYMER FILM*

**N. Tarjányi**, D. Káčik

*EXPERIMENTAL FSO NETWORK AVAILABILITY ESTIMATION USING INTERACTIVE FOG CONDITION MONITORING*

**J. Turán**, Ľ. Ovseník

*MEASUREMENT OF THE OPTICAL FIBER NUMERIC APERTURE EXPOSED TO THERMAL AND RADIATION AGING*

**A. Vanderka**, L. Hajek, L. Bednarek, J. Latal, R. Poboril, P. Zavodny, V. Vasinek

*FOCUS ION BEAM MICRO-MACHINING OF FIBER FACET PHOTONIC STRUCTURES*

**M. Vaněk**, P. Honzátko, F. Todorov, J. Vaniš

*STOKES POLARIMETER BASED ON TWISTED NEMATIC LIQUID CRISTAL MODULATOR*

**W. A. Woźniak**, J. Olszewski, P. Kurzynowski

*INTRACAVITY INTERFEROMETRY USING SYNCHRONOUSLY PUMP OPO*

**A. Zavadilová**, V. Kubeček, J. Šulc, D. Vyhlídal

**19:00 – Gala Dinner**

# Friday

## 9.9.2016

8:00-8:45 Breakfast

### Invited Talks 7: Congress centrum (9:00 – 10:00)

Chairman: Kamil Postava

9:00-9:30 *TIME DOMAIN TERAHERTZ SPECTROSCOPY AND ITS APPLICATIONS*  
**N. Palka**

9:30-10:00 *ADAPTIVE AUTOMATIC DATA ANALYSIS IN FULL-FIELD FRINGE PATTERN BASED OPTICAL METROLOGY*  
**M. Trusiak**, K. Patorski, L. Sluzewski

10:00-10:15 Coffee break

### Photonics and Plasmonics, Congress Centrum (10:30 – 12:15)

Chairman: Maciej Wojtkowski

10:30-10:45 *THE EXTRAORDINARY OPTICAL TRANSMISSION THROUGH SUB-WAVELENGTH PERIODIC ARRAYS*  
**J. Fiala**, I. Richter

10:45-11:00 *SPECTRAL PHASE-SHIFT DETECTION OF SURFACE PLASMON RESONANCE*  
M. Duliaková, **P. Hlubina**, D. Ciprian

11:00-11:15 *PREPARATION OF RING RESONATOR BASED ON PDMS USING LASER LITHOGRAPHY*  
**D. Jandura**, D. Pudis, P. Gaso

11:15-11:30 *SPONTANEOUS PARAMETRIC DOWN-CONVERSION IN ONE-DIMENSIONAL PHOTONIC STRUCTURES WITH BOUNDARIES*  
**D. Javůrek**, J. Peřina Jr.

11:30-11:45 *ANALYSIS OF LOCALIZED SURFACE PLASMON BASED SENSORS USING RCWA METHOD*  
**P. Kwiecien**, I. Richter, J. Lelek, B. Špačková, J. Homola

11:30-11:45 *WAVEGUIDE SILICON NITRIDE GRATING COUPLER*  
**J. Litvik**, I. Dolnak, M. Dado

12:00-12:15 *PHOTONICS APPROACH TO TRAFFIC SIGNS*  
**D. Litwin**, J. Galas, A. Czyżewski, B. Rymśa, L. Kornalewski, T. Kryszczyński, J. Mikucki, M. Daszkiewicz

12:15-12:30 Closing ceremony

12:30-13:45 Lunch