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|            | <b>26.09</b>          |
|            | <b>Saturday</b>       |
| 9:00-19:30 | <b>REGISTRATION</b>   |
| 20:00      | <b>Welcome Buffet</b> |

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|             | <b>September 27</b>                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                 |
|             | <b>Sunday</b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                 |
| 9:00-09:30  | <b>Registration</b>                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                 |
| 9:30-10:00  | Welcome Speakers:<br>Prof. Ivan SCHERBAKOV, Chairman of ALT09, Russia<br>Prof. Nuket YETIS, President of TÜBİTAK, Turkey<br>Prof. Vladislav PANCHENKO, Chairman of the Russian Foundation for Basic Research, Russia<br>Prof. Sezer KOMSUOGLU, Rector of Kocaeli University , Turkey<br>Prof. Mustafa AKAYDIN, Lord Mayor of Antalya, Turkey<br>Prof. Kerim ALLAKHVERDIEV, Co-Chairman of Program Committee, Turkey. |                                                                                                                                                                                                                                 |
| 10:00-10:20 | <b>Coffee Break</b>                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                 |
| 10:20-10:40 | <b>BIOMEDICAL LASER APPLICATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                 | <b>NON-LINEAR PHENOMENA</b>                                                                                                                                                                                                     |
|             | <b>Raman Spectroscopy - A Powerful Tool in Biophotonics</b><br><u>Jürgen Popp</u> (Germany)                                                                                                                                                                                                                                                                                                                          | <b>Spectral Response of Molecular Media under Nanoporous Confinement</b><br>V.G. Arakcheev, <u>V.B.Morozov</u> , A.N. Olenin, A.A.Valeev (Russia)                                                                               |
| 10:40-11:00 | <b>Biophotonic Methods for the Assessment of Burn Injury in Human Skin</b><br><u>Martin Leahy</u> (Ireland)                                                                                                                                                                                                                                                                                                          | <b>THz Source Based on Two-Color Diode-Pumped c-cut Vanadat Lasers and GaSe Nonlinear Crystal</b><br><u>A.A. Sirotkin</u> , S.V. Garnov, A.I. Zagumennyi, Yu.D. Zavartsev, S.A. Kutovoi, V.I. Vlasov, I.A. Shcherbakov (Russia) |
| 11:00-11:20 | <b>Multi-Dimensional Laser Microscopy in Biomedical Sciences</b><br><u>Herbert Schneckenburger</u> , Petra Weber, Thomas Bruns and Michael Wagner (Germany)                                                                                                                                                                                                                                                          | <b>Nonlinear Optics at the Single Optical Cycle Limit</b><br><u>Eleftherios Goulielmakis</u> (Greece)                                                                                                                           |
| 11:20-11:40 | <b>Laser Cancer Phototherapy Enhanced by Gold Nanoparticles</b><br><u>Valery V. Tuchin</u> , Irina L. Maksimova, Georgy S. $\square$ erentyuk, Garif G. Akchurin, Boris N. Khlebtsov, Nikolai G. Khlebtsov (Russia)                                                                                                                                                                                                  | <b>Pair Collisions of Optical Pulses in Non-Linear Dispersive Media: Frequency Tuning and Velocity Variation</b><br><u>A.P. Sukhorukov</u> , V.E. Lobanov                                                                       |
| 11:40-12:00 | <b>Imaging of Live Mammalian Embryos with Confocal Microscopy and Optical Coherence Tomography</b><br><u>Kirill V. Larin</u> , Irina V. Larina, Saba Syed, Steven Ivers, Mary E. Dickinson (USA)                                                                                                                                                                                                                     | <b>Review for the Technique Development of Front end of SG Laser facility</b><br><u>Zhou Yi</u> , Jianqiang Zhu, Xuechun Li, Wei Fan, Shaohe Chen, Zunqi Lin (China)                                                            |
| 12:00-15:00 | <b>Lunch</b>                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                 |
|             | <b>BIOMEDICAL LASER APPLICATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                 | <b>NON-LINEAR PHENOMENA</b>                                                                                                                                                                                                     |
| 15:00-15:20 | <b>Nonlinear Optical Properties of Biomineral</b>                                                                                                                                                                                                                                                                                                                                                                    | <b>Laser Resonator Mode Connection and</b>                                                                                                                                                                                      |

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|             | <b>Nanocomposite Structures</b><br><u>Yuriy Kulchin</u> , A.V. Bezverbny, O.A. Bukin, S.S. Voznesenski, S.S. Golik, A.Yu. Mayor, Yu.A. Shipunov (Russia)                                              | <b>Change of this Connection under Influence of an External Optical Signal</b><br><u>V.P.Bykov</u> (Russia)                                                                                                                                               |
| 15:20-15:40 | <b>Fluorescent Detection and Photodynamic Inactivation of Pathogenic Microorganisms</b><br><u>Ekaterina Borisova</u> , V. Mantareva, I. Angelov, V. Kussovski, D. Woehrlle, and L. Avramov (Bulgaria) | <b>Powerful Few Cycle Optical Pulse Production and New Spectral Component Formation under Filamentation in Gases</b><br>M. Kurilova, A. Mazhorova, D. Uryupina, n. Panov, G. golovin, S. gorgutsa, R. Volkov O. Kosareva, and <u>A. Savel'ev</u> (Russia) |
| 15:40-16:00 | <b>Laser Scattering and Diffraction Assessment of the Effect of Diamond Nanoparticles on Blood Microrheology</b><br><u>Alexander Priezzhev</u> (Russia)                                               | <b>Phase Retrieval Method for Reconstructing Wavefront Aberration of Ultrashort High-Power Laser Pulse</b><br><u>Moon Tae Jeong</u> , Chu Min Kim, and Jongmin Lee (Korea)                                                                                |
| 16:00-16:20 | <b>Laser-Based Nanoengineering for Biomedical Applications</b><br><u>Boris Chichkov</u> (Germany)                                                                                                     | <b>Phase-Lock and Frequency Stabilization of Nd:YAG Lasers</b><br><u>Cihangir Erdogan</u> (Turkey)                                                                                                                                                        |
| 16:20-16:40 | <b>Sorption of the Ions with Different Ionic Radii on Protein Surface in the Process of Nanocluster Formation</b><br>Khlapov V.P, <u>G.P. Petrova</u> , Yu.M. Petrusevich (Russia)                    |                                                                                                                                                                                                                                                           |
| 16:40-17:00 | <b>Medical Applications of Laser Spectroscopic Gas Analyses</b><br><u>Markus Sigrist</u> , R. Bartlome, and M. Gianella (Chehia)                                                                      |                                                                                                                                                                                                                                                           |
| 17:00-17:20 | <b>Coffee Break</b>                                                                                                                                                                                   |                                                                                                                                                                                                                                                           |
|             | <b>BIOMEDICAL LASER APPLICATION</b>                                                                                                                                                                   | <b>LASER IN ATMOSPHERE MONITORING</b>                                                                                                                                                                                                                     |
| 17:20-17:40 | <b>“Clean” and “Cold” Laser Transfer of Biomaterials</b><br><u>Taras Kononenko</u> , I.A.Nagovitsyn, G.K.Chudinova, V.I. Konov, I.N.Mihailescu, P.Alloncle, M.Sentis (Russia)                         | <b>LIDAR Technologies of Remote Monitoring</b><br><u>Anatoly Boreysho</u> (Russia)                                                                                                                                                                        |
| 17:40-18:00 | <b>The Optical Nose, Laser Based Trace Gas Detection for the Early Monitoring of Human Health</b><br><u>Frans Harren</u> (Netherland)                                                                 | <b>Reference and Phase Shift Technique in Multipass Laser Schemes for Trace Gas Particles Detection</b><br>I.V.Nikolaev, <u>V.N.Ochkin</u> , S.N.Tskhai (Russia)                                                                                          |
| 18:00-18:20 | <b>Spectral Domain Optical Coherence Tomography Imaging of the Human Posterior Eye</b><br><u>Tapio Fabritius</u> , and Risto Myllyla (Finland)                                                        | <b>Retrieval of Dust Particle Parameters from Multiwavelength Lidar Measurements</b><br><u>Igor Veselovskii</u> , Alexey Kolgotin, Oleg Dubovik, Sergey Vartapetov (Russia)                                                                               |
| 18:20-18:40 | <b>Functionalized Plasmon-Resonant Nanoparticles: Fabrication, Optical Properties, and Biomedical Applications</b><br><u>Nikolai Khlebtsov</u> (Russia)                                               | <b>Quantum Cascade Laser Spectrometers for Atmospheric Gas Detection</b><br><u>Virginie Zeninari</u> (France)                                                                                                                                             |
| 18:40-19:00 | <b>Surface-Assisted Laser Desorption Ionization of Organic Compounds. Mechanism and Applications.</b><br><u>S.Alimpiev</u> (Russia)                                                                   | <b>A Multi-Angle Laser Light Scattering Aerosol Spectrometer</b><br><u>A. Nagy</u> , A. Czitrovsky, A. Kerekes, W. Szymanski (Hungary)                                                                                                                    |
| 17:00-19:30 | <b>POSTERS</b>                                                                                                                                                                                        |                                                                                                                                                                                                                                                           |

| <b>September 28</b> |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                    |
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| <b>Monday</b>       |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                    |
|                     | <b>PHOTOACOUSTICS</b>                                                                                                                                                                                                                         | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                                               |
| 9:00-9:20           | <b>Optoacoustic Measurement of Optical Propertist in Biological Tissues</b><br><u>Pelivanov I.M.</u> , Barskaya M.I., Podymova N.B., Khokhlova T.D., Karabutov A.A (Russia)                                                                   | <b>Numerical Analysis of Multilayer Optical Waveguides</b><br>A.G. Rzhhanov, <u>S.E. Grigas</u> (Russia)                                                                                                                                                                                           |
| 9:20-9:40           | <b>Optoacoustic Array for Monitoring of Hemoglobin Concentration: Modeling and Experiment</b><br><u>Valeriy Andreev</u> , Tatiana Khokhlova, Alexander Bykov (Russia)                                                                         | <b>The Red and Infrared Emission Centers in Bismuth-Activated Silicate Glass.</b><br>B. Denker, E. Dianov, <u>B. Galagan</u> , S. Sverchkov, I. Shulman (Russia)                                                                                                                                   |
| 9:40-10:00          | <b>Point Spread Function of Array Transducers in 2D Optoacoustic Tomography</b><br><u>Tatiana Khokhlova</u> , Ivan M. Pelivanov, Varvara A. Simonova and Alexander A. Karabutov (Russia)                                                      | <b>Fluorescent and Optical Absorption Centers in Chromium-Doped LiGaSiO<sub>4</sub> Nano-Glass-Ceramics and Vitreous Precursors</b><br><u>Kirill A. Subbotin</u> , Valery A. Smirnov, Evgeny V. Zharikov, Ivan A. Shcherbakov (Russia)                                                             |
| 10:00-10:20         | <b>Optoacoustic Cancer Diagnosis and Therapy</b><br>M. Jaeger, S. Preisser, L. Siegenthaler, M. Kitz, <u>Martin. Frenz</u> , D. Schol, M. Fléron, J.F. Greisch, M.C. De Pauw-Gillet, E. De Pauw J. Niederhauser, D. Schweizer (Switzerland)   | <b>Photoluminensecence of CdTe Quantum Dots and Porous Silicon Oxide Nanocomposite</b><br><u>N.A. Piskunov</u> , E.D. Maslennikov, L.A. Golovan, V.Yu Timoshenko, P.K. Kashkarov (Russia)                                                                                                          |
| 10:20-10:40         | <b>Coffee Break</b>                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                    |
|                     | <b>PHOTOACOUSTICS</b>                                                                                                                                                                                                                         | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                                               |
| 10:40-11:00         | <b>Imaging of Ultrasound Transmission Parameters in Photoacoustic Tomography</b><br><u>Srirang Manohar</u> , Rene G.H. Willeminck, Jithin Jose, Steffen Resnik, Cornelis H. Slump, Ferdi van der Heijdeb and Ton G. van Leeuwen (Netherlands) | <b>Thin Disk Laser: A Versatile Tool for Micro Machining</b><br><u>Friedrich Dausinger</u> (Germany)                                                                                                                                                                                               |
| 11:00-11:20         | <b>Laser Induced Photoacoustic and Vaporization Pressure Signals in Water: New Experimental Results</b><br><u>A.A.Samokhin</u> , V.I.Vovchenko, and N.N.II'ichev (Russia)                                                                     | <b>A cw Tm,Ho:YLF Laser Pumped by Raman Erbium Fiber laser at 1675 nm</b><br>Yu. L. Kalachev, <u>V. A. Mihailov</u> , V. V. Podreshetnikov, I. A. Shcherbakov (Russia)                                                                                                                             |
| 11:20-11:40         | <b>Evaluation of Microstructure of Severely Plastically Deformed Metals by Laser Ultrasound</b><br>V. V. Kazhushko, G. Paltauf, and <u>H. Krenn</u> (Austria)                                                                                 | <b>Pedestal Suppression in a Short-Pulse Fiber-Laser Output by Soliton Self-Frequency Shift in a Photonic-Crystal Fiber</b><br><u>D.A. Sidorov-Biryukov</u> , E.E. Serebryannikov, A. Voronin, A. Fernandez, L. Zhu, A. Pugzlys, F.Ö. Ilday, J.C. Knight, A. Baltuška, and A.M. Zheltikov (Russia) |
| 11:40-12:00         | <b>Characterization of Giant Photoacoustical Signals in Layered Crystals by a Novel Transient Free-Carrier Absorption</b>                                                                                                                     | <b>Broadly Tunable Tm,Ho:KYW Laser Around 2 μm and its Mode-Locked Operation</b><br><u>A.A. Lagatsky</u> , S. Calvez, N.V. Kuleshov, W.                                                                                                                                                            |

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|             | <b>Technique</b><br><u>Vytautas Grivickas</u> , V. Gavryushin, K. Gulbinas, V. Bikbajevs, K. R. Allakhverdiev, and D. A. Huseinova (Latvia)                                                                        | Sibbett (United Kingdom)                                                                                                                                                                                                                                                                           |
| 12:00-15:00 | <b>Lunch</b>                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                    |
|             | <b>PHOTOACOUSTICS</b>                                                                                                                                                                                              | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                                               |
| 15:00-15:20 | <b>High Power Quantum Cascade Lasers and Applications to High Sensitivity, High Selectivity Detection of Chemical Warfare Agents and Explosives</b><br><u>C. Kumar N.Patel</u> (USA)                               | <b>Diode-Pumped Disk and Slab Solid-State Lasers</b><br><u>Vladimir Tsvetkov</u> , Vladimir Seregin, Andrew Lyashedko, Galina Bufetova, Dmitriy Nikolaev, Ivan Shcherbakov (Russia)                                                                                                                |
| 15:20-15:40 | <b>Photoacoustic Spectroscopy: Low VS. High Laser Power</b><br><u>Dan Constantin Dumitras</u> , D. C. A. Dutu, A. M. Bratu, M. Patachia, C. Achim, M. Petrus, C. Matei, S. Banita (Romania)                        | <b>CW and Pulsed Lasers Based on Er-doped GTWave Fiber</b><br><u>A.S.Kurkov</u> , A.I.Ivanenko, S.M.Kobtsev, S.V.Kukarin (Russia)                                                                                                                                                                  |
| 15:40-16:00 | <b>Three-Dimensional Acousto-Optic Mapping in Tissue Mimicking Phantoms Using Heterodyne Light-Scattering Spectroscopy.</b><br><u>Aliaksandr Bratchenia</u> , R. Molenaar, <u>R.P.H. Kooyman</u> (Netherlands)     | <b>Chemical Vapor Deposited (CVD) Diamond for Laser Applications</b><br><u>V.G. Ralchenko</u> , V.I. Konov, A.P. Bolshakov, A.F. Popovich, V.V. Kononenko, M.N. Sinyavskiy, E.E. Ashkinazi, A.A. Kaminskii, A.Yu. Lukyanov, A.V. Khomich (Russia)                                                  |
| 16:00-16:20 | <b>Acousto-Optical Methods of Image Processing</b><br><u>Oleg Makarov</u> , Wladimir Molchanov, Jewgenij Maximov (Germany)                                                                                         | <b>High Accuracy TN Optical Commutator of Laser Radiation for Application in Space Navigation</b><br>V. Pokrovsky, S. Studentsov, L. Soms, <u>M. Tomilin</u> (Russia)                                                                                                                              |
| 16:20-16:40 | <b>Self-Mixing Interferometry</b><br>Silvano Donati (Italy)                                                                                                                                                        | <b>Investigating Ultra-Intense Plasma-Based Soft x-ray Lasers</b><br><u>Philippe Zeitoun</u> , Marta Fajardo, Pedro Velarde-Mayol, Frederic Burgy, Kevin Cassou, Julien Gautier, Jean-Philippe Goddet, Guillaume Lambert, David Ros, Anna Barszczak Sardinha, Stephane Sebban, Amar Tafzi (France) |
| 16:40-17:00 |                                                                                                                                                                                                                    | <b>High Power Femtosecond Thin Disk Lasers</b><br><u>Thomas Südmeyer</u> , Cyrill R. E. Baer, Christian Kränkel, Oliver H. Heckl, C.J. Saraceno, Matthias Golling, Rigo Peters, Klaus Petermann, Günter Huber, and Ursula Keller (Germany)                                                         |
| 17:00-17:20 | <b>Coffee Break</b>                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                    |
|             | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                                                                                    | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                                               |
| 17:20-17:40 | <b>Three-Waves Interactions of Surface Defect-Deformational Waves and Their Role in Selforganization of Nano and Microstructures Under Laser Action on Solids</b><br><u>V.I. mel'yanov</u> , D. Seval'nev (Russia) | <b>High Power CW and Pulsed Fiber Lasers with China-Made Yb-Doped LMA Fiber at SIOM</b><br><u>Qihong Lou</u> , Jun Zhou, Bin He and Songtao Du (China)                                                                                                                                             |
| 17:40-18:00 | <b>Neutral and Charged Species Produced</b>                                                                                                                                                                        | <b>Lasing Properties of a New Ytterbium-Doped</b>                                                                                                                                                                                                                                                  |

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|             | <b>Through Lasers in Solid and Gas Phase: Spectroscopy and Mass Spectrometry.</b><br><u>A.Giardini</u> , S. Orlando, A. Paladini, S. Piccirillo, F.Rondino, A. Santagata, P. Villani (Italy)                                                                                             | <b>Glass for Miniature Diode-Pumped Ultrashort Pulse Lasers</b><br>B.I.Denker, B.I.Galagan, I.N.Glushenko, V.E.Kisel, S.V.Kulchik,N.V.Kuleshov, <u>S.E.Sverchkov</u> (Russia)                                     |
| 18:00-18:20 | <b>Direct-Write of 3-Dimensional Materials Structures from Gaseous Precursors and Applications</b><br><u>Michael Stuke</u> (Germany)                                                                                                                                                     | <b>Diamond p-n-Junction for UV Streamer Laser</b><br><u>Sergei Buga</u> , V. Blank, V. Bormashov, V. Denisov, S. Terentiev, A. Kirichenko, N. Kornilov, M. Kuznetsov, V. Mordkovich, E. Pel, S. Tarelkin (Russia) |
| 18:20-18:40 | <b>Ultrafast Light Blade: Anisotropic Sensitivity of Isotropic Medium to Femtosecond Laser Radiation</b><br><u>Peter G. Kazansky</u> , Yasuhiko Shimotsuma, Jiarong Qiu, Weijia Yang, Masaaki Sakakura, Martynas Beresna, Yuri Svirko, Selcuk Akturkand Kazuyuoki Hirao (United Kingdom) | <b>High-Power Coherent Beam Combination from Two and Four Fiber Lasers</b><br><u>Jun Zhou</u> , Bin He, Wei Wang, Qihong Lou (China)                                                                              |
| 18:40-19:00 | <b>Turkish Accelerator Complex, FEL Resonator System</b><br><u>H. Duran Yildiz</u> (Turkey)                                                                                                                                                                                              | <b>Laser Raman Microscopy, Pigments and the Arts/Science Interfaces</b><br><u>R.J.H. Clark</u> (United Kingdom)                                                                                                   |
| 19:00-19:20 | <b>Nanowires, Nanoloops and Nanorods by CVD</b><br><u>Michael Veith</u> , Cenk Aktas (Germany)                                                                                                                                                                                           |                                                                                                                                                                                                                   |
| 17:00-19:30 | <b>POSTERS</b>                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                   |
| 21:00       | <b>Committee Meeting</b>                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                   |

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|            | <b>September 29</b>   |
|            | <b>Tuesday</b>        |
| 9:00-19:30 | <b>Social program</b> |
| 20:00      | <b>Gala dinner</b>    |

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|           | <b>September 30</b>                                                                                                                                                                                                                      |                                                                                                                                                                                               |
|           | <b>Wednesday</b>                                                                                                                                                                                                                         |                                                                                                                                                                                               |
|           | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                                                                                                          | <b>DIAGNOSTICS</b>                                                                                                                                                                            |
| 9:00-9:20 | <b>Laser Crystallisation Induced Multicrystalline Silicon Thin Film Solar Cells on Glass: European High-EF project</b><br><u>F. Antoni</u> , E. Fogarassy, A. Slaoui, F. Falk, E. Ose, S. Christiansen, G. Sarau, J. Schneider, (France) | <b>Roughness Measurement with Laser Speckle Pattern of Milled Metals Using Speckle Statistics Analysis</b><br><u>Ersin Kayahan</u> , Fikret Hacizade, Ozcan Gundogdu, Humbat Nasibov (Turkey) |
| 9:20-9:40 | <b>Femtosecond Laser Applied to Photovoltaic Cell processing</b><br><u>M. Sentis</u> , Th. Sarnet and J. Hermann (France)                                                                                                                | <b>Development of Laser-Based Metrology Methods for Extreme Light Infrastructure Project</b><br><u>Aladar Czitrovszky</u> (Hungary)                                                           |

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| 9:40-10:00 | <b>a-Si:H/c-Si Heterojunction for Photovoltaic Application</b><br><u>Osman Kodolbaş</u> (Turkey) | <b>Lasers in Spectroscopy to Study Materials Under Extreme Conditions</b><br><u>Hans Dieter Hochheimer</u> , (USA) |
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| 10:00-10:20 |                                                                                                                                                                                                             | <b>Structural Diagnostics of Polymer Materials by Raman Spectroscopy</b><br><u>Kirill Prokhorov</u> , E.A. Sagitova, G.Yu. Nikolaeva, P.P. Pashinin, P. Donfack, and A. Materny (Russia)                                                                                  |
| 10:20-10:40 | <b>Coffee Break</b>                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |
|             | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                                                                             | <b>DIAGNOSTICS</b>                                                                                                                                                                                                                                                        |
| 10:40-11:00 | <b>A Review of Laser Ablation Propulsion</b><br><u>Claude Phipps</u> , W. Bohn, T. Lippert, M. Michaelis, A. Sasoh, W. Schall and J. Sinko (USA)                                                            | <b>“An Ultrafast Single-Photon Image Diagnostics Sensor with APD Arrays for Industrial and Bio-Applications”</b><br><u>E.Charbon</u> and <u>S.Donati</u> (Italy)                                                                                                          |
| 11:00-11:20 | <b>High-Intensity Terahertz Pulses: Methods of Generation and Applications</b><br><u>Sergey V. Garnov</u> (Russia)                                                                                          | <b>Investigation of Radio-Optic Resonances on Far Field and Free Space Condition</b><br><u>Mustafa Cetintas</u> , R. Hamid, S. Çakir, O. Sen (Turkey)                                                                                                                     |
| 11:20-11:40 | <b>Laser Cleaning of Metals: Fundamentals, Practical Applications and Future Prospects</b><br><u>Vadim Veiko</u> , V.N. Smirnov, T.Yu. Moutin, E.A. Shakhno (Russia)                                        | <b>Optical Characterization and Thin Film Electronics Applications of Carbon Nanobuds and -Tubes</b><br><u>Esko I. Kauppinen</u> (Finland)                                                                                                                                |
| 11:40-12:00 | <b>LIBS-study of Components Migration in Steel Weld Joints</b><br><u>Elena L. Surmenko</u> , Tatiana N. Sokolova, and Ivan A. Popov (Russia)                                                                | <b>Nano-Aquarium Integrated with Functional Microcomponents in Photostructurable Glass by Femtosecond Laser Microprocessing for Microorganism Analysis</b><br><u>Y. Hanada</u> , K. Sugioka, H. Kawano, I. Ishikawa, A. Miyawaki, M. Iida, H. Takai, K. Modrikawa (Japan) |
| 12:00-15:00 | <b>Lunch</b>                                                                                                                                                                                                |                                                                                                                                                                                                                                                                           |
|             | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                                                                             | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                      |
| 15:00-15:20 | <b>Laser-Assisted Fabrication of Silicon Nanocrystals in Liquids</b><br><u>S.V. Zobotnov</u> , P.A. Perminov, A.A. Ezhov, I.O. Dzhun, L.A. Golovan, P.K. Kashkarov (Russia)                                 | <b>A New Approach for Developing Highly effective Solid-State HV Pulse Generators for Laser Pumping</b><br><u>Sergey Moshkhunov</u> (Russia)                                                                                                                              |
| 15:20-15:40 | <b>Theoretical and Experimental Characterization of Nanosecond-Laser-Induced Plasmas for Ignition</b><br><u>Ernst Wintner</u> (Austria)                                                                     | <b>A Novel Pattern Recognition Approach for Noisy Frequency-Resolved-Optical-Gating Traces</b><br><u>Chao-Kuei Lee</u> , Wei-Hong Su, Sung-Hui Lin, T. R. Tsai (Taiwan)                                                                                                   |
| 15:40-16:00 | <b>Laser-Induced Surface Modification of Organic polymers</b><br><u>Lokman Torun</u> (Turkey)                                                                                                               | <b>Plasma-Based Extreme Ultra-Violet Lasers</b><br><u>G.J. Tallents</u> , I. Al'Miev, N. Booth, L.M.R. Gartside, H. Huang, A. K. Rossall, E. Wagenaars, D. S. Whittaker, Z. Zhai (United Kingdom)                                                                         |
| 16:00-16:20 | <b>Synthesis by Pulsed Laser Ablation in Ar and SERS Activity of Silver Thin Films with Controlled Nanostructure</b><br><u>C. D'Andrea</u> , F. Neri, P.M. Ossi, N. Santo, <u>Sebastiano Trusso</u> (Italy) | <b>Temporal Optimization of 0.1- Hz.0.5- PW Laser Pulses</b><br><u>Jae Hee Sung</u> , Tae Jun Yu, Seong Ku Lee, Tae Moon Jeong, Il Woo Choi, and Jongmin Lee (Korea)                                                                                                      |
| 16:20-16:40 | <b>Zinc Oxide Nanostructured Layers for Gas Sensing Applications</b>                                                                                                                                        | <b>Recent Advances of High Power 1 <math>\mu</math>m Lasers</b><br><u>Manfred Berger</u> (Germany)                                                                                                                                                                        |

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|             | A.P. Caricato, A. Cretí, <u>A. Luches</u> , M. Lomascolo, M. Martino, R. Rella, D. Valerini (Italy)                                                                                                                                    |                                                                                                                                                                               |
| 16:40-17:00 | <b>Terahertz Reflection Response Measurement Using a Photon Polariton Wave</b><br><u>Kenji Katayama</u> (Japan)                                                                                                                        | <b>Z-Scan Investigation of Concentration Dependency of Nonlinear Optical Responses in Triphenylmethane Dye Solutions</b><br><u>Humbat Nasibov</u> , Izmir Mamedbeili (Turkey) |
| 17:00-17:20 | <b>Coffee Break</b>                                                                                                                                                                                                                    |                                                                                                                                                                               |
|             | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                                                                                                        | <b>LASER SYSTEMS</b>                                                                                                                                                          |
| 17:20-17:40 | <b>Terahertz Applications of Nanostructured Alumina Oxyhydroxide Based Artificial Materials</b><br>A.V. Andreev, M.N.Esaulkov, A.□. Khodan, M.M. Nazarov, A.A. Konovko, D.A. Sapozhnikov, I.N.Smirnova, A.P. <u>Shkurinov</u> (Russia) | <b>Nano-Imaging and Nano-Patterning with Compact EUV Lasers: New Opportunities in Nanotechnology with a Table Top System</b><br><u>Mario Marconi</u> (USA)                    |
| 17:40-18:00 | <b>Functional Surface Structures Using Femtosecond Ablation</b><br><u>Paivasaari Kimmo</u> , <u>Jääskeläinen Timo</u> (Finland)                                                                                                        | <b>Laser Designator and Range Finder Design</b><br><u>Birol Erenturk</u> (Turkey)                                                                                             |
| 18:00-18:20 | <b>Application of the Pulse Laser Deposition Method for Preparation Film Nanostructure of Metals and Semiconductors</b><br><u>O.A. Novodvorsky</u> , E.V. Khaydukov, A.A. Lotin, L.S. Parshina, V.V. Rocheva, V.Ya. Panchenko (Russia) | <b>New Frontiers in Tunable Laser Technology: Optical Parametric Oscillators Spanning the Ultraviolet to Mid-Infrared</b><br><u>Majid Ebrahim-Zadeh</u> (Spain)               |
| 18:20-18:40 | <b>Laser Modification of 1D Al/Al<sub>2</sub>O<sub>3</sub> Nanostructures</b><br><u>C. Aktas</u> , <u>C. Akkan</u> , M. Veith (Germany)                                                                                                | <b>Pishaper-Beam Shaping Optics for Advanced Laser Technologies</b><br><u>Aleksandr Laskin</u> (Germany)                                                                      |
| 18:40-19:00 | <b>Optimization of Ultrashort Pulsed Laser Radiation for Precise and Productive Micromashing</b><br><u>P. Pivovarov</u> , S. Klimentov, V. Konov, D. Walter, M. Kraus, F. Dausinger (Russia)                                           | <b>High Power Fiber Lasers</b><br><u>Bulend Ortac</u> (Germany)                                                                                                               |
| 17:00-19:30 | <b>POSTERS</b>                                                                                                                                                                                                                         |                                                                                                                                                                               |

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|           | <b>October 01</b>                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
|           | <b>Thursday</b>                                                                                                                                               |                                                                                                                                                                                                                                                                                            |
|           | <b>LIGHT-MATTER INTERACTION</b>                                                                                                                               | <b>LASER SYSTEMS</b>                                                                                                                                                                                                                                                                       |
| 9:00-9:20 | <b>Obtaining of Extremely Homogeneous Volume Self -Sustained Discharge for Powerful CO<sub>2</sub>-Lasers Pumping</b><br><u>Vladimir Yamshchikov</u> (Russia) | <b>GaS<sub>0.4</sub>Se<sub>0.6</sub>: Relevant Properties and Potential for 1064 nm Pumped Mid-IR OPOs and OPGs Operating above 5 μm</b><br><u>Valentin Petrov</u> , Vladimir Panyutin, Alexey Tyazhev, Georgi Marchev, Alexander I. Zagumennyi, Fabian Rotermund and Frank Noak (Germany) |
| 9:20-9:40 | <b>Stable Laser-Plasma Picosecond kHz X-ray Source Using Melted Metal Target</b>                                                                              | <b>Ultrafast Low-Noise High-Power Fiber Lasers: Applications from Material Processing to Next-</b>                                                                                                                                                                                         |

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|             | <u>Konstantin Ivanov</u> , D.S. Uryupina, R.V. Volkov, A.B. Savel'ev, I.A. Ozheredov, A.P. Shkurinov (Russia)                                                         | <b>Generation Accelerators</b><br><u>Omer Ilday</u> (Turkey)                                                                                                                             |
| 9:40-10:00  | <b>Waveguides in Laser Crystals Inscribed by a Femtosecond Laser Beam</b><br><u>Andrey Okhrimchuk</u> , A.V. Shestakov, V. Mezentsev, and I. Bennion (United Kingdom) | <b>Alternative Materials for High Power Lasers</b><br><u>Zelmon D.</u> (USA)                                                                                                             |
| 10:00-10:20 | <b>Effect of CO2 Laser Focusing on Groove Cutting into Steel Surfaces</b><br><u>Suleyman Biyikli</u> , J. Yilmazkaya Sungu (Turkey)                                   | <b>Polycrystalline Yttrium Aluminum Garnet for Fiber Lasers</b><br><u>Randall S. Hay</u> , Geoff Fair, Hee Dong Lee, Triplicane Parthasarathy, Kristin Keller, Pavel Mogilevsky (Canada) |
| 10:20-10:40 | <b>CLOSING CEREMONY</b>                                                                                                                                               |                                                                                                                                                                                          |