

CONFERENCE PROGRAMME

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Welcome

On behalf of the Organizing Committee it is a great pleasure to welcome you to the 14th European Conference on Liquid Crystals (ECLC 2017) in Moscow, Russia. This Conference will bring together several hundreds of specialists from academic and industrial research centers across the world. ECLC 2017 is dedicated to the 90-th anniversary of Frederiks effect which has provided the basis for the display technology. Vsevolod Frederiks (Freedericksz, 1885—1944) was a Russian physicist, the founder of the liquid crystal scientific school in Russia.

The conference lectures and posters will start with the ECLC 2017 Opening Ceremony on Monday morning (June, 26) and will continue until Friday afternoon (June, 30). We also invite you to participate in our Social Program including Welcome Reception on Sunday (June, 25), Moscow by Night Excursion on Monday, a number of excursions on Wednesday, and a Conference Banquet on Thursday.

The final program includes 5 plenary talks, 34 invited talks, 124 oral presentations and 139 posters. Each day will start from a plenary talkfollowed by invited and oral talks. The twoPoster Sessions will take place on Tuesday and Thursday from 14:00 to 16:00. Each participant can reserve a part of his/her poster session time to visit the Earth Science Museum in the Main Building of Moscow State University.

During the Conference we invite participants to visit an exhibition demonstrating the production of industrial companies and publishing editions. We expect that exhibition will be useful for providing information about recent developments of scientific equipment, as well as about new scientific literature.

There will be the Opening Ceremony of BOEoffice in Moscow (one of the Conference General Sponsors) nearby the Poster Session on Tuesday between 14:00 and 16:00. The welcome surprises from BOE are expected.

We hope that your participation in ECLC 2017 in Moscow will be scientifically rewarding and that your stay in Moscow will be enjoyable, comfortable and memorable.

Alexei Khokhlov, ECLC 2017 Chair

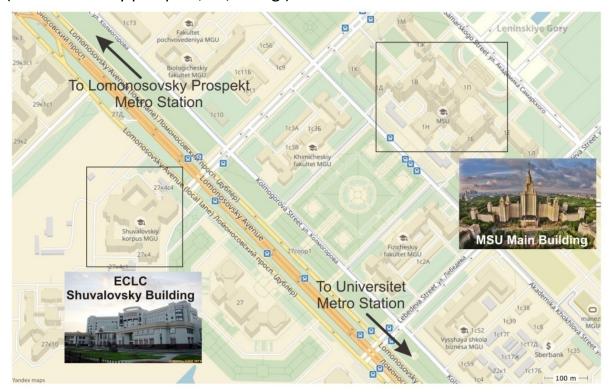
Alexander Emelyanenko, ECLC 2017 Co-Chair

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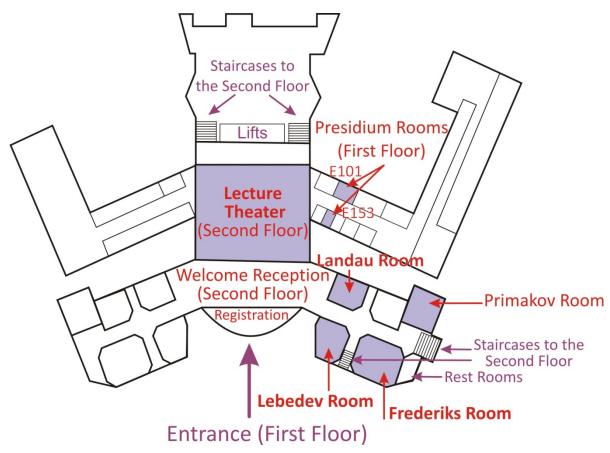
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| Design and Synthesis of LC Materials | 17 |
| Photonic, Electro- and Photo-Responsive LC Systems | 18 |
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Conference Venue

Shuvalovsky Building of Moscow State University (MSU) (Lomonosovskiy prospekt, 27/4 bldg.)



Scheme of Shuvalovsky Building



Conference Programme

| Sunday 25th June |
|--------------------------|
| 16:00-20:00 Registration |
| 20:00- Welcome Party |

Monday 26th June

9:00-9:30 Lecture Theater

Opening remarks: Alexei Khokhlov

9:30-10:20 Lecture Theater, Chair: Alexander Emelyanenko

Plenary 1: **Nikolay Tsvetkov**, St. Petersburg State University, Russia, *Vsevolod Konstantinovich Freedericksz - the founder of the Russian school of physics of liquid crystals*

10:20-10:50 Lecture Theater, Chair: Alexander Emelyanenko

11. Nelson Tabiryan, BEAM Co., USA, The Augmented Reality of Liquid Crystal Optics (Frederiks Award Lecture)

10:50-11:10 **Coffee break**

| Novel LC Phases, Structure and Phase Behaviour (I) Frederiks Room, Chair: EvgenyPozhidaev | Design and Synthesis of LC Materials (I) Landau Room, Chair: Vladimir Besborodov | Applications of Liquid Crystals (I) Lebedev Room, Chair: Vladimir Chigrinov |
|---|--|---|
| 11:10-11:40 | 11:10-11:40 | 11:10-11:40 |
| 12. Helen Gleeson , University of Leeds, UK, <i>Continuing</i> | 16. Yuriy Galyametdinov , Kazan National Research | I10. Arne Buesing, Merck, Germany, History and |
| surprises from bent-core liquid crystals | Technological University, Russia, Lanthanide | future aspects of liquid crystal materials from an |
| | Containing Metallomesogens: Creation and Properties | industrial perspective |
| 11:40-12:00 | 11:40-12:00 | 11:40-12:00 |
| O1. Stanislaw Urban, Fluorosubstituted nematogens | O13. Zbigniew Galewski , Esters of 4-nitrocinnamic | O25. Svetlana Lukishova, Ultrabright Polarized |
| with high positive or high negative dielectric | acids and 4-alkyloxy-4'-hydroxyazobenzenes - | Nanocrystal Sources: Liquid Crystal/Nanoplasmonic |
| anisotropies enabling formulation mixtures useful for | synthesis and mesogenic studies | Hosts for Displays, Light-Emitting Diodes, |
| various applications | | Microlasers, and Single-Photon Sources for Quantum |
| | | Information |

| 12:00-12:20 | 12:00-12:20 | 12:00-12:20 |
|---|--|---|
| O2. Sharmistha Ghosh , Large Kerr constant observed in BPIII derived from four-ring bent-core liquid crystals | O14. Izabela Korbecka , Esters of carboxylic acids and 4-hexyl-4'-hydroxyazobenzene - synthesis and mesogenic studies | O26. Yang Liu , Alignment of Liquid Crystals on Ion Beam Spurted Graphene Oxide Thin Layers |
| 12:20-12:40 | 12:20-12:40 | 12:20-12:40 |
| O3. O. Georg Mehl , Extending the structural parameters of systems with two nematic phases | O15. Matthias Lehmann , Free Space in Liquid Crystals – Generation, Design and Application | O27. Inge Nys , Surface mediated alignment of chiral nematic liquid crystal structures |
| 12:40-13:00 | 12:40-13:00 | 12:40-13:00 |
| O4. Wojciech Tomczyk , Modulated nematic phases formed by bent-shaped molecules | O16. Michal Kohout , Design and synthesis of novel photosensitive bent-core liquid crystals – structure-property relationship | O28. Susete Fernandes , <i>Cellulose nanocrystal films'</i> new photonic properties: mimicking Plusiotis resplendens cuticule |
| | 13:00-14:00 Lunch | |
| Novel LC Phases, Structure and Phase Behaviour (II) Frederiks Room, Chair: Vladimira Novotna | Design and Synthesis of LC Materials (II) Landau Room, Chair: John Goodby | Photonic, Electro- and Photo-Responsive LC Systems (I) Lebedev Room, Chair: Janusz Parka |
| 14:00-14:30 | 14:00-14:30 | 14:00-14:30 |
| 13. Oriano Francescangeli , Universita Politecnica delle Marche, Italy, <i>Insights into the nematic phase of allaromatic mesogens</i> | 17. Jose Luis Serrano , University of Zaragoza, Spain, Supramolecules vs Macromolecules in Liquid Crystals Organizations | I11. Yuri Panarin , Dublin Institute of Technology, Ireland, <i>Linear Electrooptic Response in non-Chiral</i> Bent-Core Liquid Crystalline Systems |
| 14:30-15:00 14. Cesare Umeton , University of Calabria, Italy, Collective Photo-Heating of Nematic Liquid Crystals doped with Gold Nanoparticles | 14:30-15:00 18. Vladimir Bezborodov , Belarusian State Technological University, Belarus, <i>Supramolecular Chemistry of anisotropic compounds and self- organized processes. Prospects of the development of new materials and devices</i> | 14:30-15:00 I12. Alexei Bobrovsky , Lomonosov Moscow State University, Russia, <i>Photo- and electro-induced orientational processes in LC polymer systems</i> |
| 15:00-15:20 | 15:00-15:20 | 15:00-15:20 |
| O5. Ke Liu , Exotic Chiral Liquid Phase Emerged from Novel Nematic Liquid Crystals | O17. Tristan Hessberger , Co-Flow Microfluidic Synthesis of Liquid Crystalline Actuating Janus Particles | O29. Ellis Parry , Drop-on-Demand Ink-jet Printing of Liquid Crystals and the Fabrication of Tuneable Microlens Arrays |
| 15:20-15:40 | 15:20-15:40 | 15:20-15:40 |
| O6. Eugeny Demikhov , Study of the Free Surface of Liquid Crystals in SmA Phase Using Near-Field Microscope | O18. Pratibha Ramarao , Cellular structures arising from viscoelastic phase separation in binary mixtures of thermotropic liquid crystals | O30. Georgi Dyankov , Surface plasmon excitation assisted by SmC*liquid crystal layer in Otto configuration |
| 15:40-16:00 O7. Giuliano Zanchetta , Poised between order and disorder: coupled relaxation of stress and birefringence in sheared DNA hydrogels | 15:40-16:00 O19. Martin Cigl , Laterally substituted liquid crystals with different polarization of azo linkage | 15:40-16:00 O31. Sergey Svyakhovskiy , Phototunable Photonic Crystals Based on Porous Silicon Filled with Photochromic LC mixture |

| 16:00-16:20 | | |
|--|---|---|
| Coffee break | | |
| Novel LC Phases, Structure and Phase Behaviour (III) Frederiks Room, Chair: OrianoFrancescangeli | Theory and Simulations of LC Systems (I) Landau Room, Chair: Efim Kats | Photonic, Electro- and Photo-Responsive LC Systems (II) Lebedev Room, Chair: Alexei Bobrovsky |
| 16:20-16:50 I5. Vladimira Novotna , Institute of Physics, Czech Republic, <i>Bent-core liquid crystalline dimers</i> | 16:20-16:50 19. Claudio Zannoni , Universita di Bologna, Italy, Computer Simulations of Liquid Crystals at a Surface | 16:20-16:50 I13. Nadezhda Usol'tseva , Ivanovo State University, Russia, <i>Mesogenic "Push–Pull"-type Discotic</i> Compounds and Heterostructures on their Base |
| 16:50-17:10 O8. Shajeth Srigengan , Anomalously low elastic constants measured for a bent-core nematic liquid crystal | 16:50-17:10 O20. Valery Loiko , <i>Transmittance</i> , <i>polarization</i> , <i>and</i> scattering by polymer films composed of liquid crystal droplets with homogeneous and inhomogeneous anchoring | 16:50-17:10 O32. Vladimir Dmitrienko , Unusual Kramers-Kronig relations for the optical chirality of cholesteric blue phase |
| 17:10-17:30 O9. Mario Cifelli , An NMR study of biaxiality and diffusometry in a twist-bend nematic phase | 17:10-17:30 O21. Anton Oskirko , The Influence of Flexoelectric Effect on the Freedericksz Transition in Cholesteric Liquid Crystals | 17:10-17:30 O33. Serena Bolis , Electro-optic properties of a solvent-induced uniform lying helix in cholesteric liquid crystals |
| 17:30-17:50 O10. Valentina Domenici, Molecular properties of a liquid crystal showing Isotropic-Isotropic'-(Columnar)-Cubic phases investigated by means of NMR spectroscopy | 17:30-17:50 O22. Jonathan Selinger , Orientation of Topological Defects in Two-Dimensional Nematic Liquid Crystals | 17:30-17:50 O34. Vitaly Sutormin , Director reorientation induced by electrically controlled anchoring transition in cholesteric layer |
| 17:50-18:10 O11. Maxim Shcherbina , Structure and Phase Behaviour of The Mixtures of Self-Assembling Tapered Compounds with Viologen | 17:50-18:10 O23. Abolghasem Avazpour , The Fourier transform of new direct correlation function of hard sphere fluids | 17:50-18:10 O35. Kristiaan Neyts , Periodic nematic liquid crystal topologies, created by interference-based photoalignment |
| 18:10-18:30 O12. Mateusz Mrukiewicz , Pretransitional effects in isotropic liquids under a bias electric field | 18:10-18:30 O24. Flora Tsourtou , Monte Carlo and Molecular Dynamics simulation of the liquid-crystalline phases of oligothiophenes using a united-atom model | 18:10-18:30 O36. Irina Terenetskaya , Features of provitamin D photochemistry in the H-bonded nematic LC |
| 20:00 | | |

20:00 **Excursion**"Moscow by Night" (Bus Tour around Moscow)

Tuesday 27th June

9:00-9:40 Lecture Theater, Chair: Victor Belyaev

Plenary 2: Noel Clark, University of Colorado, USA, Double-Helical Tiled Chain Structure Of The Twist-Bend Liquid Crystal Phase In CB7CB

9:40-10:20 Lecture Theater, Chair: Victor Belyaev **Awards**

10:20-10:50 Lecture Theater, Chair: Victor Belyaev

114. **John Goodby**, University of York, UK, *Free Volume, Molecular Grains and Self-Organization* (Frederiks Award Lecture)

10:50-11:10

Coffee break

| Confee break | | |
|--|--|---|
| Hybrid and Nanostructured LC Systems (I) Frederiks Room, Chair: Jan Lagerwall | Theory and Simulations of LC Systems (II) Landau Room, Chair: Claudio Zannoni | Photonic, Electro- and Photo-Responsive LC Systems (III) Lebedev Room, Chair: Maxim Gorkunov |
| 11:10-11:40 I18. Giusy Scalia , University of Luxembourg, Luxemburg, <i>Graphene, aligned carbon nanotube</i> sheets and LC: high performance and multifunctionalities | 11:10-11:40 I16. Mikhail Osipov , University of Strathclyde, UK, Orientational order of anisotropic nanoparticles in nematic liquid crystals and diblock copolymers | 11:10-11:40 I17. Vladimir Belyakov , Landau Institute for Theoretical Physics, Russia, <i>Localized Modes in Optics</i> of Photonic Liquid Crystals |
| 11:40-12:00 O37. Christian Legrand , 8CB liquid crystal doped with Sn2P2S6 ferroelectric nanoparticles: dielectric properties in correlation with phase transition temperatures | 11:40-12:00 O46. Michal Ciesla , Modulated Nematic structures and chiral symmetry breaking | 11:40-12:00 O55. Sergey Kharintsev , Voltage-Dependent Near- Field Raman Dichroism of Azobenzene-Functionalized Polymers |
| 12:00-12:20 O38. Wiktor Lewandowski , Dynamic self-assembly of liquid-crystalline quantum dots | 12:00-12:20 047. Go Watanabe , Estimating Helical Twisting Powers of Chiral Metal Complexes Doped in Nematics by Using Molecular Dynamics Simulation | 12:00-12:20 O56. Alexander Zolot'ko , Light-Induced Freedericksz Effect in Nematic Polymer |
| 12:20-12:40 O39. Vitaly Panov , Studies of Sub-micrometer level of self-assembly hierarchy in twist-bend nematic phase by photo-polymerization | 12:20-12:40 O48. Sergei Pestov , Modelling of phase equilibria in liquid crystalline systems | 12:20-12:40 O57. Juergen Schmidtke , Light Emission in Cholesteric Films: Temperature and Angular Dependence |
| 12:40-13:00 O40. Syou-P'heng Do , Reversal of anisotropic optical properties of a gold nanoparticle/smectic liquid crystal composite film through heating treatment | 12:40-13:00 O49. Elena Aksenova , Continuous and Discontinuous Freedericksz Transitions in Cholesteric Liquid Crystals | 12:40-13:00 O58. Alexei Kiselev , Transient Disordering Effects in Light-Induced Reorientation Dynamics of Liquid Crystal Easy Axis on Photoaligned Substrates |

| 13:00-14:30 Lunch | | | |
|---|--|--|--|
| 14:30-16:30 Poster Session 1 | | | |
| | 16:30-16:50 Coffee break | | |
| General Spo | 16:50-17:20 Primakov Room, Chair: Victor Belyaev nsor Lecture. Dong Xue, BOE, China, Open innovation for | future display | |
| Hydrodynamics and Microfluidics of LC Systems (I) Frederiks Room, Chair: Petr Shibaev | Hybrid and Nanostructured LC Systems (II) Landau Room, Chair: Mikhail Osipov | Photonic, Electro- and Photo-Responsive LC Systems (IV) Lebedev Room, Chair: Nelson Tabiryan | |
| 17:20-17:40 O41. Alex Zakharov , Squeezing-out dynamics in free-standing smectic films | 17:20-17:40 O50. Tatyana Shabatina , Hybrid metal-mesogenic nanosystems: nanoordering and self-assembled nanostructures formation | 17:20-17:40 O59. Maxim Pyatnov , Localized states in a metal - cholesteric liquid crystal structure containing a planar defect | |
| 17:40-18:00 O42. Riccardo Barberi , Dynamical Properties of electroconvection in nematics | 17:40-18:00 O51. Sergey Dvinskikh , NMR Study of Surfactant Mesophases at Nanostructured Solid Interfaces | 17:40-18:00 O60. Liana Lucchetti , Non-linear optical measurement of the twist elastic constant in thermotropic and lyotropic chiral nematics | |
| 18:00-18:20 O43. Samuel Sprunt , New results on the motion of smectic films obtained from nanosecond photon correlation spectroscopy | Theory and Simulations of LC Systems (III) Landau Room, Chair: Mikhail Osipov 18:00-18:20 O52. Natalia Chumakova, Orientation distribution functions of spin probes in liquid crystal matrixes – high rank order parameters | 18:00-18:20 O61. Ivan Timofeev, Bisector effect in a twisted- nematic Fabry-Perot cavity | |
| 18:20-18:40 O44. Jean-Christophe Loudet , Colloidal aggregation and dynamics in nematic fluids | 18:20-18:40 O53. Valentina Vasilevskaya, Induced Liquid- Crystalline Ordering in Mixtures of Stiff and Flexible Amphiphilic Macromolecules | 18:20-18:40 O62. Agnes Buka , <i>Tunable optical grating in a bent-core NLC</i> | |
| Hybrid and Nanostructured LC Systems (III) Frederiks Room, Chair: Petr Shibaev | 18:40-19:00 O54. Kostas Daoulas , Thermodynamics of polymer | 18:40-19:00 O63. Pavel Pankin, Flexibly tunable hybrid Tamm- | |
| 18:40-19:00 O45. Michal Wojcik , Recent development on tunable and dynamically controlled liquid-crystalline gold and iron oxide nanoparticles | nematics: comparing free energies in Monte Carlo simulations and Self Consistent Field theory | microcavity state | |

| | Wednesday 28th June | |
|--|---|--|
| 9:00-9:40 Lecture Theater, Chair: Alexander Petrov Plenary 3: Sven Lagerwall , Chalmers University of Technology Göteborg, Sweden, <i>The Rise and Fall of Smectic Liquid Crystals</i> for Commercial Device Applications | | |
| Hybrid and Nanostructured LC Systems (IV) Frederiks Room, Chair: Cesare Umeton | Theory and Simulations of LC Systems (IV) Landau Room, Chair: Serguei Palto | Photonic, Electro- and Photo-Responsive LC Systems (V) Lebedev Room, Chair: Yuri Panarin |
| 9:40-10:10 I15. Ingo Dierking , University of Manchester, UK, Graphene Oxide in Thermotropic and Lyotropic Nematic Liquid Crystal Phases | 9:40-10:10 120. Alberta Ferrarin i, University of Padova, Italy, Molecular diffusion in the twist-bend nematic phase: new features from coupling of bent shape and helical environment | 9:40-10:10 123. Alexey Eremin , Otto von Guericke University Magdeburg, Germany, <i>On the way to active colloids:</i> photo-driven motion in complex liquid crystalline structures |
| 10:10-10:30 O64. Alexander Petrov , Bioflexoelectricity and membrane machines | 10:10-10:40 I21. Efim Kats , Landau Institute for Theoretical Physics, Russia, <i>Non-traditional phase transitions in liquid crystals</i> | 10:10-10:30 O74. Satoshi Aya , Orientational Transition through Photodynamically Reconfigurable Two-Dimensional Anisotropic Fluids |
| Ferroelectric and Ferromagnetic LC Systems (II) Frederiks Room, Chair: JagdishVij 10:30-10:50 | | 10:30-10:50 O75. Maxim Gorkunov , Ultrafast electro-optical switching of nematic on subwavelength metal grating |
| O65. Natalia Tomasovicova , <i>Magnetic properties of ferronematics</i> | | switching of hematic on subwavelength metal grating |
| | 10:50-11:10 Coffee break | |
| Ferroelectric and Ferromagnetic LC Systems (II) Frederiks Room, Chair: JagdishVij | Hydrodynamics and Microfluidics of LC Systems (II) Landau Room, Chair: Ricardo Barberi | Applications of Liquid Crystals (I) Lebedev Room, Chair: Victor Zyryanov |
| 11:10-11:40 129. Evgeny Pozhidaev , Lebedev Physical Institute, Russia, <i>Spatial non-uniformities as a main source of electro-optical effects in ferroelectric liquid crystals</i> | 11:10-11:40 122. Ralf Stannarius , Otto von Guericke University Magdeburg, Germany, <i>Smectic Liquid Crystal Films</i> under Microgravity | 11:10-11:40 I24. Vladimir Chigrinov , Hong Kong University of Science and Technology, China, <i>Liquid crystal display and photonics devices: new trends</i> |
| 11:40-12:00 O66. Igor Kompanets , <i>Electrooptics of Novel Helix-Free FLCs</i> | 11:40-12:00 O70. Lawrence William Honaker , <i>Microfluidic Pressure-Based Interfacial Tensiometry of Liquid</i> | 11:40-12:00 O76. Artur Geivandov , Electrooptics of VA-IPS mode in localized electric field |

Crystalline Systems

| 12:00-12:20 | 12:00-12:20 | 12:00-12:20 |
|--|---|---|
| O67. Yan-Song Zhang, Synthesis and Optical | O71. Alexey Kalugin, On the Role of Surfacelike Elastic | O77. Sophie Jones , Measurement of homeotropic |
| Characterization of Field-Sequential Color Display | Constant for Instability of Shear Flow of Nematic | surface anchoring and slip in liquid crystal displays |
| Using Predesigned Ferroelectric Liquid Crystals | Liquid Crystal | through bistable latching |
| 12:20-12:40 | 12:20-12:40 | 12:20-12:40 |
| O68. Erfan Kadivar , The influence of surface effects on | O72. Erms Pereira, Measuring the saddle-splay elastic | O78. Victor Belyaev, Experimental modeling and |
| the Frederiks transition in the NLC doped with | constant K24 using two optical polarizing microscopy | theoretical simulation of composite systems with |
| ferroelectric nanoparticles | patterns and a system of two equations | inhomogeneous LC alignment for flat panel displays |
| 12:40-13:00 | 12:40-13:00 | 12:40-13:00 |
| O69. Michal Czerwinski, Physicochemical and | O73. Klopp Christoph , Microrheology Of Rod-Shaped | O79. Maria Penelope De Santo, RGB Cholesteric |
| electrooptical studies of AFLC materials with different | Particles In Freely Suspended Liquid Crystal Films | Lasers |
| kind of phase sequences, before and after | | |
| polymerization | | |
| 13:00-14:30 | | |
| Lunch Charles Control of the Control | | |

Excursion or Free Time

| Thursday 29th June | | |
|---|---|--|
| 9:00-9:40 Lecture Theater, Chair: Jose Luis Serrano | | |
| Plenary 4: Maria Godinho , Univ | versidade Nova de Lisboa, Portugal, <i>Cellulose-based liquid</i> | crystals for advanced materials |
| Ferroelectric and Ferromagnetic LC Systems (III) Confined LC Systems and Defects (I) Applications of Liquid Crystals (II) | | |
| Frederiks Room, Chair: Tommaso Bellini | Landau Room, Chair: SamoKralj | Lebedev Room, Chair: Ralf Stannarius |
| 9:40-10:10 | 9:40-10:10 | 9:40-10:10 |
| 125. Jagdish Vij, Trinity College Dublin, Ireland, | 128. Emmanuelle Lacaze, Pierre and Marie Curie | I31. Victor Zyryanov, Kirensky Institute of Physics, |
| Temperature and field induced Subphases other than | University, France, Control of smectic topological | Russia, Prospects of Ionic-Surfactant Operation |
| the conventional ones of 2, 3 and 4 layers periodicity | defects by nematic instabilities for directed assemblies | Method for LC Electro-Optical Cells |
| in chiral antiferroelectric liquid crystals determined by | of nanoparticles | |
| electric field induced birefringence and the microbeam | | |
| Resonant x-ray scattering | | |

| 10:10-10:30 | 10:10-10:30 | 10:10-10:30 |
|---|---|---|
| O80. Alenka Mertelj , Magnetic domains in | O90. Vladimir Rudyak, Orientation structure of | O100. Alexander Dubtsov, Droplets of nematic |
| ferromagnetic chiral liquid crystals | nematic droplets with tilted surface anchoring | mixtures in aqueous environment |
| 10:30-10:50 | 10:30-10:50 | 10:30-10:50 |
| O81. Nerea Sebastian, Complex dynamics of | O91. Elena Pikina, The Role of Dislocations in | O101. Sergey Shvetsov, Structure Switching of |
| ferromagnetic liquid crystals | Nucleation and Growth of self-inclusions in overheated | Nematic Liquid Crystal Droplets Caused by Light |
| | Smectic Films | Excitation of Azopolymer Dopant |
| | 10:50-11:10 Coffee break | |
| | | |
| LC Polymers, Elastomers, Colloids and Gels (I) Frederiks Room, Chair: ValeryShibaev | Confined LC Systems and Defects (II) Landau Room, Chair: AntalJakli | Applications of Liquid Crystals (III) Lebedev Room, Chair: Igor Kompanets |
| 11:10-11:40 | 11:10-11:40 | 11:10-11:40 |
| 126. Jan Lagerwall, University of Luxembourg, | I29. Fumito Araoka, RIKEN Center for Emergent | l32. Janusz Parka , Warsaw University of Technology, |
| Luxemburg, Microfluidic Production of Liquid Crystal | Matter Science, Japan, Reconfigurable Topological | Poland, Metamaterial Structures with Liquid Crystals - |
| Elastomer Actuators with Unconventional Shape | Network in a Nematic Liquid Crystal for Tunable | New Concept for Tunable Devices in THz and GHz |
| 44.40.40.00 | Optical Vortex Generation | Range |
| 11:40-12:00 | 11:40-12:00 | 11:40-12:00 |
| O82. Andraz Resetic , Thermomechanically functionalized rubber | O92. Guillaume Durey , A change in stripes for cholesteric liquid crystal shells via modulated | O102. Doina Manaila-Maximean , <i>Electric and electro-optic characterization of new cellulose electrospun</i> |
| Junetionalized rabbet | anchoring | polymer dispersed liquid crystal |
| 12:00-12:20 | 12:00-12:20 | 12:00-12:20 |
| O83. Devesh Mistry , Mechanical Deformations and | O93. Mayada Selmi, Structures in the meniscus of | O103. Ravindra Kumar Gupta, Perylene based Room |
| Applications of Liquid Crystal Elastomers in Novel | smectic membranes: role of dislocations? | Temperature Columnar Liquid Crystals for Host-Guest |
| Geometries | | OLEDs Application |
| 12:20-12:40 | 12:20-12:40 | 12:20-12:40 |
| 084. Laura Beckett, Melt Processing of UV-Responsive | O94. Maryam Nikkhou, Topological monopoles on | O104. Petr Shibaev , Gas sensitive materials based on |
| Thermoplastic Liquid Crystal Elastomers | micro-helices and micro-ribs in a nematic liquid crystal | liquid crystals |
| 12:40-13:00 | 12:40-13:00 | 12:40-13:00 |
| O85. Federico Lancia, Photo-stiffening of liquid crystal | O95. Uros Jagodic , Fractal Nematic Colloids | O105. Robert Repnik, Frustrated Nematic Structures |
| polymer springs | 12.00.11.00 | and Potential Applications |
| | 13:00-14:00 Lunch | |
| | 14:00-16:00 | |
| | Poster Session 2 | |

| 16:00-16:20 Coffee break | | |
|--|--|--|
| LC Polymers, Elastomers, Colloids and Gels (II) Frederiks Room, Chair: Yuri Evdokimov | Confined LC Systems and Defects (III) Landau Room, Chair: Boris Ostrovskii | Applications of Liquid Crystals (IV) Lebedev Room, Chair: Alexander Zolot'ko |
| 16:20-16:50 I27. Antal Jakli , Kent State University, USA, <i>Assembly driven curvature in chiral nematic liquid crystals</i> | 16:20-16:50 I30. Samo Kralj , University of Maribor, Slovenia, Geometry enforced assemblies of topological defects | 16:20-16:50 133. Jui-Hsiang Liu , National Cheng Kung University, Republic of China (Taiwan), <i>Imprinting of Cholesteric</i> Liquid Crystal Constructions Via UV-Induced Polymerization |
| 16:50-17:10 086. Alexander Ryabchun , Patterned liquid crystal polymer photo-actuators | 16:50-17:10 O96. Pavel Dolganov , Structures Formed by Inclusion Self-Organization in Free Standing Smectic Films | 16:50-17:10 O106. Young-Wan Kwon , Magnetic Properties of Discotic Liquid Crystals with Ordered Structure |
| 17:10-17:30 087. Natalia Boiko , Light-controllable orientation processes in side-chain azobenzene-containing LC copolymers and triblock copolymers | 17:10-17:30 097. Vladimir Dolganov , Orientational Action of Edge Dislocations on Molecular Tilt in Smectic Films | 17:10-17:30 O107. Chao Ping Chen , Dual-View Liquid Crystal Display Using Patterned Etype Polarizer |
| 17:30-17:50 088. Lukas Braun , Microfluidic Synthesis of a Light- driven Liquid Crystalline Elastomer Micropump | 17:30-17:50 O98. Mohammad Mohammadimasoudi , Full alignment of dispersed colloidal nanorods in LC | 17:30-17:50 O108. Ivan Vartaniants , Study of the bond-orientational order by means of angular X-ray cross correlation analysis |
| 17:50-18:10 089. Marta Lavric , Elastocaloric effect in liquid crystal elastomers | 17:50-18:10 99. Tetiana Orlova , Field-induced topological transformations of chiral nematic micro-spheres | 17:50-18:10 O109. Žiga Kos , Cross-talk between topological defects in different fields revealed by nematic microfluidics |

19:00-23:00 Conference Dinner

Friday 30th June

9:00-9:40 Frederiks Room, Chair: Sven Lagerwall

Plenary 5: Serguei Palto, Shubnikov Institute of Crystallography, Russia, Photonic systems based on spatially modulated liquid crystals

9:40-10:20 Frederiks Room, Chair: Sven Lagerwall

134. **Show-An Chen**, National Tsing Hua University, Taiwan, *Progress of Semiconductive Polymers for Opto-Electronic Interconversion and Conductive Coating: Molecular Design and Morphological Control* (RAS Honorary Doctorate Lecture)

| Photonic, Electro- and Photo-Responsive LC Systems (VI) Frederiks Room, Chair: Vladimir Dmitrienko | Confined LC Systems and Defects (IV) Landau Room, Chair: Valery Loiko | Biological, Lyotropic and Chromonic LC systems (I) Lebedev Room, Chair: Nadezhda Usol'tseva |
|--|--|---|
| 10:20-10:40 O110. Grzegorz Pajak , Influence of the external fields on nematic twist–bend phase | 10:20-10:40 0115. Sergei Semenov , Surface Anchoring and Director Distribution in Grandjean-Cano Wedge | 10:20-10:40 0120. Cheng Wu , Directing structure in colloidal liquid crystals with patchy rod-like particles |
| | 10:40-11:00 Coffee break | |
| Photonic, Electro- and Photo-Responsive LC Systems (VII) Frederiks Room, Chair: Vladimir Dmitrienko | Confined LC Systems and Defects (V) Landau Room, Chair: Valery Loiko | Biological, Lyotropic and Chromonic LC systems (II) Lebedev Room, Chair: Nadezhda Usol'tseva |
| 11:00-11:20 O111. Boris Umanskii , Chiral Symmetry Breaking in Liquid Crystals Due to Flexoelectric Effect | 11:00-11:20 O116. Dina Shmeliova , Rheology of liquid crystals confined to porous polymer (PET) film | 11:00-11:20 O121. Baeckkyoung Sung , 2D to 1D Morphology Transition in Self-Assembly of Hexagonally Packed Rod-Like Viruses |
| 11:20-11:40 O112. Mikhael Halaby Macary , Electronic and ionic ambipolar transports in the isotropic, SmA, SmB and Crystalline phases of a liquid crystal | 11:20-11:40 O117. Nikita Solodkov , Liquid Crystal Microdroplets and Confined Systems for Novel Shutters | 11:20-11:40 O122. Tommaso Bellini , Liquid Crystal Formation of Mononucleotide Triphosphates by Base-Pairing and Duplex Stacking in Aqueous Solution |
| 11:40-12:00 O113. Maciej Czajkowski , Chiral ionic liquids for electrically-controlled cholesteric gratings | LC Polymers, Elastomers, Colloids and Gels (III) Landau Room, Chair: Valery Loiko 11:40-12:00 O118.David Ditter, Microtechnical processing of liquid crystal elastomers | 11:40-12:00 O123. Yuri Yevdokimov, DNA Liquid-Crystalline Dispersion Particles as a Platform for Creation of "Rigid" Spatial Structures |
| 12:00-12:20 O114. Jure Aplinc , Liquid crystal gyroids as photonic crystals | 12:00-12:20 O119. Elena Govorun , <i>Self-Assembly of Polymers and Amphiphilic Molecules</i> | 12:00-12:20 O124. Veronika Gdovinova , AFM and SAXS studies of interaction of magnetic nanoparticles with lyotropic liquid crystal |
| 12:20-13:00 Closing Remarks | | |
| 13:00-14:30 Lunch and Depart | | |

Poster Presentations – Tuesday

Novel LC Phases, Structure and Phase Behaviour

| P1 | Jose Carvalho | Orientational order of the NU and NTB phases |
|-----|---------------------------|---|
| | | probed by 1H and 2H NMR spectroscopy |
| P2 | Minko Petrov | Smectic CG phase in hydrogen bonded in dimers |
| | | liquid crystals |
| Р3 | Evgeny Aver`yanov | Change in the polarizability of molecules at the |
| | | phase transitions isotropic liquid – nematic – |
| | | smectic-A – crystal-B in liquid crystal 40.8 |
| P4 | Evgeny Aver`yanov | Change in the spectrum of the polarizability |
| | | density of molecules at the smectic-A – crystal-B |
| | | phase transition |
| P5 | Satoshi Aya | "Inversed" temperature dependence of anchoring |
| | | strength triggered by interfacial wetting |
| P6 | Dmitry Molodenskiy | X-ray diffraction and Calorimetry studies of Liquid |
| | | Crystal with Monotropic Hexatic Phase |
| P7 | Joao Figueirinhas | Orientational order in the NU and NTB phases of |
| | | CBC9CB probed by 1H and 2H NMR spectroscopy |
| P8 | Ivan Zaluzhnyy | Reconstruction of a pair distribution function from |
| | | x ray diffraction patterns in hexatic liquid crystals |
| P9 | Anna Bagdinova | Nanoprofilometry of the Free Surface of Liquid |
| | | Crystals |
| P10 | Amid Ranjkesh | Order parameter and crossover temperature for |
| | Siahkal | low birefringence liquid crystals |
| P11 | Stanislaw Urban | Fluorosubstituted nematogens with high positive |
| | | or high negative dielectric anisotropies enabling |
| | | formulation mixtures useful for various |
| | | applications |
| P12 | Andreja Lesac | Induced smectic phase in binary mixture of twist- |
| | | bent nematogens |
| P13 | Riccardo Barberi | Time modulated order reconstruction in nematic |
| | | liquid crystals |
| P14 | Yelena Vasil`chikova | Mesogens Orientation on Spherical Interfaces |
| P15 | Vladimir Kolosov | Transrotational Crystals Formed in Amorphous |
| | | Films |
| P16 | Hamit Yurtseven | Pippard Relations at Various Temperatures for the |
| | | Cholesteryl Myristate Close to the Cholesteric / |
| | | Smectic A Transition |

Design and Synthesis of LC Materials

| _ | <u>-</u> | |
|-----|----------------------|---|
| P17 | Sofia Torgova | Short Bent-Core Molecules |
| P18 | Ewelina Tomczyk | Light-induced Optical Switching of Coupled Plasmons of Noble Metals Liquid Crystalline Nanoparticles |
| P19 | Nadezhda Usol`tseva | Modeling and Prediction of Columnar Mesomorphism of Star-Shaped Discotic Compounds with Azo- and Oxadiazole Groups |
| P20 | Alessio Riccobono | Ionic liquid crystals based on 1,2,4-triazolium rings |
| P21 | Alexey Bubnov | Design of ferroelectric liquid crystals with keto group possessing sub-micrometer helical pitch length |
| P22 | Robert Deschenaux | The olefin cross-metathesis reaction for the design of liquid crystals |
| P23 | Moritz Dechant | Phthalocyanine Hybrid Star Mesogens – New Materials for Potential Photovoltaic Applications |
| P24 | Maciej Baginski | Dynamic self-assemby of Ag nanoparticles covered with semifluorinated LC ligands |
| P25 | Alexey Bubnov | Chiral photosensitive acrylate monomers for design of smart self-assembling polymers |
| P26 | Alexey Bubnov | Synthesis and self-assembling properties of photosensitive lactic acid derivatives |
| P27 | Gurkan Karanlik | The Chiral Rod-like Mesogens Incorporating Azomethine Units |
| P28 | Matthias Lehmann | Does the Magic Angle promote the formation of nematic liquid crystals? |
| P29 | F. Pinar Caglar-Eyol | The Influence of Linking Groups on the Mesomorphic Behaviour of New Chiral Rod-Like Mesogens |
| P30 | Hiroaki Okamoto | Liquid Crystal Property and Gelation Ability of 4- Semifluoroalkylthiophenyl 4-Alkoxybenzoates |
| P31 | Hale Ocak | The Unsymmetric Bent-Core Compounds Derived From 3,4`-Biphenyldiol with a Chiral Group |
| P32 | Byeong-Cheon Kim | Helical Twisting Power in Mixtures consisting of Achiral Bent-core Molecules and a Cholesteric Liquid Crystallie Molecule |
| P33 | Luma Fritsch | Kinetic studies of hydrolysis of liquid crystalline Schiff bases and its healing through Aza Diels- Alder reaction |
| P34 | Magdalena Zurowska | Synthesis and properties of new liquid crystalline materials in their racemic forms and as (S) and (R) enantiomers |

| P35 | Vaclav Kozmik | Synthesis and mesomorphic behaviour of liquid crystals with 3-chlorobenzo[b]thiophene-2-carboxylic acids as central core |
|-----|---------------------|---|
| P36 | Vera Hamplova | Enantioseparation by liquid chromatography as an effective method for testing the optical purity of chiral liquid crystalline materials |
| P37 | Vladimir Bezborodov | Anisotropic derivatives of ethyl L-lactate |
| P38 | Vladimir Bezborodov | Design of anisotropic materials based on quaternary ammonium salts «Gemini» type |

Photonic, Electro- and Photo-Responsive LC Systems

| P39 | Ivan Simdyankin | Circular Dichroism in Chiral Nematic Liquid |
|-----|---------------------|--|
| | | Crystals |
| P40 | Boris Umanskii | In-plane luminescence of undulated cholesteric |
| | | structures in electric field |
| P41 | Sergey Kharintsev | Photoinduced heating of freestanding |
| | | azobenzene-functionalized polymers studied by |
| | | scanning thermal microscopy |
| P42 | Van Bao Bui | Response Time Improvement in Terahertz Wave |
| | | Phase Shifter Using Nanofiber and Liquid Crystal |
| | | Composite |
| P43 | Vladimir Kesaev | Modulation of unpolarized light in planar aligned |
| | | deformed-helix ferroelectric liquid crystals with |
| | | sub-wavelength helix pitch |
| P44 | Jeon Sung-Wook | Chirality in Achiral Binary Mixture consisting of |
| | | Bent-Core Molecules and Rod-like Molecules |
| P45 | Alexei Kiselev | Light Modulation in Deformed Helix Ferroelectric |
| | | Liquid Crystals and Phases of Mixed Polarization |
| | | States |
| P46 | Ching-Shun Wang | Frequency-dependent electro-optical |
| | | characteristics of BP III liquid crystal |
| P47 | Doina Manaila- | Luminescent and dielectric properties of a series |
| | Maximean | of lanthanide-containing liquid crystals |
| P48 | Vitaly Sutormin | Electrically induced anchoring transitions in |
| | | nematics with various dielectric anisotropy |
| P49 | Yuriy Galyametdinov | The features of nematic phase behavior in |
| | | lanthanidmesogens |
| P50 | Alexander Parshin | Interference of the light passing through LC |
| | | domains formed on the polymer surface |
| P51 | Pavel Dolganov | Fluorescence of Liquid Crystals with Photonic Stop |
| | | Band |

| P52 | Zurab Wardosanidze | Holographic laser structures in dye doped liquid crystal and polymer layers controlled by |
|-----|----------------------|---|
| | | transversally distributed pumping |
| P53 | Cesar Folcia | Evidence of optical absorption enhancement in |
| | | cholesteric liquid crystals at both edges of the |
| | | photonic band gap |
| P54 | Josu Ortega | Optimizing the performance of cholesteric liquid |
| | | crystal lasers: the dependence on the sample |
| | | thickness |
| P55 | Jesus Etxebarria | Measurement of the flexoelectric difference (e1- |
| | | e3) in achiral materials by an extension of the |
| | | crystal rotation method operating in an AC- |
| | | electric-field regime |
| P56 | Dmitry Yakovlev | A theory of light scattering on nematic and |
| | | cholesteric layers with random planar alignment |
| P57 | Andro Chanishvili | Photo-Induced Color Change in an Optically Active |
| | | Cholesteric Liquid Crystal Layer |
| P58 | Tetiana Orlova | Light-induced helix handedness inversion in planar |
| | | cholesteric liquid crystal cells |
| P59 | Galina Zharkova | Electrooptics of PDLC and HPDLC doped Inorganic Oxides Nanoparticles |
| P60 | Denis Chausov | Specter photosensibility of optical anisothropyin |
| | | solid films (vinyl cinnamate) |
| P61 | Mohammad | All-optical tunable chiral nematic liquid crystals |
| | Mohammadimasoudi | |
| P62 | Nune Hakobyan | Investigation of electro-optical characteristics of |
| | | liquid crystal cell with graphene electrodes |
| P63 | JaeHyun Bae | Reflective Liquid-Crystalline Device using Polymer- |
| | | stabilized Simple Cubic Blue Phase (BPII) |
| P64 | Maxim Khazimullin | Impedance Spectroscopy of Liquid Crystals: Effect |
| | | of Blocking Electrodes with Stern Layers |

Theory and Simulations of LC Systems (I)

| P65 | Evgeniia Filimonova | Piezoelectric spontaneous polarization in smectic phases composed of bent molecules |
|-----|---------------------|--|
| P66 | Liliia Elnikova | Monopole Currents and Topological Charges in Active Nematic Liquid Crystals |
| P67 | Edward Gevorkyan | Hierarchy of Spatial Scales and Relaxation Times in Liquid Crystalline Structures |
| P68 | Alexey Kalugin | About Periodical Solution in the Nematic Liquid Crystal Layer |
| P69 | Alexey Kalugin | On the Role of Splay-Bend Frank Constant in the Director Field Distribution of Nematic Droplet |
| P70 | Ke Liu | Theory, Phase Transition and Order Parameter of Point-Group Liquid Crystals |

| P71 | Lyazzat Abulyaissova | Quantum Chemical Modeling of Molecular |
|-----|----------------------|---|
| | | Interactions of Azobenzenes |
| P72 | Alexey Astakhov | Azodendrimer LCD2-8azo6 in liquid crystal 5CB: atomistic and mesoscale computer simulation |
| P73 | Daria Maltseva | Orientationally ordered intraglobular structures in a single flexible-semiflexible copolymer chain: Stochastic Approximation Monte Carlo simulation |
| P74 | Sergei Pestov | Modelling of physical properties of liquid crystal materials for opto-electronics |
| P75 | Katsuhiko Sato | Effect of Coulomb interaction on the formation of ionic liquid crystal phases by molecular dynamics simulation |
| P76 | Katsuhiko Sato | Relationship between thermodynamic scaling and Stokes-Einstein relation in liquid crystal phases |
| P77 | Liliia Elnikova | Sobolev Mapping and Topological Defects in Some Nematic Liquid Crystals |
| P78 | Anastasiia Svanidze | Theoretical and Numerical Investigation of Liquid Crystal Cells with Nonuniform Director Distribution |
| P79 | Valery Loiko | Spectral polarization of transmission radiation by uniaxially stretched polymer-dispersed liquid crystal films with modified interphase surface anchoring |

Poster Presentations – Thursday

Theory and Simulations of LC Systems (II)

| P80 | Alexander | Magnetic Field Induced Biaxial Phases in |
|-----|-------------------|--|
| | Zakhlevnykh | Ferronematic Liquid Crystals |
| P81 | Dmitry Yakovlev | A system for computer modeling of the electrooptical properties of cholesteric diffraction gratings |
| P82 | Stanislaw Urban | Activation volume of selected liquid crystals in the density scaling regime |
| P83 | Alexey Mantsurov | Magnetic Properties of a Liquid-Crystalline Suspension of Anisometric Particles |
| P84 | Dmitriy Makarov | Untwisting of a Cholesteric Structure by Shear Flow and Magnetic Field |
| P85 | Izabela Sliwa | Finite-size effects in thin liquid-crystal systems |
| P86 | Ksenia Kuznetsova | Orientational Transitions in Compensated Ferrocholesterics |
| P87 | Natalia Chumakova | Orientation distribution functions of spin probes in liquid crystal matrixes – high rank order parameters. |

| P88 | Michal Ciesla | Phase behaviour of monolayers composed of |
|-----|---------------|---|
| | | flexible, trimer-like molecule |

LC Polymers, Elastomers, Colloids and Gels

| P89 | Jaroslaw Wrobel | Chiral liquid crystal elastomer modified by nanoparticles |
|------|---------------------|--|
| P90 | Yuriy Galyametdinov | Organized Media Based on Lyotropic Ln-mesogens as Platforms for Delivery and Storage of Biomolecules |
| P91` | Valentina Domenici | New liquid crystalline elastomers investigated by 2H NMR and X-ray diffraction measurements |
| P92 | Tsun-Yi Chen | Advantage on the polymer network on the BPIII |
| P93 | Hajnalka Nadasi | Magneto-optical and magneto-rheological properties of an organo-ferrogel |
| P94 | Miron Bugakov | Composites based on liquid crystalline triblock copolymers and nanocrystals CdSe/ZnS |
| P95 | Nataliya Makarova | Comb-shaped LC Stereoregular Cyclolinear Methylsiloxane Copolymers with Chiral Mesogenic Lactate Side Groups |

Hybrid and Nanostructured LC Systems

| Shirkhan Humbatov | Effect of ferroelectric BaTiO3 particles on |
|--------------------------|--|
| | threshold voltage of smectic A liquid crystal |
| Olga Podyacheva | Synthesis and study of new composites based on |
| | PDLC and different carbon nanomaterials |
| Georgi Hadjichristov | Light-Stimulated Electro-Optics of Azo-Doped |
| | Aerosil/7CB Nanocomposites |
| Georg Mehl | The Design and Investigation of Chiral LC |
| | Nanoparticle Systems |
| Sharmistha Ghosh | Study of ferroelectric nanoparticles/bent-core |
| | nematic liquid crystal blend. |
| Christian Legrand | Harvested ferroelectric Sn2P2S6 nanoparticles for |
| | doping nematic liquid crystal |
| Fedor Podgornov | Modification of Chiroptic Response of Ferroelectric |
| | Liquid Crystal with Localized Surface Plasmon |
| | Resonance of Gold Nanoparticles |
| Fedor Podgornov | Rotational viscosity of ferroelectric liquid crystal/ |
| | gold nanoparticles nanodispersion |
| Margarita | Buildup and quenching of the photoluminescence |
| Kurochkina | quantum dots CdSe/ZnS in the nematic matrix |
| Vladimir Delev | Orientational Transitions in Liquid Crystal |
| | Nanosystems in Electric Field |
| Anatoliy Kaznacheev | Electrooptics of Nematic Liquid Crystals Stabilized |
| | by Polymer and Physical Nets |
| | Olga Podyacheva Georgi Hadjichristov Georg Mehl Sharmistha Ghosh Christian Legrand Fedor Podgornov Fedor Podgornov Margarita Kurochkina Vladimir Delev |

| P107 | Liliya Dobrun | Optical anisotropy of lanthanide-containing liquid |
|------|----------------------|---|
| | | crystal complexes |
| P108 | Liliya Dobrun | Dielectric properties of lanthanide-containing |
| | | liquid crystal complexes |
| P109 | Dmitry Shcherbinin | The ionic impurities in liquid crystals doped with |
| | | nanoparticles |
| P110 | Artur Geivandov | LC alignment on subwavelength metal gratings |
| P111 | Maxim Shcherbina | Self-Assembling of Tapered Dendrons on the Basis |
| | | of 2,3,4- and 3,4,5- |
| | | tris(dodecyloxy)benzenesulfonic Acid |
| P112 | Dmitriy Makarov | Oscillating Regimes of a Ferronematic Structure |
| | | in Elliptically Polarized Rotating Magnetic Field |
| P113 | Danil Petrov | First Order Freedericksz Transition in Liquid Crystal |
| | | Doped with Carbon Nanotubes |
| P114 | Ladislav Fekete | AFM studies of supramolecular self-assembly of |
| | | liquid crystalline molecules |
| P115 | Cristina Cirtoaje | Dynamic behavior of nematic liquid crystal with |
| | | CoFe2O4 ferromagnetic nanoparticles insertion in |
| | | magnetic fields |
| P116 | Cristina Cirtoaje | Dynamic behaviourof nematic liquid crystals |
| | | containing CdSe/ZnS quantum dots in electric field |
| P117 | Cristina Cirtoaje | Electric Freedericksz transition in nematic liquid |
| | | crystals with quantum dots |
| P118 | Yana Gromova | New Chiral Liquid Crystalline Matrices with Silver- |
| | | Nanoparticles and their Adsorption Properties |
| P119 | Elisaveta Luckianova | Optical Propreties of Hybrid Metal-Mesogenic |
| | | "Silver – Thiocholesterol" Nanosystem |
| P120 | Cristina Cirtoaje | Dynamic behavior of nematic liquid crystals with |
| | | multiwalled carbon nanotubes in electric field |
| P121 | Eduardo Soto | Interactions between electropolymerized |
| | Bustamante | methacrylic monomer and TiO2 nanoparticles |

Biological, Lyotropic and Chromonic LC systems

| P122 | Andrey Sonin | Determination of the Diffusion and Permeability |
|------|------------------|---|
| | | Coefficients for Air in Some Synthetic Detergents |
| | | by Means of the Diminishing Bubble Method |
| P123 | Baeckkyoung Sung | Dynamic Interaction between Immune Cell |
| | | Morphology and Motility Parameters on an |
| | | Anisotropic Surface with Micro/Nano-Topography |

Ferroelectric and Ferromagnetic LC Systems

| P124 | Vadim Barbashov | Low birefringent ferroelectric liquid crystals |
|------|---------------------|--|
| P125 | Vitaly Panov | Properties of novel deVries Smectic materials |
| P126 | Fedor Podgornov | Low frequency complex conductivity spectroscopy of liquid crystal cells: evaluation of DC conductivity |
| P127 | Anatoliy Kaznacheev | On the origin of the static hysteresis loop of helix- free ferroelectric smectic C* liquid crystal cell |

Confined LC Systems and Defects

| Ruibin Zhang | Columnar Liquid Crystals in Cylindrical |
|------------------------|---|
| | Confinement |
| Dina Shmeliova | Optical Properties of Grandjean-Cano Wedge and |
| | restoration of Surface Anchoring Potential |
| Sofia Tsalikova | Influence of AC electrical field on LC structure |
| | formed inside pores of PET films |
| Yoko Ishii | Defect Control in Nematic Shells through |
| | Magnetic Fields |
| Oxana Prishchepa | Orienting effect of the ammonium cationic salts |
| | on nematic LC |
| Mikhail Krakhalev | Bipolar configuration with a twisted defect loop in |
| | chiral nematic droplets |
| Dmitry Yakovlev | A microscopic polarization mapping system for |
| | characterization of inhomogeneous liquid crystal |
| | layers |
| Lubor Lejcek | Nucleation of filaments of the TGBA phase in free- |
| | standing films |
| Georgi Hadjichristov | Graphene Assisted Alignment of Nematic Liquid |
| | Crystal 5CB as Studied by Dielectric Spectroscopy |
| Yulay Timirov | Helical disclination in chiral nematic liquid crystal |
| | cylindrical droplets |
| | Dina Shmeliova Sofia Tsalikova Yoko Ishii Oxana Prishchepa Mikhail Krakhalev Dmitry Yakovlev Lubor Lejcek Georgi Hadjichristov |

Hydrodynamics and Microfluidics of LC Systems

| P138 | Edward Gevorkyan | Acoustic Investigation of Orientation Dynamics of Liquid Crystals in Conical Magnetic Field |
|------|--------------------|---|
| P139 | Chul Gyu Jhun | Monodispersed Liquid Crystal Droplets for |
| | | Flexible Display Applications |
| P140 | Serguei Yablonskii | Acoustic Streaming in Two-Dimensional Freely |
| | | Suspended Smectic Liquid Crystal Film |

Applications of Liquid Crystals

| P141 | Kevin Raimondeau | Performance improvement of a low viscosity nematic liquid crystal dichroic dye mixture by addition of a chiral dopant |
|------|----------------------|---|
| P142 | Young Cheol Chae | Optically isotropic liquid crystal using |
| | | Polyimide/IPS film for high flwibility |
| P143 | Nune Hakobyan | Circular Dichroism Meter Based on Polarization |
| | | Diffractive Waveplate |
| P144 | Igor Kompanets | Suppressing the Speckle-Noise Using a Cell with |
| | | the Helix-Free Ferroelectric LC |
| P145 | Stanislaw Urban | Thermal, structural and electro-optical properties |
| | | of new azomethine doped with TiO2 for |
| | | photovoltaic application |
| P146 | Valeri Lapanik | New liquid crystal materials for MM-band wave |
| | | antenna device applications |
| P147 | Chie-Tong Kuo | Tunable-focus Fresnel lens in liquid-crystal cell |
| | | with Sagnac patterning interferometer |
| P148 | Ethan Jull | Tunable, switchable liquid crystal laser filter. |
| P149 | Galina Zharkova | Panoramic Sensors of Shear Stress, Temperature |
| | | and Pressure on the Base of Liquid Crystals |
| P150 | Guram Chilaya | Cholesteric Liquid Crystals for Holographic |
| | | Applications |
| P151 | Alexander | Spectral polarization of transmission radiation by |
| | Konkolovich | uniaxial stretching polymer dispersed liquid |
| | | crystal films with modified interphase surface |
| | | anchoring |
| P152 | Victor Belyaev | Liquid crystal microlenses with different boundary |
| | | conditions |
| P153 | Wing-Kit Choi | Fast-response VA-FFS liquid crystal mode using 3D |
| | | electrode design |
| P154 | Dik-Lung Ma | The development of cyclometalated iridium(III) |
| | | complexes with liquid crystal ligands and their |
| | | applications in luminescent sensing |
| P155 | Erms Pereira | Functionalizing liquid crystals for phononic, |
| | | biophotonic and multiphysics devices |
| P156 | Žiga Kos | Cross-talk between topological defects in different |
| | | fields revealed by nematic microfluidics |

Excursions

Moscow by Night (Bus Tour around Moscow)

Monday, June 26, 20:00









This excursion is to get you acquainted with the city of Moscow and its most important and beautiful sights. Anyway you can't miss the city center - Red Square with the Lenin Mausoleum. During this excursion you will see Vasily Blazhenny Temple, Tverskaya Street, Cathedral of Christ the Saviour, Novodevichiy monastery, New Arbat, Lenin's Hills, which is considered to be the highest point of Moscow where you will enjoy a great panorama of the city. You will pass along the Kutuzov Street and visit the Victory Park with its fountains and churches.

In the evening Moscow plunges into the sea of light and fire. Show-windows are shining, restaurants and night clubs invite the visitors to have a party and the objects not so remarkable at the afternoon transform in the beams of a night illumination. The life in the city goes on. At night Moscow looks different and mysterious.

The Earth Science Museum at Moscow State University

Tuesday, June 27, 14:00-16:00 or Thursday, June 29, 14:00-16:00

The Earth Science Museum is located at 24-31 floors of the main building of Moscow State University. The participants will have an opportunity to enter the balcony to see the beautiful panoramic view of Moscow city. Museum tells about the structure and origin of the Earth, endogenous and exogenous processes. The rock formation, minerals, natural resources and evolution of life are also demonstrated in the museum.

Excursion to the Kremlin with a visit to Assumption Cathedral

Wednesday, June 28, 14:00









The Kremlin is the symbol of Russia and the main tourist attraction of Moscow. Once the residence of Tsars and Patriarchs, today it is one of the biggest architectural ensembles in the world, which is included into the UNESCO list. During this excursion you will see the chambers and cathedrals inside the fortress. You will visit some of the churches in the area of Kremlin, the ancient street of Moscow - the Spasskaya street, walk by the Tsar Bell and the Tsar Cannon and see the most ancient building in Moscow - The Assumption Cathedral.

Excursion to Novodevichy Convent

Wednesday, June 28, 14:00



Excursion to one of the Moscow's most attractive monasteries. Novodevichy, or "New Maidens Convent" in English, was founded in a suburb of Moscow in 1524 to commemorate the liberation of Smolensk from the Lithuanians in 1514. The convent is rather like a miniature Kremlin by its architectural style. Many of the city's monasteries served as retirement homes for royal and noble women, who either chose or were forced to take the veil and remain in the safety of the convents for the rest of their lives. The Tsars and the supreme feudal nobility showed a great interest in the Novodevichy convent, rendering it all possible financial and legal support. The convent has also been a burial place for famous persons in Russian history.

Useful Information

Registration

Registration will start on Sunday, June 25, at 16:00.

Registration desk will also be open from Monday to Friday between 8:00 and the end of oral presentations.

Oral Presentations

Oral presentations should be prepared in the following file formats: ppt, pptx or pdf. They should be uploaded to the computer in the corresponding room before the session starts. If the presenter prefers using his/her personal computer, this is his/her personal responsibility to check that it is in full operation.

Presentation length:

Invited talk 30 minutes including questions

Standard oral 20 minutes including questions

Poster Presentations

Each poster should **not** be larger than A0 portrait (841 x 1189mm). Posters P1-P79 should be hung up on Monday morning and removed on Tuesday evening. Posters P80-P158 should be hung up on Wednesday morning and removed on Friday before lunch.

Internet

Free internet access will be available in the Conference Rooms.

Conference banquet

The conference banquet will be on Thursday evening on the board of Kolesovship that will sail along the Moskva River from 19.00 till 23.00.

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