

PROGRAM OF CLC 2021

SUNDAY 17.10.2021

17.00 – 20.00	Registration at the conference desk
18.00 – 20.00	Supper
20.00 – 22.00	Get-together party

MONDAY 18.10.2021

7.30 – 9.00	Breakfast
	Session 1
10.00 – 10.15	Opening Remarks
10.15 – 11.00	Plenary lecture (1.1) <i>Sub-micrometer and non-periodic photo-alignment for complex 3D liquid crystal structures</i> <u>Kristiaan Neyts</u> , Inge Nys, Brecht Berteloot, Migle Stebryte, Xianyu Xue, Sunqian Liu, Jeroen Beeckman
11.00 – 11.30	Invited talk (1.2) <i>Liquid Crystals in Space</i> R. Stannarius, Otto von Guericke University Magdeburg
11.30 – 12.00	Coffee break
	Session 1A
12.00 – 12.20	Oral presentation (1.3) <i>New Lenses based on vortex structures</i> M.G. de Blas, J. Pereiro, X. Quintana, <u>M.A. Geday</u> , J. M. Otón, M. Caño-García
12.20 – 12.40	Oral presentation (1.4) <i>Tunable axicons based on spiral LC configurations</i> <u>J. Pereiro</u> , M.G. de Blas, M. Caño-García, M.A. Geday, X. Quintana, J.M. Otón
12.40 – 13.00	Oral presentation (1.5) <i>Substrate alignment of patterned photoalignment substrates to achieve 3D liquid crystal structures</i> <u>B. Berteloot</u> , I. Nys, X. Xue, J. Beeckman, K. Neyts
13.00 – 14.30	Lunch


	Session 2
15.00 – 15.45	Plenary Lecture (2.1) <i>Sewable and machine-washable threads of cholesteric liquid crystal elastomer with broad-band mechanochromic response</i> Jan P. F. Lagerwall, University of Luxemburg
15.45 – 16.15	Invited talk (2.2) <i>Optofluidic photonic structures based on nanoparticles-doped liquid crystals</i> Piotr Lesiak, Miłosz Chychłowski, Daniel Budaszewski, Sławomir Ertman, Piotr Sobotka, Karolina Bednarska, <u>Tomasz R. Woliński</u>
16.15 – 16.35	Oral presentation (2.3) <i>Diffraction optical elements implemented with liquid-crystal spatial light modulators with extended phase modulation</i> <u>I. Moreno</u> , M. del Mar Sánchez-López, J. A. Davis, D. M. Cottrell
16.35 – 17.00	Coffee break
	Session 2A
17.00 – 17.20	Oral presentation (2.4) <i>Liquid crystal tunable reflectarrays for 5G and 6G</i> <u>X. Quintana</u> , M.A. Geday, J.M. Otón, M. Caño-García, M.G. de Blas, G. Pérez-Palomino, E. Carrasco, J.A. Encinar
17.20 – 17.40	Oral presentation (2.5) <i>Optical characterization of a large aperture modal liquid crystal lens</i> <u>N. Bennis</u> , F. Algorri, T. Jankowski, P. Morawiak, O. Strzeżysz
17.40 – 18.00	Oral presentation (2.6) <i>A novel approach for the creation of electrically-controlled LC:PDMS microstructures</i> <u>K. A. Rutkowska</u> , P. Sobotka, S. Baczyński, M. Grom, A. Dybko, K. Marchlewicz, M. Juchniewicz,
18.00 – 19.30	Supper
19.30 – 21.00	Poster session A

TUESDAY 19.10.2021

7.30 – 9.00	Breakfast
	Session 3
9.30 – 10.15	<p>Plenary Lecture (3.1) <i>Twist again, twisting time is here...</i> D. Pocięcha, N. Vaupotic, M. Majewska, E. Cruickshank, R. Walker, J. M. D. Storey, C. T. Imrie, C. Wang, <u>E. Górecka</u></p>
10.15 – 10.45	<p>Invited talk (3.2) <i>New architectures of liquid crystalline radicals derived from the benzo[e][1,2,4]triazin-4-yl: in search of multifunctional organic paramagnetic materials</i> P. Kaszyński</p>
10.45 – 11.10	Coffee break
	Session 3A
11.10 – 11.40	<p>Invited talk (3.3) <i>Chiral chromatography for analysis of liquid crystals and their precursors</i> <u>P. Vaňkátová</u>, A. Kubičková, K. Kalíková</p>
11.40 – 12.00	<p>Oral presentation (3.4) <i>Do we (be)live in a simulation? I don't know, but we can use them in LC research</i> <u>B. Loska</u>, A. Kocot, Y. Arakawa, K. Merkel</p>
12.00 – 12.20	<p>Oral presentation (3.5) <i>Infrared and dielectric study of the orientational order of the nematic twist-bend dimers</i> <u>K. Merkel</u>, G. Mehl, Y. Arakawa, A. Kocot,</p>
12.20 – 12.40	<p>Oral presentation (3.6) <i>Elastic properties of novel modulated nematic phases - the review of various models</i> M. Szmigielski</p>
12.40 – 13.00	<p>Oral presentation (3.7) <i>Active hyperbolic metamaterials with dye doped nematic liquid crystals for enhancement spontaneous emission engineering</i> <u>K. Sielezin</u>, R. Kowrdziej, A. Pianelli, M. Dudek, U. Chodorow, R. Mazur, B. Jankiewicz, J. Parka</p>
13.00 – 14.30	Lunch

	Session 4
15.00 – 15.45	Plenary lecture (4.1) <i>Beyond visible – the shielding of molecules by heavier atoms</i> P. Kula, Military University of Technology
15.45 – 16.15	Invited talk (4.2) <i>Deuterated liquid crystals – highly transparent optical medium for near infrared applications</i> J. Herman
16.15 – 16.35	Oral presentation (4.3) <i>Liquid Crystalline properties of alkyl (E)-4-((4-alkyloxyphenyl)diazenyl)benzoates</i> Z. Galewski
16.35 – 17.00	Coffee break
	Session 4A
17.00 – 17.20	Oral presentation (4.4) <i>Phase situation, spectral and thermo-optical properties of (E)-4-((4-alkyloxyphenyl)diazenyl)phenyl alkanoates</i> <u>M. Piwowarczyk</u> , E. Juszyńska-Gałązka, A. Drzewicz, N. Osiecka-Drewniak, M. Gałązka and Z. Galewski
17.20 – 17.40	Oral presentation (4.5) <i>The coupling between tilt angle and spontaneous polarization in smectic liquid crystalline materials</i> <u>K. Gaładyk</u> , W. Piecek, M. Czerwiński
17.40 – 18.00	Oral presentation (4.6) <i>Induction of the smectic A phase in mixtures of liquid crystals with positive and negative dielectric anisotropy</i> <u>P. Zieja</u> , M. Tykarska
18.00 – 20.30	Beer dinner

WEDNESDAY 20.10.2021

7.30 – 9.00	Breakfast
8.30 – 15.30	Conference excursion – mountain walk: Kopa – Śnieżka – Karpacz
15.30 – 16.30	Branch
18.00 – 19.30	Meeting of the Polish Liquid Crystal Society 
19.30 – 20.30	Supper
20.30 – 21.30	Poster Session B

THURSDAY 21.10.2021

7.30 – 9.00	Breakfast
	Session 5
9.30 – 10.15	Plenary Lecture (5.1) <i>Microfabrication of tunable LC photonic components</i> <u>M. Caño-García</u> , F.J. Gordo, M. García de Blas, L.F. Paz, J. Pereiro, J.M. Otón, M.A. Geday, X. Quintana
10.15 – 10.45	Invited talk (5.2) <i>Design, Synthesis and Applications of Photosensitive Bent-Core Liquid Crystals</i> M. Šmahel, V. Novotná, S. Shruthi, D. Pocięcha, G. Hegde, <u>M. Kohout</u>
10.45 – 11.10	Coffee break
	Session 5A
11.10 – 11.40	Invited talk (5.3) <i>Investigation of Reversible Photochemical Switching of Diarylethene-Based Derivatives in Liquid Crystalline State</i> Hsiu-Hui Chen
11.40 – 12.00	Oral presentation (5.4) <i>Structured ultraviolet light and its applications in liquid crystal photonics</i> <u>S. Ertman</u> , J. Różycka, N. Wasilewska, M. Kwaśny, K. Rutkowska
12.00 – 12.20	Oral presentation (5.5) <i>Liquid crystalline cellulose printing for custom-tailored photonics</i> Guang Chu

12.20 – 12.40	Oral presentation (5.6) <i>Light-driven microfluidics with soft smart materials</i> <u>K. Dradrach</u> , Hao Zeng, A. Priimagi, P. Wasylczyk
12.40 – 13.00	Oral presentation (5.7) <i>A Memristor Nematic Liquid Crystal</i> <u>Z. Sefrioui</u> , N. M. Nemes , and N. Bennis
13.00 – 14.30	Lunch
	Session 6
15.00 – 15.45	Plenary lecture (6.1) <i>Synthetic Hamiltonians in liquid crystal microcavities: how light in the soft matter can mimic the solid state</i> J. Szczytko, University of Warsaw
15.45 – 16.15	Invited talk (6.2) <i>Modification of FLC properties by doping with Fe₂O₃ nanoparticles</i> S. Lalik, O. Stefańczyk, D. Dardas, N. Górka, Shin-ichi Ohkoshi and <u>M. Marzec</u>
16.15 – 16.35	Oral presentation (6.3) <i>Rashba-Dresselhaus and tunable lasing at room temperature in dye-filled liquid crystal optical microcavities</i> <u>Marcin Muszyński</u> , Mateusz Król, Katarzyna Rechcińska, Przemysław Oliwa, Mateusz Kędziora, Rafał Mazur, Przemysław Morawiak, Wiktor Piecek, Przemysław Kula, Pavlos G. Lagoudakis, Barbara Piętka, Jacek Szczytko
16.35 – 17.00	Coffee break
	Session 6A
17.00 – 17.20	Oral presentation (6.4) <i>Magnetic Fréedericksz transition in nematic liquid crystals doped with anisometric nanoparticles</i> <u>N. Tomasovicova</u> , V. Lacková, S. Burylov, D. Petrov, K. Zakutanská, N. Burylova, A. Voroshilov, P. Kopčanský
17.20 – 17.40	Oral presentation (6.5) <i>Nanoparticle's size, surfactant and concentration effects on properties of ferronematics</i> <u>K. Zakutanska</u> , V. Lackova, S. Burylov, N. Burylova, V. Skosar, A. Juríková, D. Petrov, P. Kopcansky, N. Tomasovicova
17.40 – 18.00	Oral presentation (6.6) <i>Control and organization of active nematic bundled microtubules via submersed micro-patterned substrates</i> <u>D. A. Khaladj</u> and L. S. Hirst
20.00 – 24.00	Gala dinner

FRIDAY 22.10.2021

7.30 – 9.00	Breakfast
	Session 7
9.30 – 10.15	Plenary Lecture (7.1) <i>Nematics induced by bend deformations</i> L. Longa, Jagiellonian University
10.15 – 10.45	Invited talk (7.2) <i>Effect of different surfactants on relaxation dynamics in confined liquid crystals</i> S. Róžański
10.45 – 11.10	Coffee break
	Session 7A
11.10 – 11.40	Invited talk (7.3) <i>Random lasing in chiral liquid crystals</i> A. Iljin
11.40 – 12.00	Oral presentation (7.4) <i>Numerical method of obtaining physical properties from liquid crystal texture</i> S. Pieprzyk, Tetiana Yevchenko, Arkadiusz C. Brańka
12.00 – 12.20	Oral presentation (7.5) <i>Optical Tamm States in a Metallic Thin Film Adjacent to Left- and Right-Handed Cholesterics</i> V. Yu. Reshetnyak, I.P. Pinkevych, T. J. Bunning, M. E. McConney, and D. R. Evans
12.20 – 12.40	Oral presentation (7.6) <i>Kink- and double π-forms of distortions in hollow capillaries</i> A. Zakharov, I. Śliwa
12.40 – 13.00	Closing ceremony
13.00 – 14.30	Lunch

POSTER SESSION A

P01	<i>Formation of liquid crystals mesophases dopped with polymers. Relative of concentration of ingredients, stability and the properties of the mesophase</i> <u>N. Bielejewska</u>
P02	<i>Self-assembling behavior of smart nanocomposite system: Ferroelectric liquid crystal confined by stretched porous polyethylene film</i> <u>A. Bubnov</u> , A. Bobrovsky, L. Fekete, I. Rychetský, V. Hamplová
P03	<i>Photo-active self-assembling symmetric dimers with two azo moieties possessing the ethyl and methyl lateral substituents</i> <u>A. Bubnov</u> , M. Cigl, A. Ruzsová, Z. Böhmová, P. Tomášková, V. Hamplová
P04	<i>Design and synthesis of liquid-crystalline dimers exhibiting B4 phase</i> <u>Tereza Černá</u> , Michal Kohout, Vladimíra Novotná
P05	<i>Synthesis of Non-chiral and Chiral Pentaphenylbenzene Mesogenic Discotic Derivatives</i> <u>Chu-Ti Cheng</u> , Hsiu-Hui Chen
P06	<i>The effect of spacer and alkyl tail lengths in side-chain azobenzene LC polymers</i> <u>Martin Cigl</u> , A.Yu., Bobrovsky, V.P., Shibaev, V. Hamplová, P.V. Dorovatovskii, B.I. Ostrovskii, A. Bubnov
P07	<i>The influence of conditions of creating polymer network on helical parameters of antiferroelectric liquid crystal</i> <u>Michał Czerwiński</u> , Jakub Herman, Ewelina Dmochowska, Ewa Topyła, Przemysław Kula
P08	<i>Separation and stabilization of homogeneous region in complex liquid crystal systems by controlled laser photobleaching</i> <u>Dorota Dardas</u> , Tetiana Yevchenko
P09	<i>Self-assembling behaviour of chiral calamitic monoacrylates targeted for polymer stabilisation of polar smectic phases in chiral liquid crystals</i> <u>Ewelina Dmochowska</u> , Jakub Herman, Michał Czerwiński, Sergei Stulov, Alexej Bubnov, Przemysław Kula
P10	<i>2D Beam Steering based on Liquid Crystals Phase Gratings</i> <u>M.G. de Blas</u> , S.V. Andreu, M.A. Geday, X. Quintana, M. Caño-García, J.M. Otón

P11	<i>Low refractive index fluorinated liquid crystal materials</i> <u>P. Harmata</u> , J. Herman and P. Kula
P12	<i>Liquid crystalline electrolytes for ion battery applications</i> Jannick Guschlbauer, <u>Litwin Jacob</u> , Edyta Rzeszotarska and Piotr Kaszyński
P13	<i>Chalcogenophene based liquid crystalline emitters for tunable optical microcavities</i> <u>Jakub Karcz</u> , Natan Rychłowicz, Jacek Szczytko, Przemysław Kula
P14	<i>Dielectric and optical study of the twist-bend structure deformation of liquid crystal dimers</i> <u>Antoni Kocot</u> , Katarzyna Merkel, Georg Mehl , Yuki Arakawa
P15	<i>Polymeric Network Thin Films Based Discotic Mesogen as Electrochemical Gas Sensing</i> <u>Han-Wen Kuo</u> , Hsiu-Hui Chen
P16	<i>Laterally substituted biphenyl benzoates – synthesis and mesomorphic properties</i> <u>Tomas Landovsky</u> , Martin Cigl, František Hampl, Jiří Svoboda, Natalia Podoliak, Sergei Stulov, Michal Kohout, Vladimíra Novotná
P17	<i>Dragonfly shaped mesogenic anthracene and chrysene derivatives – synthesis and properties</i> <u>A. Majchrowicz</u> and P. Kula
P18	<i>Ion-doped fluorinated smectics for intimate windows and bistable displays application</i> <u>R. Mazur</u> , W. Piecek, D. Węglowska, A Kalbarczyk, N. Bennis, R. Dąbrowski, P. Morawiak
P19	<i>Micro-grating structures for liquid crystal phase devices</i> José Francisco Algorri, <u>Przemysław Morawiak</u> , Dimitrios C. Zografopoulos, Nouredine Bennis, Anna Spadlo, Luis Rodríguez-Cobo, Leszek R. Jaroszewicz, José Manuel Sánchez-Pena, José Manuel López-Higuera, Urszula Chodorow
P20	<i>Ionic conductivity of the fluorinated smectic mixture</i> <u>M. Mrukiewicz</u> , P. Perkowski, M. Urbańska, D. Węglowska, W. Piecek
P21	<i>Polar umbrella-shaped structures in columnar phases of subphthalocyanine mesogens</i> <u>A. Murad</u> , M. Feneberg, A. Eremin, M. Baumann, M. Lehmann

POSTER SESSION B

P22	<p><i>Mueller matrix polarimeter for the characterization of liquid-crystal devices: application to a twisted nematic modulator</i></p> <p><u>Esther Nabadda</u>, Guadalupe López-Morales, David Marco, María del Mar Sánchez-López and Ignacio Moreno</p>
P23	<p><i>Nematics interfacing photosensitive substrates: experiments on photoalignment</i></p> <p><u>Ameer Nassrah</u>, Tibor Tóth-Katona</p>
P24	<p><i>Enhanced electric field tunability and thermal stability of photonic crystal fibers filled with gold nanoparticles-doped cubic blue phases liquid crystals</i></p> <p><u>Kamil Orzechowski</u>, Wiktor Lewandowski, Olga Strzeżysz, Martyna Tupikowska, Tomasz R. Woliński</p>
P25	<p><i>Dye-doped monocrystalline free-standing blue phase liquid crystals: lattice orientation control and optical tomography</i></p> <p><u>Eva Otón</u>, Marcin Muszyński, Przemysław Morawiak, Mateusz Król, Barbara Piętka, Jacek Szczytko, Wiktor Piecek</p>
P27	<p><i>Microprocessor-based electronic drivers for LC addressing</i></p> <p>J. Pereiro, P. de la Rosa, M.G. de Blas, M. Caño-García, M.A. Geday, J.M. Otón, X. Quintana</p>
P27	<p><i>Nematic liquid crystals as the materials for RC filters</i></p> <p><u>Paweł Perkowski</u></p>
P28	<p><i>Deuterium labeled 4-alkyl-4'-isothiocyanato-[1,1':4',1'']terphenyls – synthesis and photochemical stability</i></p> <p><u>Marta Pytlarczyk</u>, Jakub Herman, Yuki Arakawa, Hideto Tsuji, Przemysław Kula</p>
P29	<p><i>Liquid crystal cells with high resolution images recorded with structured light</i></p> <p><u>Julia Różycka</u>, Natalia Wasilewska, Michał Kwaśny and Sławomir Ertman</p>
P30	<p><i>Look on the bright side: emission tuning in liquid crystals</i></p> <p><u>Natan Rychłowiec</u>, Jakub Karcz, Przemysław Kula</p>
P31	<p><i>Dynamic liquid-crystal retardance functions for the spatial control of depolarization</i></p> <p><u>María del Mar Sánchez-López</u>, David Marco, Guadalupe López-Morales, Ángel Lizana, Ignacio Moreno and Juan Campos</p>

P32	<i>Simulations of spectra and some physical properties for selected homologous series of nematic liquid crystals at IR and THz range</i> <u>Karol Sielezin</u> , Rafał Kowrdziej, Alessandro Pianelli, Marek Olifierczuk, Janusz Parka
P33	<i>Biopolymer for vertical alignment of liquid crystals</i> <u>A.Spadło</u> , N. Bennis, R. Węglowski, D. Węglowska, P. Kobylański and K. Czupryński
P34	<i>Influence of polycyclic aromatic compounds with photoluminescent properties on the nematic phase stability</i> <u>Olga Strzeżysz</u> , M. Szarek, J. Herman, D. Węglowska, P. Harmata, E. Dmochowska, P. Kula
P35	<i>Nonlinear dielectric effect in smectic E liquid crystals under pressure</i> <u>Szymon Starzonek</u> , Joanna Łoś, Aleksandra Drozd-Rzoska, Krzysztof Czupryński, Sylwester J. Rzoska
P36	<i>Ferroelectric liquid crystal admixed with magnetic nanoparticles</i> <u>Sergei Stulov</u> , Věra Hamplová, Vladimíra Novotná, and Jana Vejpravová
P37	<i>Induction of the smectic A phase in mixtures of nematic compounds with different polarity</i> Paulina Zieja, <u>Marzena Tykarska</u>
P38	<i>Synthesis and characterization of new chiral smectic liquid crystals</i> <u>Magdalena Urbańska</u> , Michał Czerwiński
P39	<i>Light-emitting high birefringence chlorinated bistolanes</i> <u>Dorota Węglowska</u> , Przemysław Kula
P40	<i>Mesomorphic characteristics of a highly tilted FLC material 4'-(3-pentan oyloxyprop-1-oxy) biphenyl-4-yl (S)-(+)-4-(1-methylheptyloxy) benzoate</i> <u>Dorota Węglowska</u> , Amir Iqbal, Avneesh Mishra, Roman Dąbrowski, Ravindra Dhar
P41	<i>Photoalignment of nematic liquid crystal by using Digital Micromirror Devices</i> <u>R. Węglowski</u> , J. Konieczkowska, E. Schab-Balcerzak, D. Węglowska, W. Piecek
P42	<i>Kerr constant and modified Gerber's formula of liquid crystal blue phases</i> <u>Tetiana Yevchenko</u> , Dorota Dardas, Wojciech Kuczyński and Arkadiusz C. Brańka