

17th EUROPEAN CONFERENCE ON LIQUID CRYSTALS

MONDAY, JUNE 2, 2025

MONDAY 17:20 - 20:00	POSTER SESSION I
1	Design and Synthesis of Liquid Crystals
P 01	Helical network phases of bent-shaped polycatenar dimers <u>M. Alaasar</u> , Y. Cao, Y. Zaho, T. Tan, F. Liu
P 02	Synthesis and characterization of high birefringence liquid crystals containing thieno[3,2-b]thiophene core <u>M. Bakiera</u> , J. Herman, J. Karcz, J. Dziaduszek, P. Perkowski, P. Harmata
P 03	The effect of lateral substitution far from the chiral centre for photo-active self-assembling materials <u>A. Bubnov</u> , M. Cigl, S. Mironov, T. Suchánek, J. Marhoul, P. Tomášková, Z. Böhmová, V. Hamplová
P 04	Influence of lateral substituents and long terminal flexible chains on the mesomorphic properties of seven-ring symmetrical bent-shaped derivatives <u>I. Carlescu</u> , R. Avram, A. M. Gheorghita, D. Zaharia, A. Simion, I. Berladean, C. I. Ciobanu, G. Lisa
P 05	Novel liquid crystalline fluorene and fluorenone MIDA boronates: influence of alkyl vs alkoxy side chains on the mesomorphic properties <u>F. Feucht</u> , C. Schilling, A. Zens, S. Laschat
P 06	Synthesis, chiral separation and physical properties of the cinnamic acid derivatives exhibiting short-pitch cholesteric and TGB phases T. Jurkovičová, P. Vaňkátová, M. Cigl, V. Novotná, <u>V. Hamplová</u> , D. Pociecha, N. Podoliak
P 07	Chiral photo-active liquid crystalline symmetric dimers laterally substituted by ethyl and methyl groups <u>V. Hamplová</u> , M. Cigl, Z. Böhmová, P. Tomášková, A. Ruzsová, S. Mironov, A. Bubnov
P 08	Fluorophores as guests in crowded star-shaped host mesogens <u>F. N. Chalamukath</u> , T. Bauer, S. Maier, M. Lehmann
P 09	Synthesis and properties of liquid crystalline organic semiconductors based on metalloporphyrin <u>J.-W. Ka</u> , M. Choi
P 10	Synthesis and characterization of non-symmetrical dimers exhibiting twist-bend nematic phase <u>J. Karcz</u> , J. Herman, P. Kula
P 11	First azulene de Vries materials, a smectic re-entrance phase and further tailoring of liquid crystalline self-assembly <u>B. Lutz</u> , F. Schulz, B. Wank, D. Rück, D. Batman, P. Nacke, W. Frey, S. Laschat
P 12	Pyridine scaffold in focus: towards designing ionic and zwitterionic bent-core liquid crystals <u>A. Mašulović</u> , M. B. Ros
P 13	New self-organised benzo[b]thiophene-based materials for GHz applications <u>A. Mieczkowska</u> , J. Herman, N. Rychłowiec, M. Zajac, P. Harmata
P 14	Effect of the lactate group number and lateral substitution by methyl group on mesomorphic and photosensitive behaviour for chiral liquid crystals <u>S. Mironov</u> , M. Sanginov, J. Knop, M. Cigl, P. Tomášková, Z. Böhmová, V. Hamplová, A. Bubnov
P 15	Chiral, photosensitive and luminescent ligands for magnetic nanoparticles <u>M. Novák</u> , M. Šmahel, M. Kohout
P 16	Synthesis, mesomorphic and gelation property of semi-fluoroalkylated compounds containing a phenyl benzoate core <u>H. Okamoto</u> , K. Matsumoto, Y. Suzuki, S. Mutaguchi, Y. Morita
P 17	Synthesis of deuterated chiral and luminescent dopants for materials with circularly polarized luminescent properties <u>J. Poláchová</u> , V. Domenici, F. Zinna, M. Cifelli, A. Bubnov, J. Svoboda, M. Kohout
P 18	Liquid crystalline self-assembly of azulene–thiophene hybrids and their applications as OFET materials <u>D. Rück</u> , F. Schulz, S. Takamaru, T. Bens, J. Hanna, B. Sarkar, S. Laschat, H. Iino
P 19	Supercritical fluid chromatography for separation of ferroelectric nematics <u>P. Vaňkátová</u> , M. Cigl, K. Kalíková

P 20	Highly-polar nematic materials from the group of cyano-dieters containing 1,3-dioxane unit N. Kominek, J. <u>Żukowska</u> , D. Pocięcha, J. Herman, P. Kula
P 21	Thermotropic liquid crystalline phase transitions of the alkyl homologues of ether-linked alkoxyazobenzene-triphenylene mesogens A. Oka, K. Kitagawa, H. Sanada, M. Yamamoto, K. Kuwamura, N. Ohta, T. Kawai, K. Uchida, Y. <u>Shimizu</u>
2	Polar and Ferroelectric Nematics
P 22	Hybrid colloids based on ferroelectric nematics and barium hexaferrite magnetic nanoplatelets P. <u>Golub</u> , V. Novotná, V. Hamplová, Z. Böhmová, N. Podoliak, M. Cigl, T. Landovský, N. Podoliak, J. Trucl, D. Lisjak
P 23	Colossal dielectric permittivity and superparaelectricity in phenyl pyrimidine-based liquid crystals W. <u>Jiang</u> , Yu. P. Panarin, N. Yadav, M. Sahai, Y. Tang, X. Zeng, O. E. Panarina, J. K. Vij, G. H. Mehl
P 24	Halogen substituents in design of new compounds exhibiting ferroelectric nematic phase M. <u>Cigl</u> , V. Novotná, P. Golub, N. Podoliak, D. Repčák
P 25	On the study of half-integer topological defects in the ferroelectric nematic phase with the help of photoalignment patterning B. de Vries, M. Li, K. Neyts, I. Nys
P 26	Design and synthesis of polar LC materials: On the way to ferroelectric nematic mesophase A. <u>Pospíšil</u> , M. Kohout, J. Poláchová, D. Fardis, V. Novotná, N. Podoliak
P 27	Synthesis and characterisation of highly fluorinated ferroelectric nematogens S. Ramsay, M. Juodka, J. Spieß, C. T. Imrie, J. M. D. Storey, R. Walker
P 28	Ferroelectric nematic liquid crystal mixtures for enhanced liquid crystal device performance S. <u>Sannj</u> , A. Saxena, N. Collings, R. J. Mandle, H. F. Gleeson, M. Nagaraj
P 29	What is the role of local electric fields in shaping defects in ferroelectric nematics? A. <u>Sterle</u> , N. Sebastián, N. Osterman, R. Mandle, C. J. Gibb, J. Hobbs, A. Mertelj
P 30	Mechanical and magneto-optical behaviour of a room-temperature nematic phase with polar symmetry E. E. <u>Zavvou</u> , A. Jarosik, H. Nádas, C. A. Krontiras, P. K. Karahaliou, A. Eremin
P 31	Vibration dynamics of ferroelectric fibres in oscillating electric fields A. <u>Jarosik</u> , H. Nádas, A. Eremin
P 32	Intrinsic relaxor-like nature in single-component polar nematics F. <u>Ye</u> , S. Aya, M. Huang
P 33	Experimental and theoretical explorations of relaxor ferroelectric fluids Y. <u>Zou</u> , X. Zhang, M. Huang, S. Aya
P 34	Liquid crystals as new tunable sources of entangled photon pairs A. <u>Kavčič</u> , V. Sultanov, E. Kokkinakis, N. Sebastian, M. V. Chekhova, M. Humar
P 35	Controlled photon entanglement from FNLCs S. <u>Klopčič</u> , A. Kavčič, N. Sebastián, M. Humar
5	Photonic, Electro- and Photo-Responsive Systems
P 36	Directional laser emission from 3D Blue Phase photonic crystals E. Oton, M. Muszyński, K. Cyprych, P. Kapuściński, P. <u>Morawiak</u> , M. Popławska, J. Myśliwiec, J. Szczytko, W. Piecek
P 37	Whispering gallery modes as a tool to probe phase transitions A. <u>Neogi</u> , I. Muševič
P 38	Reusable UVA/UVB radiation dosimeter based on the spiropyran-doped liquid crystal polymer film G. <u>Petriašvili</u> , A. Chanishvili, K. Chubinidze, N. Ponjavidze, E. Kalandia, T. Makharadze, A. Petriašvili
P 39	Change in inner structure of azo-doped 8OCB liquid crystal droplets by blue light irradiation D. <u>Sato</u> , Y. Sumino, T. Yamamoto, I. Muševič, Y. Takenaka
P 40	Azobenzene-enhanced photocontrol of B4 morphologies in bent-core liquid crystals B. <u>Sezgin</u> , T. Hegmann
P 41	Third-order nonlinear optical phenomena in photo-active chiral liquid crystalline materials A. <u>Szukalski</u> , K. Kamiński, K. Cyprych, J. Myśliwiec, S. Mironov, M. Cigl, V. Hamplová, A. Bubnov

P 42	Carbon nanotube-reinforced photonic cholesteric liquid crystals for enhanced calcium ion detection A. Singh , B. P. Singh, S.-J. Hwang
P 43	Synergistic effects of various dimensional nanomaterials on PDLCs for energy-efficient smart windows Y.-Ch. Xiao , B. P. Singh, S.-J. Hwang
P 44	Smectic and soap bubble optofluidic lasers Z. Korenjak , M. Humar
10	Hybrid and Nanostructured Systems
P 45	Polarity and charge transport in liquid crystals formed by self-assembled umbrella-shaped subphthalocyanine mesogens: Doping vs. covalent binding of fullerenes M. Baumann, M. Lehmann, A. Eremin
P 46	Novel swimming behavior of microrod under electric field S. J. Selvin Robert , M. Ravnik, I. Muševič
P 47	Hybrid doping of nematic liquid crystals with methyl red dye and silver nanowires: A route to enhanced multifunctional properties S. Sharma , R. Manohar

TUESDAY, JUNE 3, 2025

TUESDAY 17:20 - 20:00	POSTER SESSION II
3	Mesophase Structure and Behaviour
P 48	High-resolution AC calorimetric and optical study along the N-NS-NF phase sequence of RM734 liquid crystal M. Lavrič, N. Sebastian, C.J. Gibb, R.J. Mandle, A. Mertelj, N. Novak, G. Cordoyiannis
P 49	Polarization switching in ferroelectric smectic phases, orthogonal and tilted K. Kwiatkowska , G. J. Strachan, E. Górecka, D. Pociecha
P 50	Spontaneous helix formation in polar smectic C phase E. Gorecka, M. Majewska , L. Fekete, J. Karcz, J. Żukowska, J. Herman, P. Kula, D. Pociecha
P 51	The twist-bend smectic phases: On the role of lateral substituents A. Pearson , G. Strachan, D. Pociecha, E. Gorecka, J. M. D. Storey, C. T. Imrie, R. Walker
P 52	Investigation of spontaneous polarization-tilt angle coupling as a method for determining dominant interactions in polar smectics W. Piecek
P 53	The effect of dipolar associations on the static dielectric response of cyanobiphenyl-based liquid crystal dimers E. E. Zavvou , W. Jiang, C. Welch, G. H. Mehl, C. A. Krontiras, A. G. Vanakaras, P. K. Karahaliou
4	Complex and Chiral Phases
P 54	Tunable self-assembled structures in cholesteric liquid crystal under external fields V. Lackova , D. Petrov, D. V. Makarov, K. Konyova, N. Tomasovicova, P. Kopcansky
P 55	Comparative study of the optical and dielectric anisotropy of laterally fluorinated liquid crystalline oligomers with two nematic phases E. E. Zavvou , C. Welch, G. H. Mehl, A. G. Vanakaras, P. K. Karahaliou
P 56	Colloidal rods with saddle-splay symmetry self-assemble into exotic liquid crystal phases R. Subert , M. Dijkstra
6	Light-emitting Materials and Light-steering Systems
P 57	Laser emission from a large area of a cholesteric liquid crystal layer A. Chanishvili , K. Chubinidze, G. Petriashvili, N. Ponjavidze, Z. Wardosanidze, Ts. Zurabishvili

P 58	Synthesis and spectral non-linear optical properties of chosen BODIPY dyes in liquid crystals and thin films <u>P. Leśniak</u> , N. Rychłowiec, A. Szukalska, P. Wójcicka, A. Szukalski, J. Myśliwiec, P. Kula
P 59	MR-TADF liquid crystals: Towards self assembling host-guest mixtures showing narrowband emission from the mesophase <u>F. Müller</u> , J. A. Knöller, T. Matulaitis, J. M. dos Santos, A. Kumar Gupta, E. Zysman-Colman, S. Laschat
P 60	Cone-shaped emission from a dye-doped cholesteric liquid crystal layer <u>N. Ponjavidze</u> , A. Chanishvili, K. Chubinidze, G. Petriashvili, Z. Wardosanidze, Ts. Zurabishvili
P 61	Rod-like organic emitters in liquid crystals: Synthesis and characterization of novel dyes for luminescent LC materials <u>N. Rychłowiec</u> , P. Kula
P 62	From liquids to light: SPLASH device for tunable optical amplification and white light emission <u>A. Szukalska</u> , M. Czajkowski, J. Cybińska, J. Myśliwiec
P 63	Bis-tiophenes: Newly synthesized materials as laser dyes in liquid crystalline matrices <u>P. Wójcicka</u> , N. Rychłowiec, J. Karcz, P. Kula, A. Szukalska, J. Myśliwiec
7	Theory and Simulation of Liquid Crystals
P 64	Bent-shaped mesogens can give rise to a splay-twist modulated nematic phase G. Barbero, L. R. Evangelista, <u>I. Lelidis</u>
9	Polymers, Elastomers, Colloids and Gels
P 65	Design, self-assembling and structural behaviour of multifunctional selectively deuterated reactive mesogens targeted for photo-active liquid crystalline elastomers M. Cigl, S. Mironov, O. Pasolini, D. Pociecha, A. Rešetič, V. Hamplova, <u>V. Domenici</u> , A. Bubnov
P 66	Polymer composites with Aligned MXene nanosheets for enhanced humidity-driven actuation <u>S. Jeon</u> , C. Lee, D. K. Yoon
P 67	Liquid crystal elastomers: Lowering actuation temperature through network optimization H. Kim, <u>D. S. Kim</u>
P 68	Structural properties of graphene oxide colloidal nematics <u>M. Lanciotti</u> , M. Hegde, T. Dingemans, H. Adenusi, F. Vita, O. Francescangeli
P 69	Stress-driven mechanochromic behaviors in cholesteric liquid crystal elastomer films embedded in PDMS <u>H. J. Lee</u> , S.-U. Kim, H. S. Oh, J. Hyun, Y.-S. Kim, D. S. Kim
P 70	Ferronematic in electric and magnetic fields: coupling mechanisms <u>D. Miakota</u> , V. Lacková, K. Kónyová, M. Jarošová, A. Juríková, P. Kopčanský, N. Tomašovičová
P 71	Shape change of liquid crystal elastomer films containing dual frequency liquid crystalline groups <u>M. Sawada</u> , K. Kaneko, K. Kaneko, T. Hanasaki
P 72	Synergistic effects of doping nanoparticles of conjugating polymer on electrical conduction properties of nematic liquid crystal <u>D. Verma</u> , A. Sinha
12	Polar and Ferroelectric Nematics - Confined Systems, Topology and Defects
P 73	Nanoconfinement-induced orientation change of azobenzene-based liquid crystalline block co-oligomer <u>J. Kim</u> , Y. Kang, H. Park, D.-G. Kang, Ch. Lee, D. K. Yoon
P 74	Dynamic engineering of photonic potentials through size tuning of toron photonic traps in liquid crystal microcavities <u>J. Mędrzycka</u> , M. Muszyński, P. Kapuściński, P. Oliwa, E. Oton, P. Morawiak, R. Mazur, W. Piecek, B. Piętko, J. Szczytko
P 75	Fluctuating dynamics and structure of torons in confined chiral liquid crystals <u>I. Nurlu</u> , G. Poy, M. Nobili
13	Hydrodynamics and Microfluids
P 76	Dynamics of swimming algae in soap films <u>A. Jarosik</u> , A. Eremin
P 77	Magnetic dynamics in ferromagnetic liquid crystal emulsions <u>C. Klopp</u> , H. Nádasí, D. Lisjak, A. Eremin

14	Applications of Liquid Crystals
P 78	Optimization of Via-Hole Processing for Performance Improvement of Liquid Crystal-Based Antenna I.-J. Bae, H. Yang, S. H. Yoon, M. Kim
P 79	Functional supramolecular materials based on bent-core amphiphiles N. Cruz-Navarro , C. Auría-Soro, A. Concellón, M. B. Ros
P 80	Fast-response liquid crystal device with three-electrode design and improved transmission for virtual reality (VR) applications W.-K. Choi , B.-K. Tseng, Ch.-H. Tung
P 81	A novel 3D hexagonal electrode design for blue phase liquid crystal display W.-K. Choi , Y.-Ch. Liao
P 82	Thermo and mechanical optical sensors based on cholesteric liquid crystals in cellulosic matrices A. Bracco, J.P. Santos, A.P. Almeida, J.P. Canejo, M.H. Godinho, A.P. Duarte, P. L. Almeida
P 83	Fabrication of homogeneous liquid crystal phase modulators O. Niculescu , T.D. Wilkinson
P 84	Hyperspectral imaging device based on temperature tunable cholesteric liquid crystal mirror G. Petriashvili , A. Chanishvili, K. Chubinidze, N. Ponjavidze
P 85	Unravelling the dynamics of liquid crystal-protein interactions: A multi-technique investigation for biosensing A. Satya , A. Bhattacharjee
P 86	An innovative cholesteric liquid crystal biosensor for label-free, high-sensitivity detection based on haze measurement T.-H. Peng , M.-J. Lee, W. Lee
P 87	Liquid crystal materials for water harvesting inspired in ingenious nature's designs F. Sousa, J. Malta, M. Silva, J. Santos, P. L. Almeida, M. H. Godinho, A. P. C. Almeida
P 88	Flexoelectric liquid crystal diffraction gratings for beam steering technologies Q. Han , S. J. Elston, W. Kamal, L. Xue, S. M. Morris
P 89	Impact of nanoparticle doping on the electrocaloric performance of ferroelectric liquid crystals E. Bsaibess, D. P. Singh , A. Slimani, B. Duponchel, S. Longuemart, V. Laux-Le Guyon
15	Other Topics Related to Liquid Crystals
P 90	Multilayer photo-aligned thin-film structure for polarizing photonics using water-soluble alignment material F. Abbasi , J. Beeckman, K. Neyts, I. Nys
P 91	Dynamic processes in oriented nematic liquid crystal systems during phase transitions L. Bezhanova
P 92	Attraction and coalescence of water droplets on porous and microstructured liquid-crystal-infused surfaces F. Ferš , X. Wang, U. Tkalec