



INSTITUTE OF PHYSICS

National academy of Sciences of Ukraine



POLSKA AKADEMIA NAUK

Program of Second Ukrainian-Polish Seminar
“New Horizons of Liquid Crystal and Colloid Science”
May 18-21, 2017

May 18, Thursday		
Science Day in Institute of Physics (10.00-12.30)		
13.00-13.05	Opening H. Sobczuk Director of Polish Academy of Sciences Scientific Center in Kyiv	
13.05-13.35	Chairman H. Sobczuk	M. Tykarska Military University of Technology, Warsaw, Poland <i>Miscibility studies and their use in LC mixture preparation</i>
13.40-14.10		A. Morozovska¹, E. Eliseev^{1,2}, N. Morozovsky¹ and S. Kalinin^{1,3} ¹ Institute of Physics, NASU, Kyiv, Ukraine ² Institute for Problems of Materials Science, NASU, Kyiv, Ukraine ³ Center for Nanophase Materials Science, Oak Ridge, Tennessee 37831, USA <i>Ferroionic states in ferroelectric thin films</i>
14.15-14.45		L. Lisetski Institute for Scintillation Materials of STC "Institute for Single Crystals" NASU, Kharkiv, Ukraine <i>Dispersions of carbon nanotubes in nematic and cholesteric mixtures containing photosensitive components</i>
14.50-15.20		V. Reshetnyak Taras Shevchenko National University of Kyiv, Ukraine <i>Tuning surface plasmons in graphene with liquid crystal</i>
15.20-15.40	coffee break	
15.40-16.10	Chairman L. Lisetski	J. Parka, U. Chodorow Military University of Technology, Warszawa, Poland <i>Liquid Crystal Phase Shifter for THz radiation</i>
16.15-16.45		I. Pinkevych Taras Shevchenko National University of Kyiv, Ukraine <i>Two-beam energy exchange in hybrid photorefractive cholesteric cell with photosensitive molecules</i>

16.50-17.20		<p>S. Chernyshuk and O.Tovkach Institute of Physics, Kyiv, Ukraine</p> <p><i>Colloidal particles as elastic triads in nematic liquid crystals</i></p>
17.20-17.40		<p>S. Bugaychuk¹, G. Klimusheva¹, D. Zhulai¹, A. Iljin¹, V. Handziuk²</p> <p>¹ Institute of Physics, National Academy of Sciences, Kiev, Ukraine ² Peter Grunberg Institute Bioelectronics (PGI-8), Juelich, Germany</p> <p><i>Nonlinear optical properties in new liquid crystal structures: nanocomposites of ionic LC with metal nanoparticles, and hybrid LC cells with photonic crystals</i></p>
	May 19, Friday	
10.30-11.00	Chairman J. Parka	<p>Z. Raszewski, W. Piecek, J. Parka, Z. Jaroszewicz, E. Miszczyk, P. Kuka Military University of Technology, Warszawa, Poland</p> <p><i>Near-Infrared Liquid Crystal Shutter for Breath analyser Application</i></p>
11.05-11.35		<p>O. Yaroshuk Institute of Physics, Kyiv, Ukraine</p> <p><i>Liquid crystal photoalignment: from discovery to industrial life</i></p>
11.40-12.10		<p>S. Nastyshyn¹, I. Bolesta¹, E. Lychkovskyy², P. Vankevych³, M. Yakovlev³, B. Pansu⁴, Yu. Nastyshyn³</p> <p>1 Ivan Franko National University of Lviv, 50 Dragomanov St, Lviv, 79005, Ukraine 2 Lviv Danylo Halytsky National Medical University, 69 Pekarska st., Lviv, 79010, Ukraine 3 Hetman Petro Sahaidachny National Army Academy, 32, Heroes of Maidan st., Lviv, Ukraine 4 Laboratoire de Physique des Solides, UMR 8502, Univ. Paris-Sud, 91405, Orsay, France</p> <p><i>Ray tracing matrix approach for refractive index mismatch aberrations in confocal microscopy</i></p>
12.15-12.30		<p>K. Sielezin, J. Parka Military University of Technology, Warszawa, Poland</p> <p><i>03 - 10.0 THz Spectra for Chosen Liquid Crystal Molecules - Simulation and Physical Properties</i></p>
12.35-13.05		<p>V. Pergamenshchik Institute of Physics, NASU, Kyiv, Ukraine</p> <p><i>Aggregation of dye molecules in a NLC and strong aggregate-induced torque on the nematic director</i></p>
13.15-14.45	Lunch	
15.00-17.30	Tour of the laboratories of Institute of Physics	