

# 13<sup>th</sup> INTERNATIONAL CONFERENCE ON ORGANIC ELECTRONICS – 2017 (ICOE-2017)

## Organizers

Division of Chemistry and Material Science of Russian Academy of Sciences

Enikolopov Institute of Synthetic Polymer Materials of Russian Academy of Sciences (ISPM RAS)

Lomonosov Moscow State University (MSU)

Printed Electronics Technologies Limited Liability Company (Printeltech LLC)

Russian Science Foundation (RSF)

Federal Agency of Scientific Organizations (FASO RF)

## Scientific program

- 1) *Interfaces in organic electronics: understanding and controlling order/disorder and defects*
- 2) *Organic materials challenges in synthesis, design and processing*
- 3) *Organic biosensors for health and environment*
- 4) *Implantable organic electronics and active interfaces to living matter*
- 5) *Hybrid and nanocomposite materials for organic electronics*
- 6) *Organic electronics for energy applications*
- 7) *Organic spintronics*
- 8) *Integration, multifunctionality, flexible and large area technology*
- 9) *Perspectives of organic electronics*



Saint Petersburg, Russia  
Hotel Azimut  
2017

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Dmitry Paraschuk – *co-chairman*  
Alexey Sizov – *conference secretary*  
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Victoria Chekusova

## **Service agent**

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# The 13<sup>th</sup> International Conference on Organic Electronics – 2017 Time Schedule

	<b>Sunday</b> <i>June 4th</i>	<b>Monday</b> <i>June 5th</i>	<b>Tuesday</b> <i>June 6th</i>	<b>Wednesday</b> <i>June 7th</i>	<b>Thursday</b> <i>June 8th</i>			
9:00		Henning Sirringhaus	Iain McCulloch	Fabio Biscarini	Barbara Stadlober	9:00		
		Vitaly Podzorov	Christian Müller	Luisa Torsi	Koen Vandewal			
10:00		Aram Amassian	Christoph Brabec	Annalisa Bonfiglio	Pavel Troshin	10:00		
11:00		<b>Coffee-break</b>						
12:00		Oral talks 1	Oral talks 3	Oral talks 5	Oral talks 6	12:00		
13:00	<b>Registration</b>	<b>Lunch</b>			<b>Closing ceremony</b>	13:00		
14:00		Natalie Stingelin	Martin Weis	Hermitage Museum Tour (optional)	Peterhof Excursion (optional)	14:00		
		Paul Meredith	Dago de Leeuw					
15:00		Oral talks 2	Oral talks 4					
16:00						Satellite event (optional)		
17:00								
18:00		<b>Welcome-party</b>	<b>Coffee-break</b> Poster session 1	<b>Coffee-break</b> Poster session 2			18:00	
19:00		<b>St. Petersburg Sightseeing Tour</b>	Leisure time	Leisure time		<b>Conference dinner</b>	19:00	
20:00								
21:00								21:00
22:00			White-Night Boat Tour (optional)			22:00		

## Sunday, June 4<sup>th</sup>

13:00 – 17:30	<b>Registration</b>
17:30 – 19:00	<b>Welcome-party</b>
19:00 – 22:00	<b>Saint Petersburg sightseeing tour</b>

## Monday, June 5<sup>th</sup>

	Chair: <i>Sergey Ponomarenko</i>
9:00 – 9:30	<b>I-1.</b> <i>Henning Sirringhaus.</i> Charge and spin transport physics of organic semiconductors
9:30 – 10:00	<b>I-2.</b> <i>Vitaly Podzorov.</i> Artifact-free determination of the intrinsic charge carrier mobility in high-performance organic field-effect transistors
10:00 – 10:30	<b>I-3.</b> <i>Aram Amassian.</i> Programming the crystallization and microstructure of organic semiconductors
10:30 – 11:00	<b>Coffee-break</b>
	<b>Oral talks 1.</b> Chair: <i>Vitaly Podzorov</i>
11:00 – 11:15	<b>O-1.</b> <i>Tim Leydecker.</i> Polymer blends for precise control of electron and hole transport
11:15 – 11:30	<b>O-2.</b> <i>Kamal Asadi.</i> Graphene ferroelectric field-effect transistors: up-scaling and practicality
11:30 – 11:45	<b>O-3.</b> <i>Thomas Mosciatti.</i> Asymmetric injection in OTFTs via direct SAMs functionalization of electrodes
11:45 – 12:00	<b>O-4.</b> <i>Dario Natali.</i> On the role of metal/semiconductor interfaces and of the density of states in the modeling of organic thin film transistors
12:00 – 12:15	<b>O-5.</b> <i>Muhammad Rizwan Khan Niazi.</i> Two-step nucleation in solution-printed organic semiconductors
12:15 – 12:30	<b>O-6.</b> <i>Thomas Schmaltz.</i> Aligned and region-selective deposition of organic nanowires for thin film transistor applications
12:30 – 12:45	<b>O-7.</b> <i>Rocco Peter Fornari.</i> How many parameters actually affect the mobility of conjugated polymers?
12:45 – 13:00	<b>O-8.</b> <i>Antonio Valletta.</i> Fully printed OTFTs: fabrication and large signal modeling
13:00 – 14:00	<b>Lunch</b>

	Chair: <i>Aram Amassian</i>
14:00 – 14:30	<b>I-4.</b> <i>Natalie Stingelin</i> . Semiconducting: insulating polymer blends – processing, structure and opportunities for the organic electronics field
14:30 – 15:00	<b>I-5.</b> <i>Paul Meredith</i> . Narrow and broadband high detectivity organic semiconductor photodetectors
	<b>Oral talks 2.</b>
15:00 – 15:15	<b>O-9.</b> <i>Laura Basirico</i> . X-Ray imaging with flexible direct organic detectors
15:15 – 15:30	<b>O-10.</b> <i>Le Yang</i> . Efficient triplet exciton fusion in molecularly doped polymer light-emitting diodes
15:30 – 15:45	<b>O-11.</b> <i>Matthew Dyson</i> . Unravelling the effect of side chain environment in conjugated polymers blends
15:45 – 16:00	<b>O-12.</b> <i>Elham Khodabakhshi</i> . Boosting OLED efficiency by blending: spectroscopic identification of reduced charge trapping
16:00 – 16:15	<b>O-13.</b> <i>Elisa Collado-Fregoso</i> . Charge separation and recombination in intermixed and “semi-planar” interfaces: PBTT-T/fullerene blends and solar devices
16:15 – 16:30	<b>O-14.</b> <i>Bernd Ebner</i> . Beyond the Shockley equation: reliable parameter extraction from low-mobility organic solar cells
16:30 – 19:00	<b>Coffee-break</b> <b>Poster session 1 (P-1 – P-50)</b>

## Tuesday, June 6<sup>th</sup>

	Chair: <i>Koen Vandewal</i>
9:00 – 9:30	<b>I-6.</b> <i>Iain McCulloch</i> . Designing high performance organic electronic materials
9:30 – 10:00	<b>I-7.</b> <i>Christian Muller</i> . Interplay between processing and doping of organic semiconductors
10:00 – 10:30	<b>I-8.</b> <i>Christoph Brabec</i> . Physics of non-fullerene acceptors for organic solar cells
10:30 – 11:00	<b>Coffee-break</b>
	<b>Oral talks 3.</b> Chair: <i>Christoph Brabec</i>
11:00 – 11:15	<b>O-15.</b> <i>Ferdinand Melkonyan</i> . New conjugated connections and substituents for enabling efficient organic materials for photovoltaic and transistor applications

11:15 – 11:30	<b>O-16.</b> <i>Soo Young Park</i> . Designing novel heteroarene molecules for organic electronics: Indolo[3,2-b]indole (IDID) and 1,5-Naphthyridine-2,6-dione (NTD) derivatives
11:30 – 11:45	<b>O-17.</b> <i>Dmitri Godovsky</i> . Conductive polyelectrolytes as a basis for a new generation of electronic devices
11:45 – 12:00	<b>O-18.</b> <i>Yuriy Luponosov</i> . Donor-acceptor molecules with electron-withdrawing phenyldicyanovinyl groups for organic solar cells
12:00 – 12:15	<b>O-19.</b> <i>Maxim Kazantsev</i> . Highly-emissive furan/phenylene co-oligomer single crystals
12:15 – 12:30	<b>O-20.</b> <i>Alexander Shokurov</i> . Structure and complex formation properties of hemicyanine chromoionophore monolayers for sensor applications
12:30 – 12:45	<b>O-21.</b> <i>Francesca Di Maria</i> . Poly(3-hexylthiophene) nanoparticles containing thiophene-S,S-dioxide: tuning of dimensions, optical and redox properties and charge separation under illumination
12:45 – 13:00	<b>O-22.</b> <i>Jens Drechsel</i> . Vacuum Deposition of Perovskite Layers – A New Tool Concept
13:00 – 14:00	<b>Lunch</b>
	Chair: <i>Iain McCulloch</i>
14:00 – 14:30	<b>I-9.</b> <i>Martin Weis</i> . Making polymers conductive by secondary doping
14:30 – 15:00	<b>I-10.</b> <i>Dago de Leeuw</i> . Energy harvesting with PVDF and piezoelectric ceramic-polymer composites
	<b>Oral talks 4.</b>
15:00 – 15:15	<b>O-23.</b> <i>Alexei Komolov</i> . The interface charge transfer and the energy level alignment upon vacuum deposition of the ultra-thin conjugated molecular layers onto solid surfaces
15:15 – 15:30	<b>O-24.</b> <i>Celso de Melo</i> . Flexible self-standing organic supercapacitors of carbon nanotubes/polypyrrole based on eggshell membranes
15:30 – 15:45	<b>O-25.</b> <i>Mari-Cruz Garcia-Gutierrez</i> . Nanopatterning conjugated polymers by laser: influence on electrical properties
15:45 – 16:00	<b>O-26.</b> <i>Dmitry Paraschuk</i> . Self-doping controls luminescence in thiophene-phenylene single crystals
16:00 – 16:15	<b>O-27.</b> <i>Anastasia Glushkova</i> . Thiophene-based single crystal monolayers for organic field-effect devices
16:15 – 16:30	<b>O-28.</b> <i>Oleg Borshchev</i> . Nanostructured organosilicon luminophores for optoelectronics

16:30 – 19:00	<b>Coffee-break</b> <b>Poster session 2 (P-51 – P-127)</b>
19:00 – 22:00	<b>Leisure time</b>
22:00 – 1:00	<b>White-night boat tour (optional)</b>

## Wednesday, June 7<sup>th</sup>

	Chair: <i>Martin Weis</i>
9:00 – 9:30	<b>I-11.</b> <i>Fabio Biscarini</i> . Biorecognition and transduction in ultrasensitive label-free organic biosensors
9:30 – 10:00	<b>I-12.</b> <i>Luisa Torsi</i> . Label-free protein electronic detection with an electrolyte-gated organic field-effect transistor-based immunosensor
10:00 – 10:30	<b>I-13.</b> <i>Annalisa Bonfiglio</i> . Organic Sensing and Biosensing Platforms
10:30 – 11:00	<b>Coffee-break</b>
	<b>Oral talks 5.</b> Chair: <i>Luisa Torsi</i>
11:00 – 11:15	<b>O-29.</b> <i>Beatrice Fraboni</i> . All PEDOT:PSS organic electrochemical transistor for the selective detection of redox-active molecules in biological fluids
11:15 – 11:30	<b>O-30.</b> <i>Laura Ferlauto</i> . Injectable, self-opening, and freestanding retinal prosthesis for fighting blindness
11:30 – 11:45	<b>O-31.</b> <i>Elena Zucchetti</i> . Characterization of organic semiconducting nanoparticles and their <i>in vitro</i> application
11:45 – 12:00	<b>O-32.</b> <i>Andreas Petritz</i> . Single-substrate integrated active-matrix pyro-sensor
12:00 – 12:15	<b>O-33.</b> <i>Alessandro Pezzella</i> . Eumelanin-based electrodes for ITO-free devices in bioelectronics and nanomedicine
12:15 – 12:30	<b>O-34.</b> <i>Andrey Aleshin</i> . Bacterial cellulose modified with conducting and light-emitting polymers for organic biosensors applications
12:30 – 12:45	<b>O-35.</b> <i>Sergey Ponomarenko</i> . Highly sensitive gas sensors based on LS OFETs
12:45 – 13:00	<b>O-36.</b> <i>Alexander Yakimansky</i> . Chromophore-Containing Non-Linearly Optically Active and Light-Emitting Polymers
13:00 – 14:00	<b>Lunch</b>
14:00 – 19:00	<b>Hermitage museum tour (optional)</b>

14:00 – 19:00	<b>Satellite event (optional):</b> Flexible electronics and photovoltaics: from science to markets
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## Thursday, June 8<sup>th</sup>

	Chair: <i>Fabio Biscarini</i>
9:00 – 9:30	<b>I-14.</b> <i>Barbara Stadlober.</i> Screen-printing of multifunctional ferroelectric sensors and organic electrochemical transistors on flexible substrates for a multitude of applications such as novel 3D user interfaces, force and proximity sensing surfaces and large-area digital circuits
9:30 – 10:00	<b>I-15.</b> <i>Koen Vandewal.</i> Charge transfer states for organic opto-electronics
10:00 – 10:30	<b>I-16.</b> <i>Pavel Troshin.</i> Novel perovskite and perovskite-inspired materials for solar cells
10:30 – 11:00	<b>Coffee-break</b>
	<b>Oral talks 6.</b> Chair: <i>Dmitry Paraschuk</i>
11:00 – 11:15	<b>O-37.</b> <i>Gitti Frey.</i> Harnessing molecular diffusion in organic solar cell
11:15 – 11:30	<b>O-38.</b> <i>Artem Bakulin.</i> The dynamics of charge separation in organic photovoltaic materials with low electronic band offsets
11:30 – 11:45	<b>O-39.</b> <i>Derya Baran.</i> Fullerene-free organic solar cells exceeding 1V open circuit voltages
11:45 – 12:00	<b>O-40.</b> <i>Stylianos Choulis.</i> Device structure engineering for organic and hybrid photovoltaics
12:00 – 12:15	<b>O-41.</b> <i>Ning Li.</i> Solution-processed organic tandem solar cells: interface design, process optimization and loss analysis
12:15 – 12:30	<b>O-42.</b> <i>Stoichko Dimitrov.</i> Exciton and charge separation dynamics in intermixed polymer:fullerene blends: correlating structural and photo-physical length scales
12:30 – 12:45	<b>O-43.</b> <i>Xianjie Liu.</i> Interfacial electronic properties of air-stable molecule-doped polymers and fullerene derivatives for organic photovoltaics
12:45 – 13:00	<b>O-44.</b> <i>Nicola Gasparini.</i> Controlling the recombination in ternary polymer blends: a path towards high efficiency organic photovoltaics
13:00 – 13:30	<b>Closing ceremony</b>
14:00 – 19:00	<b>Peterhof excursion (optional)</b>



Akbulatov, Azat F.	P1	Intrinsic thermal and photochemical stability of hybrid and inorganic lead halide based perovskites
Alim, Cisl	P2	Towards designing new high-mobility polymeric semiconductors: DFT investigation of electronic and optical properties of BTI-based monomers and dimers
Almadhoun, Mahmoud N.	P3	Non-volatile memory devices based on ferroelectric polymer and semiconducting silicon
Anisimov, Daniil S.	P4	Effect of evaporated and laminated gold electrodes on performance of organic single crystal field effect transistors
Baek, Seung Woon	P5	Shellac film as gate insulating layers in organic field-effect transistors
Balakirev, Dmitry O.	P6	Star-shaped donor-acceptor oligomer with p-fluorophenyl-dicyanovinyl electron-withdrawing groups for organic photovoltaics
Baranov, Denis S.	P7	Synthesis of substituted diaza-analogues of pyrene and perylene
Baranovskii, Sergei D.	P8	Analytical theory for charge carrier recombination in blend organic solar cells
Bof Bufon, Carlos Cesar	P9	Hybrid organic/inorganic interfaces as reversible label-free platform for sensing and biosensing
Botta, Chiara	P10	Stimuli responsive emissive behaviours of organic and organometallic compounds with crystallization induced emission properties
Brackmann, Stefan	P11	Investigation of hybrid organic/inorganic heterostructures in GaN for light emission
Bruevich, Vladimir V.	P12	Vertical cavity laser on thiophene-phenylene co-oligomers
Chekusova, Victoria P.	P13	Metal-containing porphyrins as an active layers for organic field-effect transistors and gas sensors on their base
Cuadrado Santolaria, Alba	P14	Active organic semiconductors based on 10,15-dihydro-5H-diindolo[3,2-a:3',2'-c] carbazole as a centre core for OTFTs
Dashitsyrenova, Dolgor D.	P15	Molecular structure-electrical performance relationship for photochromic materials used in the OFET-based memory devices
Ditte, Kristina R.	P16	Synthesis and photophysical characterization of Y <sub>3</sub> N@C <sub>80</sub> nitride clusterfullerene's derivatives
Dominskiy, Dmitry I.	P17	Molecular end groups impact on structural and electronic properties of thiophene-phenylene co-oligomer single crystals
Dronov, Mikhail A.	P18	Modeling resistive switching: filamentary model and scaling limits for organic ReRAM

Emelianov, Aleksei V.	P19	The role of carbon lattice functionalization on transport properties in polyaniline molecular channel formed in gap between single-walled carbon nanotubes
Feriancova, Lucia	P20	Effect of electron acceptor groups on molecular properties of potential n-type semiconducting materials
Ferlauto, Laura	P21	Transient electronics for edible neuroprosthetics
Frankenstein, Hadar	P22	Atomic layer deposition of ZnO for top cathode interlayers in organic photovoltaics
Frantseva, Ekaterina S.	P23	Synthesis of furan/phenylene co-oligomers for organic electronics
Frolova, Lyubov A.	P24	Highly efficient all-inorganic planar heterojunction perovskite solar cells produced by thermal co-evaporation of CsI and PbI <sub>2</sub>
Gadirov, Ruslan M.	P25	Inkjet printing of organic semiconductor materials and devices
Galindo, Sergi	P26	Control of structure and morphology of printed thin film organic field-effect transistors
Goryunkov, Alexey A.	P27	Effect of alkyl chain length of double-caged fullerene acceptors on photovoltaic performance
Gudeika, Dalius	P28	Ambipolar 1,8-naphthalimide derivatives exhibiting aggregation enhanced emission phenomenon
Gul'tikov, Nikita V.	P29	Probing of luminescent dopants in single-crystal thiophene-phenylene and furan-phenylene co-oligomers by photothermal deflection spectroscopy
Gurskiy, Stanislav I.	P30	Fluorescent properties of salt built of 3-cyano-4-dicyanomethylene-5-oxo-4,5-dihydro-1H-pyrrole-2-olate anion and 2-aminopyridinium cation
Hietzschold, Sebastian	P31	Nickel oxide as hole contact material in organic electronics: the role of surface chemistry and microstructure
Hofacker, Andreas	P32	Time-dependent recombination orders in organic disordered semiconductors
Hrabal, Michal	P33	Organic electrochemical transistors (OECT) prepared via screen printing technique as a tool for biosensing
Inasaridze, Liana N.	P34	Effect of the substrate and processing conditions on the photochemical, thermal and electrochemical stability of the MAPbI <sub>3</sub> thin films
Ivanov, Vitaly S.	P35	Iodine-doped carbon nanotube-polyimide composites for microelectronics
Juhasz, Peter	P36	Small- and large-signal analysis of relaxation times in pentacene diode
Keshtov, Mukhamed L.	P37	Synthesis, characterization and photovoltaic properties of new iridium-containing conjugated polymers

Kharlanov, Oleg G.	P38	Description of charge-carrier transport in crystalline organic semiconductors beyond simple hopping or band-transport models
Khotina, Irina A.	P39	Synthesis of hyperbranched oligophenylenes with phenylene ethynylene fragments for optoelectronics
Kiry, Anton	P40	New highly potent vacuum- and solution-processable [3]-radialene-based molecular p-dopant: synthesis and application
Kleymyuk, Elena A.	P41	Synthesis, theoretical and experimental investigations of new luminescent bithiophenesilane dendrimers
Komissarova, Ekaterina A.	P42	Synthesis and investigation of diaryldiazenes incorporating pyrimidine moiety
Komolov, Alexei S.	P43	Molecular mechanism of reductive dehalogenation by P450 enzymes: possible importance of dissociative electron attachment for biosensor applications
Koskin, Igor P.	P44	Controlling torsional rigidity by introduction of furan moiety into co-oligomers towards highly emissive semi-conducting materials
Kotova, Maria S.	P45	Filamentary model of resistive switches in composite structures based on organic dyes and colloidal CdSe nanoplates
Kozlov, Alexey V.	P46	A degradation behavior of the polyquinone-based cathode material for lithium-organic batteries
Krivtsova, Evgenia D.	P47	Linear conjugated oligomers based on 2,1,3-benzothiadiazole as new luminophores for organic photonics
Krupskaya, Yulia	P48	Tuning the charge transfer in organic semiconductor single-crystal interfaces
Kulik, Leonid V.	P49	Structure and spin-dependent recombination of charge-separated state in polymer/fullerene composites
Kwon, Ji Eon	P50	Iptycene-based quinone molecules: multi-electron redox behaviors and application in lithium-ion battery cathodes

## Poster session 2

Tuesday, June 6<sup>th</sup>, 16:30

Leshanskaya, Lidiya I.	P51	Dibenzoindigo: a new nature-inspired semiconductor material for biocompatible organic electronics
Novikov, Artyom V.	P52	Environment friendly aqueous processing of [60]fullerene semiconducting films for organic electronics
Levitsky, Artem	P53	Probing bulk heterojunction morphology of high efficiency organic solar cells by atomic layer deposition
Malov, Vladimir V.	P54	Ambipolar transport in thin layers of new $\pi$ -conjugated imidazole/carbazole compounds
Mannanov, Artur L.	P55	Stable organic solar cells based on novel highly soluble star-shaped oligomer

Martynov, Ilya V.	P56	The impact of the photoinduced fullerene dimerization vs. generation of stable free radicals on the outdoor operation stability of organic solar cells
Maslennikov, Dmitry R.	P57	Surface-enhanced raman spectroscopy of thiophene-phenylene co-oligomer semiconducting monolayer
Micjan, Michal	P58	Influence of electrode material on contact resistance of organic field-effect transistors
Moshkalev, Stanislav A.	P59	Thin films based on multilayer graphene nanobelts and quantum dots deposited by modified Langmuir-Blodgett technique
Mróz, Wojciech	P60	Push-coating: a low-cost and green fabrication approach to polymer electronic devices
Mróz, Wojciech	P61	Water/alcohol soluble conjugated polymers as electron-injecting layers for OLED technology
Müller, Lars	P62	Controlled drift of small molecule dopants in organic semiconductors
Mumyatov, Alexander V.	P63	Theoretical and experimental study of the capacity fading in lithium-poly(naphthalene diimide) batteries
Nevostruiev, Danil A.	P64	Non-fullerene tetraazaperylene-based electron acceptors for organic photovoltaics: EPR measurements
Novota, Miroslav	P65	Characterization of naphthalene derivatives with different alkyl side chains
Obrezkov, Filipp A.	P66	Effect of substituents in photochromic materials of di(hetaryl)ethene series on electrical characteristics of memory devices based on organic field-effect transistors
Obuchovsky, Stas	P67	Probing the amorphous domains in P3HT/Fullerene blends
Odod, Aleksey V.	P68	Photo- and electroluminescence of metal-organic complexes with zinc and beryllium
Pakhomov, Georgy L.	P69	Characterization of organic-based devices by ToF-SIMS depth profiling
Platonova, Elena O.	P70	Red light-emitting polynorbornenes with cyclometaled iridium(III) complexes, carbazole and organosilicon groups in side chains
Polinskaya, Marina S.	P71	Novel organosilicon derivatives of [1]benzothieno[3,2-b][1]-benzothiophene: synthesis and semiconductor properties
Postnikov, Valeriy A.	P72	Crystals of organic conjugated rod-like co-oligomers: structure and peculiarities of growth from solutions
Promarak, Vinich	P73	A Significant improvement of dye-sensitized solar cell (DSSC) performance by donor substitutions on the $\pi$ -linker of D- $\pi$ -A organic dye

Raychev, Deyan	P74	A step-by-step theoretical study of monomers for all-conjugated block-copolymers
Ryoo, Chi Hyun	P75	Indolo[3,2-b]indole as a new electron donor for efficient thermally activated delayed fluorescence (TADF) emitters in organic light-emitting diodes (OLEDs)
Saunina, Anna Yu.	P76	Analytic modelling of field dependence of charge mobility in organic materials with correlated disorder
Selektor, Sofiya L.	P77	Nonradiative energy transfer in multilayer Langmuir-Blodgett films based on fluorophores of different chemical structure
Selivanova, Daria G.	P78	Synthesis, optical and electrochemical study of new bipolar heterocyclic systems, including 1,2,4-oxadiazole moiety
Shamieh, Basel	P79	Spontaneously generated interlayers in direct and inverted OPVs with silver and gold contacts
Sharifi Dehsari, Hamed	P80	Toward solution processed magnetic nanoparticles for non-volatile memory applications
Sharifi Dehsari, Hamed	P81	Ambient processing of P(VDF-TrFE) ferroelectric thin-films for application in non-volatile memory devices
Shcherban, Valentina V.	P82	Planar thin-film memristors based on polyaniline and polyethylene oxide
Shklyaeva, Elena V.	P83	Some new nitrogen-containing heterocyclic systems, including ferrocene moiety
Sizov, Alexey S.	P84	Sorption and desorption processes of toxic gases and water vapour in monolayer Langmuir-Schaefer organic field-effect transistors
Skorotetcky, Maxim S.	P85	Novel reactive nanostructured organosilicon luminophores and scintillators on their basis
Solodukhin, Aleksandr N.	P86	Novel donor-acceptor oligomers having different architecture based on triphenylamine for organic photovoltaics
Sosorev, Andrey Yu.	P87	Unravelling the mechanism of outstanding electron mobility in F <sub>2</sub> -TCNQ single crystals
Susarova, Diana K.	P88	Ammonia gas sensors based on fluorinated naphthalene-diimide semiconductor films
Talalaev, Philip S.	P89	BODIPY as a versatile material for memory elements and photodetectors
Toropynina, Victoria Y.	P90	Unsymmetrical donor-acceptor oligomers based on triphenylamine: synthesis and properties
Trukhanov, Vasily A.	P91	Effect of space charge limited current under the source and drain contacts on the performance of organic field-effect transistors
Trukhanov, Vasily A.	P92	Numerical modeling of power conversion efficiency in organic light-emitting transistors

Trul, Askold	P93	Influence of a chemical structure of organosilicon BTBT derivatives on their electrical performance in ultrathin OFETs prepared by different techniques
Uvarov, Mikhail N.	P94	Novel anthrathiophene-based small molecules as donor material for organic photovoltaics: Synthesis and light-induced EPR study
Velasco, Dolores	P95	Influence of the crystallinity of the organic thin film layer in OTFTs
Vinokur, Jane	P96	On the dynamics of additive migration to form cathodic interlayers in OPVs
Weiter, Martin	P97	Diketopyrrolopyrrole based OTFTs with high performance
Yamilova, Olga R.	P98	Towards understanding the photochemical degradation pathways of conjugated polymers under anoxic conditions
Yoshida, Yuji	P99	Various aspects of organic photovoltaics: the low illuminance and polarization
Zhang, Qiaoming M.	P100	High performing solution-coated electrolyte-gated organic field-effect transistors
Viola, Fabrizio Antonio	P101	Ultrathin, flexible multimodal sensor based on organic field effect transistor for tactile sensing applications
Agumba, John O.	P102	Tuning the optical absorption of P3HT single crystals for opto-electronic applications
Bakiev, Artur N.	P103	Synthesis of new conjugated systems composed of 2,5-di(2-thienyl)pyrrole moieties: investigation of optical and electrochemical properties
Bortolotti, Carlo Augusto	P104	EGOFETs with immobilized peptide aptamers as biosensors for ultra-sensitive detection of protein biomarkers in complex fluids
Fisyuk, Alexander S.	P105	Structures-electronic properties relationships for the family of five-membered $\pi$ -conjugated heterocyclic donor-acceptor-donor oligomers
Freidzon, Alexandra	P106	Theoretical prediction of operational stability of potential OLED host molecules by multireference quantum chemistry
Haddad, Clara	P107	Introduction of Lambert-function based method for OTFT modelling and application to low temperature measurements
Huang, Hui	P108	The nonbonding conformational locks for constructing highly planar $\pi$ -conjugated systems
Ismail, Moneim	P109	Some complex bismuth-based halides as lead-free materials for "perovskite" solar cells
Kaiser, Christina	P110	Substituted bithiopyranylidenes and their CT complexes with C60 for organic near-infrared detectors

Kalyani, Neeti	P111	Molecular FET based on recombinant azurin protein with enhanced switching behavior
Kochervinskii, Valentin V.	P112	Influence of electrode materials on highfield polarization and conductivity of the ferroelectric copolymers of vinylidene fluoride and tetrafluoroethylene
Kostyuchenko, Anastasia	P113	Synthese of new 5,5'''-bis(3-decyl-[2,2'-bithiophen]-5-yl)-2,2':5',2'':5'',2'''-quater(1,3,4-thiadiazole)
Li, Shuo	P114	Improving performance of transistor memory by tuning occurrence charge transport on pentacene interaction
Lmimouni, Kamal	P115	Improving performance of nano-floating memory by tuning occurrence charge transport on pentacene interaction
Majhi, Koushik	P116	Photophysical studies of inclusion complex formation of 3-aminophenol with $\beta$ -cyclodextrin
Nikitenko, Vladimir R.	P117	Analytic model of mobility and field-stimulated diffusion coefficient in disordered organic semiconductors
de Oliveira, Helinando P.	P118	Development of polypyrrole-based organic composites in electrospun fibers applied in bacterial removal from surfaces
Peng, Yingquan	P119	Near-infrared photo detectors based on organic semiconductors
Peng, Yingquan	P120	Broadband photodetectors based on organic semiconductor
Raisys, Steponas	P121	Enhanced efficiency of light upconversion <i>via</i> emitter structural modification
Ramakrishna, Jagarapu	P122	Facile synthesis, fluorescence and OFET properties of larger fluorenes
Shcherbina, Maxim A.	P123	Modern approaches to the studies of thin films: X-ray reflectometry and grazing incidence scattering
Shcherbina, Maxim A.	P124	Comparative analysis of the structure and phase behavior of carbosilane dendrimers based on $\alpha, \alpha'$ -dialkylquatrothiophene
Speller, Emily M.	P125	Photo-oxidation of electron acceptors and their blends
Shushin, Anatoly I.	P126	Manifestation of T-exciton migration in the kinetics of singlet fission in organic semiconductors
Viani, Lucas	P127	Resonant energy transport in dye-filled monolithic crystals of zeolite L: Modeling of inhomogeneity

## **Satellite event**

# **Flexible electronics and photovoltaics: from science to markets**

Flexible electronics and photovoltaics nowadays step into technological implementation and commercial realization phases. The emerging market of highly integrated flexible electronic devices requires seamless conversion of scientific developments into real products for end-users.

On June, 7<sup>th</sup> ICOE-2017 participants are invited to attend a Satellite event “Flexible electronics and photovoltaics: from science to markets” organized by ITMO University (Saint-Petersburg), Technospark Nanotech center (Moscow, Troitsk) and North-West Nanotech center (Saint-Petersburg).

### **Satellite event program:**

14:00 – **Shuttle bus transfer from Azimut hotel to ITMO University (Lomonosova str., 9)**

14:30 – **Welcome coffee**

Tour for Organic Electronics and Photovoltaics Laboratory of ITMO “Flexible electronics and photovoltaics: from science to markets” session.

Invited speakers are top researchers and business people in the field of flexible electronics and photovoltaics. The following presentations are scheduled on June, 7<sup>th</sup>:

1. *Ronn Andriessen*, Program Manager, Solliance, TNO/Holst Centre, “Towards Roll-to-Roll upscaled high efficient Perovskite based flexible solar cells and modules”.
2. *Cedric Rolin*, Senior researcher, Imec (Belgium), “Deposition of Organic Semiconductors: a path to effective devices”.
3. *Mike Banach*, Technical director FlexEnable (UK), “OTFT Technology: Enabling Transformational New Applications”.
4. *Denis Kovalevich*, CEO, Technospark Nanotech centre (Russia), “Venture business model for global industry of flexible electronics: partnerships and infrastructure”.
5. *Viktoria Zheltova*, Director Organic Electronics and Photovoltaics Laboratory at IFMO University (Russia), “Organic Electronics and Photovoltaics Laboratory in the framework of technological transfer”.
6. *Boris Galkin*, Executive director TEN FLECS (Russia), “Bridging the gap between R&D and mass manufacturing: prototyping and small scale manufacturing facility for thin-film electronics”.

Coffee break

Official opening ceremony of Organic Electronics and Photovoltaics Laboratory with ITMO University, dean Vladimir Vasiliev.

Satellite day organizers announcements.

Award ceremony for the best projects.

18:00 – 18:30 – **Shuttle bus transfer to Azimut hotel**