



PCNSPA[®]
CONFERENCE 2018
 SAINT PETERSBURG, RUSSIA

**PCNSPA 2018 - Photonic Colloidal Nanostructures:
 Synthesis, Properties, and Applications**

Holiday Inn St. Petersburg Moskovskye Vorota Hotel,
 4th – 8th June 2018, St. Petersburg, Russia

4 June, Monday

14.30 - 14.35 Opening of PCNSPA 2018

14.35 - 14.40 Remembering Helmuth Moehwald

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<i>Focus on Fundamental Properties</i>		
<i>Chair: Anatoly V. Fedorov</i>		
14.40 - 15.20	B. Lounis Bordeaux, France	<i>Reading the Spectral Fingerprint of Individual Nanocrystals</i>
15.20 - 16.00	D. Yakovlev Dortmund, Germany	<i>Spin-Dependent Phenomena in Colloidal Nanocrystals</i>
16.00 - 16.20	S. V. Goupalov Jackson, Mississippi, USA	<i>Probing Morphological Effects with Polarization Photoluminescence Spectroscopy of Single Colloidal Nanoplatelets</i>
16.20 - 16.40 Coffee break		
16.40 - 17.20	A. V. Rodina St. Petersburg, Russia	<i>Dangling Bond Spins in Colloidal Nanostructures</i>
17.20 - 17.40	E. V. Shornikova Dortmund, Germany	<i>Negatively Charged Excitons in CdSe/CdS Colloidal Nanoplatelets with Thick Shells</i>
17.40 - 17.55	A. A. Golovatenko St. Petersburg, Russia	<i>A Comparative Study of the Band-Edge Exciton Fine Structure in c-CdSe and w-CdSe Colloidal Quantum Dots</i>
17.55 - 18.10	I. V. Kalitukha St. Petersburg, Russia	<i>Electron, Hole and Exciton g-factors in CsPbBr₃ Colloidal Nanocrystals and CdSe/CdS Nanoplatelets Measured by Spin-Flip Raman Scattering</i>

18.30 - 21.00 Welcome reception

5 June, Tuesday

<i>Focus on Synthetic Approaches and Fundamental Properties</i>		
<i>Chair: Alexander Eychmüller</i>		
10.0 - 10.40	M. V. Artemyev Minsk, Belarus	<i>2D Colloidal Quantum Wells: Control of Physical Properties through Chemistry</i>
10.40 - 11.20	C. de Mello-Donegá Utrecht, The Netherlands	<i>Nanoscale Ion-Exchange: a Versatile Route to Tailored Colloidal Nanostructures</i>
11.20 - 11.40 Coffee break		
11.40 - 12.00	L. Biadala Dortmund, Germany	<i>Addressing Exciton Fine Structure in Colloidal Two-Dimensional CdSe Nanoplatelets</i>
12.00 - 12.20	J. I. Climente Castelló de la Plana, Spain	<i>An Effective Mass Model for Colloidal Nanoplatelets</i>
12.20 - 12.35	C. Meerbach Dresden, Germany	<i>Brightly Luminescent Core/Shell CdSe/Cd(Zn)S Nanoplatelets with Continuously Tunable Optical Properties</i>
12.35 - 12.50	A. W. Achtstein Berlin, Germany	<i>Tuning the Photonic Properties of Colloidal Quantum Wells</i>
12.50 - 13.05	N. Pytlik Dresden, Germany	<i>Biosynthesis of Gold Nanoparticles by the Diatom <i>Stephanopyxis turris</i></i>

13.05 - 14.20 Lunch break

<i>Focus on Applications</i>		
<i>Chair: Dmitri Yakovlev</i>		
14.20 - 15.20	B. Chaudret Toulouse, France	<i>InP QDs for Temperature Monitoring in Magnetically Induced Catalysis</i>
15.20 - 15.40	A. Eychmüller Dresden, Germany	<i>Gels and Aerogels for Electrocatalysis</i>
15.40 - 16.00	E. V. Skorb St. Petersburg, Russia	<i>Evolution of Light-Induced Processes at Heterostructured Interfaces</i>
16.00 - 16.20 Coffee break		
16.20 - 16.35	F. Eichler Dresden, Germany	<i>Exploring the Interior of Mixed Crystals Consisting of Quantum Dots Encapsulated into Ionic Salt Matrices</i>
16.35 - 16.50	B. Albela Lyon, France	<i>Towards Multifunctional Carriers based on Mesoporous Silica Nanoparticles</i>
16.50 - 17.05	D. Beke Budapest, Hungary	<i>Tuning the Size of Silicon Carbide Nanoparticles using No-Photon Excitation Chemistry</i>
17.05 - 17.20	V. A. Krivenkov Moscow, Russia	<i>Photoelectrochemical Response from Quantum Dots-Bacteriorhodopsin Hybrid Material under Near-Infrared Two-Photon Excitation</i>
17.20 - 17.35	N. V. Ryzhkov St. Petersburg, Russia	<i>Semiconductors for Light Regulated Proton Pumping</i>
17.35 - 17.50	L. Sonntag Dresden, Germany	<i>Prospects of Metal Nanowire Networks as Transparent Electrodes for Organic Solar Cells and Light Emitting Diodes</i>

6 June, Wednesday

<i>Focus on Nanocrystal Surface and Luminescence Decay</i>		
<i>Chair:</i> Bruno Chaudret		
10.00 - 10.40	H. Mattoussi Tallahassee, Florida, USA	<i>Characterization of the Ligand Structure and Stoichiometry on Colloidal Quantum Dots using NMR Spectroscopy</i>
10.40 - 11.20	N. Gaponik Dresden, Germany	<i>Advanced Surface Design of Nanoparticles</i>
11.20 - 11.40 Coffee break		
11.40 - 11.55	E. Zenkevich Minsk, Belarus	<i>Surface Ligand Exchange and Relaxation Processes in Nanoassemblies Based on CdSe/ZnS or CdSe Quantum Dots and Porphyrin Molecules</i>
11.55 - 12.10	C. Xia Utrecht, The Netherlands	<i>Efficient FRET-Based Nanoprobes Using Colloidal Quantum Dot-Dark Quencher as Donor-Acceptor Pair</i>
12.10 - 12.25	V. F. Razumov Chernogolovka, Russia	<i>A New Photoluminescence Law and its Verification on the Example of Colloidal Quantum Dots and Nanoclusters Based on them</i>
12.25 - 12.40	I. V. Martynenko Berlin, Germany	<i>Photoluminescence Quantum Yield of Semiconductor Quantum Dots: Excitation Energy Dependence</i>
12.40 - 12.55	S. A. Tovstun Chernogolovka, Russia	<i>Time-Resolved Photoluminescence of InP/ZnS Colloidal Quantum Dot Nanoclusters</i>
12.55 - 13.10	A. S. Kulagina St. Petersburg, Russia	<i>Photodynamics Transients in Colloidal CdSe/ZnS QDs after Ultrafast Excitation</i>

13.10 - 14.20 Lunch break

<i>Focus on Luminescence Decay</i>		
<i>Chair:</i> to be announced		
14.20 - 15.20	A. Meijerink Utrecht, The Netherlands	<i>Photonic Effects in Lanthanide-Doped nanocrystals</i>
15.20 - 15.40	U. Resch-Genger Berlin, Germany	<i>Spectroscopic Characterization of Semiconductor and Lanthanide-Based Nanocrystals with Vis and NIR Emission</i>
15.40 - 15.55	E. Zenkevich Minsk, Belarus	<i>Quantum Dot Emission Quenching and Temporal Energy Transfer in Single Nanoassemblies "CdSe/ZnS Quantum Dot – Dye Molecule"</i>
15.55 - 16.10	M. Greben Prague, Czech Republic	<i>Fully Radiative Emission of Size-Selected Colloidal Silicon Nanocrystals</i>
16.10 - 16.25	K. K. Pukhov Moscow, Russia	<i>Radiative Properties of a Quantum Dot in a Dielectric Shell</i>
16.25 - 18.00	Poster session + Special evening coffee	

7 June, Thursday

<i>Focus on Biomedical Applications</i>		
<i>Chair:</i> Gleb Sukhorukov		
10.00 - 10.40	M. Gao Beijing, China	<i>Functional Nanoparticles for Tumour Imaging</i>
10.40 - 11.20	I. Nabiev Reims, France	<i>Advanced Nanotools for Imaging of Solid Tumors and Circulating and Disseminated Cancer Cells</i>
11.20 - 11.40 Coffee break		
11.40 - 11.55	A. R. O. Rodrigues Braga, Portugal	<i>Magnetoliposomes Based on Manganese Ferrite/Gold Nanoparticles for Applications in Cancer Therapy</i>
11.55 - 12.10	C. Kijatkin Osnabrueck, Germany	<i>Nonlinear Optical Performance of Harmonic Nanoparticles</i>
12.10 - 12.25	D. Dassonville Lyon, France	<i>Core-Shell Location for Two Types of Quantum Dots in Mesoporous Silica Nanoparticles : Dual-Color Probe for Biomedical Imaging</i>
12.25 - 12.40	Y.A. Kyzishchin Moscow, Russia	<i>Optimization of the Excitation and Registration Modes to Detect Ultra-Small Amounts of Quantum Dots Based on Cadmium Selenide</i>
12.40 - 12.55	V. A. Kuznetsova Dublin, Ireland	<i>Investigation of Uptake Mechanisms of Chiral Semiconductor Nanocrystals in Living Cells</i>

12.55 - 14.20 Lunch break

<i>Focus on Carbon-Based Materials</i>		
<i>Chair:</i> to be announced		
14.20 - 15.00	A. L. Rogach Kowloon, Hong Kong S.A.R.	<i>Synthesis, Optical Properties, and Applications of Carbon Dots</i>
15.00 - 15.40	G. B. Sukhorukov London, UK	<i>Optical Properties of Nanoparticles Formed in situ in Organized Structures</i>
15.40 - 16.00 Coffee break		
16.00 - 16.40	M. I. Vasilevskiy Braga, Portugal	<i>Influence of Graphene on the Light Absorption and Emission Properties of Neighbouring Nanoparticles</i>
16.40 - 16.55	Y. Xiong Kowloon, Hong Kong S.A.R.	<i>Carbonization Conditions Influence the Emission Characteristics and the Stability Against Photobleaching of Nitrogen Doped Carbon Dots</i>
16.55 - 17.10	A. Aleksenskii St. Petersburg, Russia	<i>Transition Sol-Gel in Nanodiamond Hydrosols</i>
17.10 - 17.25	C. R. Bernardo Braga, Portugal	<i>Influence of Graphene-Covered Substrate on Light Emission and Raman Scattering in Colloidal QDs</i>

8 June, Friday

<i>Focus on Chirality and Plexitonic Coupling</i>		
<i>Chair: Andries Meijerink</i>		
10.00 - 10.40	N. A. Kotov Ann Arbor, Michigan, USA	<i>Chiral Inorganic Nanostructures</i>
10.40 - 11.20	A. O. Govorov Athens, Ohio, USA	<i>Bio-Plasmonics and Bio-Excitonics with Colloidal Nanocrystals: Chirality and Efficient Energy Transfer</i>
11.20 - 11.40 Coffee break		
11.40 - 12.00	J. P. Hermier Versailles, France	<i>Dramatic decrease of the optical losses at 4K for thick-shell CdSe/CdS nanocrystals coupled to a flat gold film</i>
12.00 - 12.15	S. A. Goncharov Moscow, Russia	<i>Photoluminescence Properties of Thin-Film Nanohybrid Material Based on Quantum Dots and Gold Nanorods</i>
12.15 - 12.30	S. Buil Versailles, France	<i>Realizing a nanoscale versatile active probe with a single CdSe/CdS nanocrystal attached at the end of a SNOM tip</i>
12.30 - 12.45	A. K. Visheratina St. Petersburg, Russia	<i>Interaction of Semiconductor Nanocrystals and Chiral Molecules</i>

12.45 - 14.00 Lunch break

<i>Focus on Chirality (2D Materials) and Plexitonic Coupling</i>		
<i>Chair: Andrey L. Rogach</i>		
14.00 - 14.40	Yu. K. Gun'ko Dublin, Ireland	<i>Chiroptically Active Colloidal Nanostructures</i>
14.40 - 15.20	Yu. Rakovich Donostia-San Sebastian, Spain	<i>Chirality and Magneto-Optical Effect in Coupled Organic- Inorganic Nanostructures</i>
15.20 - 15.40 Coffee break		
15.40 - 16.00	R. B. Vasiliev Moscow, Russia	<i>Spontaneous Folding of Ultrathin Colloidal CdTe and CdSe Nanosheets: Structure, Optical Properties and the Role of Ligands</i>
16.00 - 16.15	F. Purcell-Milton Dublin, Ireland	<i>Induction of Chirality in Two-Dimensional Nanomaterials: Chiral 2D MoS₂ Nanostructures</i>
16.15 - 16.30	A. S. Baimuratov St. Petersburg, Russia	<i>Topological Distortion of Semiconductor Nanocrystals</i>
16.30 - 16.45	T. Hendel San Sebastián, Spain	<i>From Weak to Strong Coupling - Plexitonic Hybrid Structures from J aggregates and Different Shaped Gold Nanoparticles</i>
16.45 - 17.00	Y. A. Gromova St. Petersburg, Russia	<i>Magnetic Circular Dichroism in 2D Colloidal Semiconductor Nanocrystals</i>

17.00 - 17.05 Closing remarks

>Welcome to St. Petersburg - the cradle of quantum dots!