



**2<sup>nd</sup> Conference and Spring School on Properties, Design and Applications  
of Upconversion Nanomaterials**  
2 - 6 April 2018 (Valencia, Spain)



**UPCON 2018 GENERAL SCHEDULE**

	<b>Monday April 2</b>	<b>Tuesday April 3</b>	<b>Wednesday April 4</b>	<b>Thursday April 5</b>	<b>Friday April 6</b>
<b>Morning</b>	School	School	School	Conference	Conference
<b>Afternoon</b>	School	School	Conference	Conference	Meeting of the Scientific Committee
			Poster Session	Poster Session	
			Round Table	Conference	
<b>Evening</b>		<i>School Dinner</i>	Guided Tour	<i>Conference Dinner Hotel Astoria</i>	



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UPCON 2018 CONFERENCE PROGRAM

Botanical Gardens					
Start-End	Wednesday April 4	Start-End	Thursday April 5	Start-End	Friday April 6
12:00-15:00	Registration	9:00-9:45	<b>K2</b> May, S.	9:00-9:45	<b>K5</b> Vetrone, F.
		9:45-10:15	<b>IC2</b> Hirsch, T.	9:45-10:15	<b>IC5</b> Mely, Y.
		10:15-10:45	<b>IC3</b> Hildebrandt, N.	10:15-10:45	<b>IC6</b> Charbonnière, L. J.
		10:45-11:05	Coffee Break	10:45-11:05	Coffee Break
		11:05-11:50	<b>K3</b> Schuck, P. J.	11:05-11:35	<b>IC7</b> Resch-Genger, U.
		11:50-12:10	<b>O2</b> Jaque, D.	11:35-11:55	<b>O8</b> Krause, S.
		12:10-12:30	<b>O3</b> Liu, H.	11:55-12:15	<b>O9</b> Francés Soriano, L.
		12:30-12:45	<b>O4</b> López Buendía, A.	12:15-12:35	<b>O10</b> Natile, M. M.
		12:45-13:05	<b>O5</b> Coudret, C.	12:35-12:55	<b>O11</b> Farka, Z.
		13:05-13:20	<b>O6</b> Suzuki, K.	12:55-13:15	<b>O12</b> Chan, E.
				13:15-13:35	<b>O13</b> Green, K.
		13:30-15:00	Lunch Time	13:35-13:50	<b>Closing Conference</b>
				13:50-15:45	Lunch Time
15:00-15:10	<b>Welcome.</b>				
15:10-15:55	<b>K1</b> Capobianco, J. A.	15:00-15:45	<b>K4</b> Hemmer, E.	16:00-17:00	<b>Meeting of the Scientific Committee</b>
15:55-16:15	<b>IC1</b> Bednarkewicz, A.	15:45-16:15	<b>IC4</b> Zhou, J.		
16:15-16:35	<b>O1</b> Jin, D.	16:15-16:35	<b>O7</b> Würth, C.		
16:35-16:55	Coffee break	16:35-16:55	Coffee break		
16:55-18:05	Round table: Future perspectives of UCNPs	16:55-18:05	<b>Poster Session</b>		
18:05-19:20	<b>Poster Session</b>	18:05	<b>F1</b> Marin, R.		
		18:10	<b>F2</b> Bastian, P.		
		18:15	<b>F3</b> Wang, F.		
		18:20	<b>F4</b> Horák, D.		
		18:25	<b>F5</b> Lipiński, T.		
		18:30	<b>F6</b> Hlaváček, A.		
19:30-20:30	<b>Guided Tour</b>	21:00-23:00	<b>Conference Dinner</b>		



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UPCON 2018 CONFERENCE PROGRAM

Day 1 - Wednesday April 4					
Start-End	WG		Event	Time (min)	Session chair
12:00-15:00			Registration	Open	
15:00-15:10			<b>Welcome:</b> Hans Gorris, Tero Soukka and Julia Pérez Prieto	10	
15:10-15:55	1	K1	Upconversion: Odyssey <b>Capobianco, John A.</b>	45	Hans H. Gorris
15:55-16:15	4	IC1	Novel features and possible applications of lanthanide-doped nanoparticles <b>Bednarkiewicz, Artur</b>	30	
16:15-16:35	1	O1	Overcoming concentration quenching to build brighter upconversion nanocrystals <b>Jin, Dayong</b>	20	
16:35-16:55			<b>Coffee break</b>		
16:55-18:05			Round table: Future perspectives of UCNPs	70	
18:05-19:20			<b>Poster session</b>	75	
19:30-20:30			<i>Guided Tour</i>		



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Day 2 - Thursday April 5			MORNING			
Start-End	WG		Event	Time (min)	Session chair	
9:00-9:45	1	K2	Alternative Methods for Determining the Quantum Efficiency of Yb-sensitized Upconversion Nanomaterials <b>May, Stanley</b>	45	Ute Resch-Genger	
9:45-10:15	4	IC2	Design and Surface Engineering of Upconversion Nanoparticles for FRET-based Bioassays <b>Hirsch, Thomas</b>	30		
10:15-10:45	4	IC3	Nucleic acid detection using fret from upconversion nanoparticles to Dyes - A glance behind the scenes <b>Hildebrandt, Niko</b>	30		
10:45-11:05			<b>Coffee Break</b>			
11:05-11:50	1	K3	Enhancing the prospects of upconverting nanoparticles with molecular antennas, new compositions and UCNP microlasers <b>Schuck, P. James</b>	45	Soukka, Tero.	
11:50-12:10	1	O2	Upconverting spinners: fundamentals and applications <b>Jaque, Daniel</b>	20		
12:10-12:30	4	O3	Stimulated emission depletion nanoscopy using upconversion nanoparticles <b>Liu, Haichun</b>	20		
12:30-12:45	1	O4	Nanosynthesis assisted by microwave radiation <b>López Buendía, Angel M.</b>	15		
12:45-13:05	1	O5	Microwave assisted preparation of pure hexagonal, highly homogeneous ultrasmall core-shell UCNPs. <b>Coudret, Christophe</b>	20		
13:05-13:20	1	O6	Upconversion emission quantum yield measurements using an integrating sphere instrument based on absolute method <b>Kengo Suzuki</b>	15		
13:30-15:00			<b>Lunch Time</b>			



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Day 2 - Thursday April 5			AFTERNOON			
Start-End	WG		Event	Time (min)	Session chair	
15:00-15:45	1	K4	Lanthanide-doped nanoparticles as versatile donors in luminescence energy transfer pairs <b>Hemmer, Eva</b>	45	Pérez-Prieto, Julia	
15:45-16:15	1	IC4	Probing and Activating Heat-favorable Surface Phonons to Overtake Thermal Quenching <b>Zhou, Jijia</b>	30		
16:15-16:35	1	O7	Systematic optical characterization of Yb <sup>3+</sup> , Er <sup>3+</sup> doped $\beta$ -NaYF <sub>4</sub> nanoparticles: Resonance Energy and influence of size, microenvironment and surface-chemistry on P-dependent quantum yields, excited state. <b>Würth, Christian</b>	20		
16:35-16:55			Coffee break	20		
16:55-18:05			Poster session			
18:05-18:10	1	F1	Upconverting nanoparticles meet quantum dots and lanthanide complexes: exploring unconventional Förster resonance energy transfer pairs. <b>Marin, Riccardo</b>	5	Hildebrandt, Niko	
18:10-18:15	1	F2	Surface-modulated upconversion nanoparticles for biosensing - a photophysical investigation <b>Bastian, Philipp Ulrich</b>	5		
18:15-18:20	4	F3	Microscopic inspection and tracking of single upconversion nanoparticles in living cells <b>Wang, Fan</b>	5		
18:20-18:25	1	F4	Dual bioimaging probes based on ultrastable PEG-neridronate-coated upconversion & magnetic nanoparticles <b>Horák, Daniel</b>	5		
18:25-18:30	2	F5	New approach for the preparation of UCNPs for PDT <b>Lipiński, Tomasz</b>	5		
18:30-18:35	2	F6	Large-scale purification of photon upconversion nanomaterials by gel electrophoresis <b>Hlaváček, Antonín</b>	5		
21:00-23:00			Conference dinner			



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Day 3 - Friday April 6					
Start-End	WG		Event	Time (min)	Session chair
9:00-9:45	2	K5	Extending the functionality of upconverting nanoparticles <b>Vetrone, Firenzo</b>	45	Hirsch, Thomas
9:45-10:15	4	IC5	Dissolution of single upconversion nanoparticles dispersed in aqueous buffers <b>Mely, Yves</b>	30	
10:15-10:45	3	IC6	Upconversion with discrete molecules: just a dream? <b>Charbonnière, Loïc J.</b>	30	
10:45-11:05			<b>Coffee Break</b>		
11:05-11:35	1	IC7	Luminescence Efficiency of upconversion - Quantification of Size, Particle Architecture and Dopant Concentration Effects for Different Excitation Power Densities <b>Resch-Genger, Ute</b>	30	Bednarkiewicz, Artur
11:35-11:55	4	O8	Upconversion Correlation Spectroscopy <b>Krause, Stefan</b>	20	
11:55-12:15	2	O9	An upconversion nanoplatform for photodynamic therapy and fluorescence imaging tracking without therapy. <b>Francés-Soriano, Laura</b>	20	
12:15-12:35	2	O10	NIR light-mediated photo-activation of ruthenium anticancer prodrugs using upconverting nanoparticles. <b>Natile, Marta Maria</b>	20	
12:35-12:55	4	O11	Photon-upconversion nanoparticles as a background-free label in rapid immunoassays for diclofenac <b>Farka, Zdeněk</b>	20	
12:55-13:15	1	O12	Power-dependent lifetimes, energy migration, and the unwinding of energy transfer networks in upconverting nanoparticles <b>Chan, Emory</b>	20	
13:15-13:35	1	O13	Nanoplasmonic Upconverting Nanoparticles as Orientation Sensors for Single Particle Microscopy <b>Green, Kory</b>	20	
13:35-13:50			<b>Closing Conference</b>		
13:50-15:45			<b>Lunch Time</b>		
16:00-17:00			<b>Meeting of the Scientific Committee</b>		