



NANOSCIENCE WITH NANOCRYSTALS

SECOND INTERNATIONAL CONFERENCE ON COLLOIDAL SEMICONDUCTOR AND METAL NANOCRYSTALS

January 07-10, 2006

Grenoble - Autrans (France)

PROGRAM

Saturday, January 7, 2006:

19:30 WELCOME RECEPTION

Sunday, January 8, 2006:

Chemical synthesis, shape control and surface functionalisation

8:45	<i>Opening Remarks</i>	A. Rogach, P. Reiss
9:00-9:30	<i>Organometallic nanoparticles : synthesis, organization, properties</i>	B. Chaudret (LCC Toulouse, France)
9:30-9:50	<i>Synthesis and characterization of the near infrared active nanoparticle materials PbS, PbSe and PbTe</i>	S. Hickey (Univ. Hamburg, Germany)
9:50-10:10	<i>Synthesis, growth's kinetics, structural and optical characterization of PbSe/PbSeS core-alloyed shell nanocrystals</i>	E. Lifshitz (Technion, Haifa, Israel)
10:10-10:40	<i>Synthesis, applications and perspectives of complex nanocrystal structures</i>	L. Manna (National Nanotechnology Lab, Lecce, Italy)

10:40-11:10		PAUSE	
11:10-11:40	<i>Optical spectroscopy as a tool to probe the surface and surroundings of II-VI quantum dots</i>		A. Meijerink (Univ. Utrecht, Netherlands)
11:40-12:00	<i>Silica coated nanoparticles by microemulsion system</i>		M. Darbandi (Freiburg Materials Res. Cent, Germany)
12:00-12:20	<i>Polymer-coated inorganic nanocrystals: surface modification with poly(ethylene glycol)</i>		R. Sperling (LMU Munich, Germany)
12:20-12:40	<i>Electrochemical and spectroelectrochemical investigations of CdSe-tetraaniline nanohybrides</i>		A. Pron (CEA-CNRS, Grenoble, France)
12:45-14:30		LUNCH	
Assembly and self-assembly			
15:00-15:30	<i>Self-organization of inorganic nanocrystals</i>		C. Petit (Univ. Paris VI, France)
15:30-15:50	<i>The assembling of colloidal nanocrystals</i>		N. Gaponik (Techn. Univ. Dresden, Germany)
15:50-16:10	<i>Lateral patterning of luminescent nanocrystals</i>		L. Chi (Univ. Münster, Germany)
16:10-16:30	<i>Self-alignment of CdSe nano-rods through anisotropic surface polarizability</i>		R. Bernard (Univ. Paris-Sud, France)
16:30-17:00		PAUSE	
17:00-17:30	<i>Molecular spring assemblies of nanoparticles and nanowires</i>		N. Kotov (Univ. Michigan, USA)
17:30-17:50	<i>Controlled self-assembly of nanocrystals in polycrystalline fluorescent dendrites with energy-transfer properties</i>		I. Nabiev (Univ. Reims, France)
17:50-18:10	<i>Exciton energy transfer in supramolecular systems of colloidal CdSe semiconductor nanocrystals and organic dye molecules</i>		C. von Borczyskowski (Techn. Univ. Chemnitz, Germany)
18:15-19:45		DINNER	
19:45-20:45	Poster Session 1 (15 posters)		
21:00-22:00	Poster Session 2 (15 posters)		

Monday, January 9, 2006:

Optical, electrical and magnetic properties		
9:00-9:30	<i>Nanocrystals in coupled microresonator structures</i>	U. Woggon (Univ. Dortmund, Germany)
9:30-9:50	<i>CdSe-single-nanocrystal based active tips for near-field optical microscopy</i>	Y. Sonnefraud (CNRS & UJF Grenoble, France)
9:50-10:10	<i>Engineering the exchange interaction in II-VI nanocrystals for CQED applications</i>	N. Le Thomas (Univ. Dortmund, Germany)
10:10-10:40	<i>Characterisation of colloidal CdSe nanocrystals using cyclic voltammetry in ionic liquids</i>	T. Nann (Univ. Freiburg, Germany)
10:40-11:10	PAUSE	
11:10-11:30	<i>Electrochemical study of ferrocene functionalized colloids: an insight into surface fractal dimension of TiO₂ and SnO₂ colloids</i>	S. Sadki (CEA-CNRS-UJF, Grenoble, France)
11:30-11:50	<i>Structural and magnetic properties of chemically synthesized FePt nanoparticles</i>	M. Delalande (CEA-DRFMC-SP2M, Grenoble, France)
11:50-12:10	<i>Interferometric pump-probe spectroscopy of single gold nanoparticles</i>	M. Lippitz (Univ. Leiden, The Netherlands)
12:45-14:30	LUNCH (FOR PARTICIPANTS WHO DON'T WANT TO TAKE PART IN THE SOCIAL EVENT)	
12:30-16:00	"SOCIAL EVENT" (CROSS COUNTRY SKI OR SNOW HIKING)	
16:00-16:30	PAUSE	
Applications in biology		
16:30-17:00	<i>Biological applications of colloidal nanoparticles</i>	W. Parak (LMU Munich, Germany)
17:00-17:30	<i>Single quantum dot imaging in live cells: towards a molecular GPS</i>	M. Dahan (Ecole Normale Superieure Paris, France)

17:30-17:50	<i>Controlling the distribution of metal nanoparticles for remote release from polyelectrolyte multilayer capsules</i>	A. Skirtach (MPI for Colloids & Interfaces, Golm, Germany)
17:50-18:20	<i>Fluorescent nanoparticle probes for high content screening imaging and diagnostic applications</i>	Y. Volkov (Trinity College Dublin, Ireland)
18:30-20:00	DINNER	
20:00-...	Σ TIME FOR DISCUSSIONS AND GET TOGETHER	

Tuesday, January 10, 2006:

Applications in electronics and optoelectronics		
9:00-9:30	<i>Semiconductor nanocrystals for optoelectronic applications</i>	J. Feldmann (LMU Munich, Germany)
9:30-9:50	<i>II-VI quantum dot applications in optical telecommunications</i>	S. Kershaw (Trackdale Ltd, Framlingham, UK)
9:50-10:10	<i>Incorporation of gold nanoparticles in opals for photonic bandgap structure modification</i>	S. Romanov (Univ. College Cork, Ireland)
10:10-10:40	<i>Controlled assembly and electronics in nanocrystal-based devices</i>	M. Drndic (Univ. Pennsylvania, USA)
10:40-11:10	PAUSE	
11:10-11:40	<i>Quantum efficiencies up to 700% in conversion of light quanta into charge carriers in semiconductor nanocrystals</i>	V. Klimov (Los Alamos Nat. Labs, USA)
11:40-12:10	<i>Controlling nanostructures in polymer/nanoparticle photovoltaic devices</i>	N. Greenham (Univ. Cambridge, UK)
12:10-12:30	<i>Hybrid OLEDs with CdSe/ZnS quantum dots</i>	E. Arici (Siemens AG, Erlangen, Germany)
12:30-14:00	LUNCH - BUFFET	