

Time	Title of Talk	Name	Institution
<b>Thursday, 21st of February 2013</b>			
8:30-9:00	Arrival and Registration		
9:00-9:15	Welcome	Goldschmidt, J. C.	Fraunhofer ISE
<b>9:15 – 12:00 Upconversion systems and Solar Cells</b>			
9:15 – 9:45	The Nanospec Project – Advanced Upconversion Systems	Goldschmidt, J. C.	Fraunhofer ISE
9:45 – 10:15	Up-conversion for Silicon Photovoltaics	Conibeer, Gavin	UNSW
<u>10:15 – 10:45 Coffee Break</u>			
10:45 – 11:15	The Effect of Increasing both Er- and Phosphor Concentration for $\beta$ -NaYF <sub>4</sub> : Er <sup>3+</sup> Up-Conversion Phosphor in a Perfluorocyclobutyl Host Matrix – A Monochromatic Study	Richards, Bryce	HWU
11:15 – 11:30	Bifacial Silicon Solar Cells for Upconversion Applications	YR: Fischer, Stefan	Fraunhofer ISE
11:30 – 11:45	Plasmonic Reflection Grating Back Contacts for Thin-Film Silicon Solar Cells	YR: Paetzold, Ulrich W.	IEF
<u>12:00 – 13:00 Lunch break</u>			
<b>13:00-16:45 Upconverter Materials</b>			
13:00 – 13:30	Sun Spectrum Engineering: Mixed Porphyrin Strategy	Balouchev, Stanislav	MPIP
13:30 – 14:00	Improving the light-harvesting of thin-film solar cells with photochemical upconversion	Schulze, Tim	HZB Berlin
14:00 – 14:30	Lanthanide doped alkaline earth fluoride nanoparticles: Synthesis, structural and morphological characterization	Bettinelli, Marco	University of Verona
14:30 – 15:00	Efficiency scaling of non-coherent upconversion	Zimmermann, Jochen	Albert-Ludwigs Universität
<u>15:00 – 15:30 Coffee Break</u>			
15:30 – 16:00	Upconversion in beta-NaYF <sub>4</sub> :Er under 4113/2 excitation	Krämer, Karl	Universität Bern
16:00 – 16:15	Direct observation of triplet-energy-transfer in a molecular upconverting system – modelled in the transient case'	YR: Piper, Roland	Imperial College
16:15 – 16:30	Exploring the Limits of Upconversion Photoluminescent Quantum Yield via broadband excitation: Spectral Leverage	YR: MacDougall, Sean	HWU
16:30 – 16:45	Upconversion in lanthanide-doped materials. Photovoltaic applications	YR: Martin-Rodriguez, Rosa	UU
<b>17:00-18:00 Poster Session</b>			
		Fröhlich, Benjamin	Fraunhofer ISE
		Wolf, Sebastian	Fraunhofer ISE
		Capek, Richard	Technion
		Hoffmann, André	FZ Jülich

		Eisenlohr, Johannes	Fraunhofer ISE
<b>19:30</b>	<b>Dinner, Greiffenegg Schlössle</b>		

<b>Friday, 22nd of February 2013</b>			
<b>8:45-12:15 Luminescent nano-crystalline quantum dots</b>			
8:45 – 9:15	Exciting multiple electrons with one photon in semiconductor nanocrystals for highly efficient solar cells	Siebbeles, Laurens	Delft University of Technology
9:15 – 9:45		Kristen, Juliane	Fraunhofer IAP
9:45 – 10:15		Lifshitz, Efrat	Technion Haifa
<u>10:15 – 10:45 Coffee Break</u>			
10:45 – 11:15	Temperature dependence of quantum dot luminescence – from 1 to 500 K	Meijerink, Andries	Universiteit Utrecht
11:15 – 11:45	Theory and simulation of NIR fluorescence in PbSe/PbS core-shell quantum dots	Aeberhard, Urs	FZ Jülich
11:45 – 12:00	Low temperature route to encapsulation of the PbSe/PbS and PbSe/CdSe quantum dots in perfluorocyclobutyl (PFCB) polymer matrix	YR: Ivaturi, Aruna	HWU
<u>12:15 – 13:15 Lunch break</u>			
<b>13:15 – 15:15 Plasmonics and Photonics for Photon Management</b>			
13:15 – 13:45	Unraveling the interplay of photonics, electronics, and thermodynamics in solar upconversion	Dionne, Jennifer	Stanford
13:45 – 14:15	Use of organic reflectors in solar energy systems	Debije, Michael	TUE
14:15 – 14:45		YR: Wouters, Claudia	TUE
14:45 – 15:00		von Plessen, Gero	RWTH Aachen
15:00 – 15:15	Photonic Structures for systems with silicon solar cells and upconverters	YR: Herter, Barbara	Fraunhofer ISE
<u>15:15 – 15:45 Coffee Break</u>			
<b>15:45-16:30 Panel Discussion &amp; Conclusions of Workshop</b>			
<b>16:30-17:30 Tour of ISE facilities</b>			

## Addresses

Place of Workshop: Fraunhofer ISE, Heidenhofstraße 2, Room A-108

Please find a location plan (including local traffic) on:

<http://www.nanospec.eu/workshop-on-photon-management/how-to-find-us>

Bus and train stop: "Robert-Koch-Straße" (tram line 5) or "Schillhof" (bus no. 10)

Hotels:

1) InterCity Hotel, Bismarckallee 3, 79098 Freiburg, Tel. +49 (0)761 3800-0;

2) Hotel Stadt Freiburg, Breisacherstraße 84b, 79110 Freiburg, Tel. +49 (0) 761 - 89680;

Dinner on 21<sup>st</sup> February 2013: Restaurant Greifenegg Schlössle, Schlossbergring 3, 79098 Freiburg