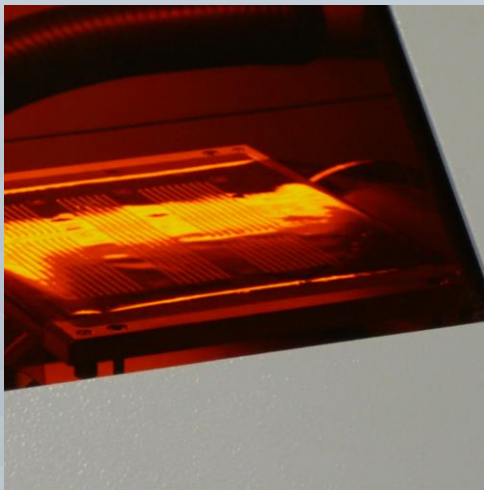




Leibniz Institute of
Surface Modification

Laser Processing in Photovoltaics

Call for presentations

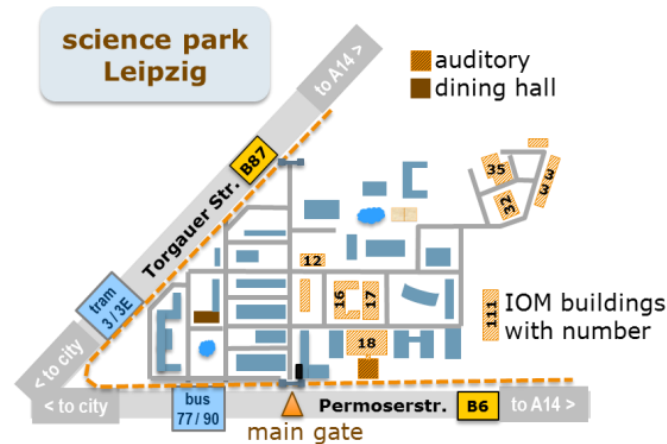


Leipzig, Germany

November 27th/28th 2014

E-Mail: pv-ws14@iom-leipzig.de

Internet: www.iom-leipzig.de
www.appolo-fp7.eu/workshops



Venue

IOM Leipzig

Permoserstr. 15, Leipzig, Germany

By car from A14

Exit 25 'Leipzig - Nordost' to city, 4 km

Exit 26 'Leipzig - Ost', to city, 5 km

By air plane

From airport "Halle-Leipzig" use railway to Leipzig Hbf. and change to tram line 3 / 3E (dir. northeast) exit at stop "Permoser/Torgauer Straße"

Leibniz-Institut für Oberflächenmodifizierung

Permoserstr. 15, Leipzig, Germany

Telefon: ++49(0)341 235 3287

Fax: ++49(0)341 235 2584

E-mail: info@iom-leipzig.de

Internet: www.iom-leipzig.de

Laser Processing in Photovoltaics

The opportunities of using lasers in the fabrication process of photovoltaics are quite very different and cover the range from drilling, texturing, scribing, soldering to contact finger deposition. Driven by the economy the PV market is still in motion. The application of lasers is one main technical approach for the reduction of the production costs, increasing the fabrication speed and enhancing the module performance.

Topics of the workshop

Laser processes in photovoltaic production

Innovative laser sources

Mechanism and modelling of laser processes in photovoltaics

Laser processing for silicon PV

Integrated interconnection of thin films

Lasers in CIGS photovoltaics

Laser equipment for PV application

Keynote and invited speakers

Dr. Claus Zimmermann

Airbus Defence and Space, München

Dr. Alexander Braun

Solarion AG, Zwenkau

Dr. Rico Böhme

InnoLas Solutions GmbH, Krailling

Sponsored by:



www.appolo-fp7.eu



Workshop program

Thursday, 27.11.2014		
12:00	Registration	
IOM Colloquium		
13:00	Current challenges in photovoltaic power generation for space	Claus Zimmermann, Airbus Industries, München
14:00	Rearrangement & Coffee break	
APPOLO workshop @ IOM “Laser Processing in Photovoltaics”		
14:30	Opening remarks	Stefan Mayr, IOM Leipzig
14:35	APPOLO project within FP7 framework	Gediminas Račiukaitis, FTMC, Vilnius, Lithuania
Session - Silicon PV		
14:40	Laser Processes in Photovoltaics Production – A Review“	Rico Böhme, InnoLas Solutions GmbH
15:10	Laser welding for module interconnection of Al metallized solar cells	Henning Schulte-Huxel, ISFH, Hameln
15:30	Precise and sensitive scribing of textured thin-film photovoltaic layers using selective femtosecond laser ablation	Paul-Tiberiu Miclea, CSP Seifert, Halle
15:50	Coffee break	
Surface processing for light harvesting		
16:20	Light harvesting structures for photovoltaic elements using laser beam interference	Indrišiūnas Simonas, FTMC, Vilnius, Lithuania
16:40	Darkening of metal surfaces	Tomi Smausz, Univ. of Szeged, Hungary
17:00	Laser based metallization processes for PV devices	David Muñoz, Universidad Politécnica de Madrid, Spain
17:20	Fast scanning cw laser beams for PV and other applications	Udo Löschner, FH Mittweida
17:40	Round table discussion @ Coffee break	
19:30	Evening event (Leipzig centre, Panorama Tower - "Plate of Art", www.panorama-leipzig.de)	

Friday, 28.11.2014		
08:30	Registration	
Thin film PV I - CIGS -		
09:00	CIGS on flexible substrates	Alexander Braun, Solarion AG
09:30	Investigations of laser-induced layer lift-off processes for thin-film solar cell processing	Paulius Gecys, FTMC, Vilnius, Lithuania
09:50	tbd	Thomas Peschel, IOF Jena
10:10	Fundamental mechanisms of selective structuring of ZnO in CIGS thin-film solar cells: Understanding “laser P3”	Regina Moser, FH München
10:30	The state of matter of thin molybdenum films at the ablation threshold using ns- and ps- pulses	Matthias Domke, FH Vorarlberg, Austria
10:50	Coffee break	
Thin film PV II		
11:20	Towards an understanding of laser ablation: Selective structuring of thin films for PV	Heinz Huber, FH München
11:50	Assessment of equipment and processes for industrial all-laser scribing of CIGS thin-film solar modules	Andreas Burn, FH Bern, ALPS, Switzerland
12:10	Organic solar cells and laser scribing	Roland Rösch, TU Ilmenau
12:30	Closing remarks	Organizers
12:35	- Lunch/Discussion	
14:00		
14 ++	IOM/Laser-Lab tour	

Registration form

Please register to the APPOLO & IOM workshop “Laser processing in PV” as soon as possible but latest at the Nov. 20th, 2014:

E-mail: klaus.zimmer@iom-leipzig.de or pv-ws14@iom-leipzig.de

Fax: ++49 (0)341 235 2584

I participate the workshop at the

Nov. 27th, 2014

Nov. 28th, 2014

I will probably have lunch at the science park (selection from different meals, salad and soft drinks is available)

luncheon voucher will be provided at the registration desk for those which are ordered lunch; self-service is also possible.

Nov. 27th, 2014

Nov. 28th, 2014

I will attend the evening event at the Nov. 27th, 2014

Nov. 27th, 2014

Family name:

First name

Organization

E-mail

Phone:

IOM - Workshop fee is 20 €/80 € (one day/two days including evening event) for all participants.

Please transfer before the workshop to:

Account	IOM Leipzig
Knt-Nr:	01 021 294 01
BLZ:	860 400 00
IBAN:	DE76860400000102129401
BIC:	COBADEFF860
	Commerzbank Leipzig
Code	PV-Workshop 2014

Accommodation

Participants are kindly asked to take care of their hotel reservation themselves. Below, please find some suggestions for hotels in Leipzig:

City centre

Motel One Leipzig

Nikolaistr. 23, 04109 Leipzig

Tel. +49-(0)341-33 74 370 or leipzig-nikolaikirche@motel-one.com

Novotel Leipzig City

Goethestrasse 6, 04109 Leipzig

Tel. +049-(0)341-99 58 930 or h1784-RE@accor.com

Mercure Hotel Leipzig am Johannisplatz

Stephanstrasse 6, 04103 Leipzig

Tel. +49-(0)341-9779-610, 611 or h5406-RE@accor.com

Hotel Michaelis

Paul-Grüner-Straße 44, 04107 Leipzig

Tel. +49-(0)341-2 67 80 or www.michaelis-leipzig.de/de/hotel-michaelis

pentahotel Leipzig

Grosser Brockhaus 3, 04103 Leipzig

Tel. +49-(0)341-1292 0 or info.leipzig@pentahotels.com

Radisson Blu Hotel

Augustusplatz 5-6, 04109 Leipzig

Tel. +49-(0)341-21 46 877 or info@radisson-leipzig.com

Near IOM

Artis Suite Hotel

Permoserstr. 50, 04318 Leipzig

Tel. +49-(0)341-25890 or www.suitehotel-leipzig.de

Treff Hotel Leipzig

Schongauer Str. 39, 04329 Leipzig

Tel. +49-(0)341-2540 or <http://www.h-hotels.com/hotels/ramada-hotel-leipzig/willkommen.html>

Pension Pfefferkiste

Wurzener Str. 167, 04318 Leipzig

+49-(0)341-2329711 or www.pfefferkiste-leipzig.de

Zum goldenen Adler

Portitzer Str. 10, 04318 Leipzig

Tel. +49-(0)341/244000

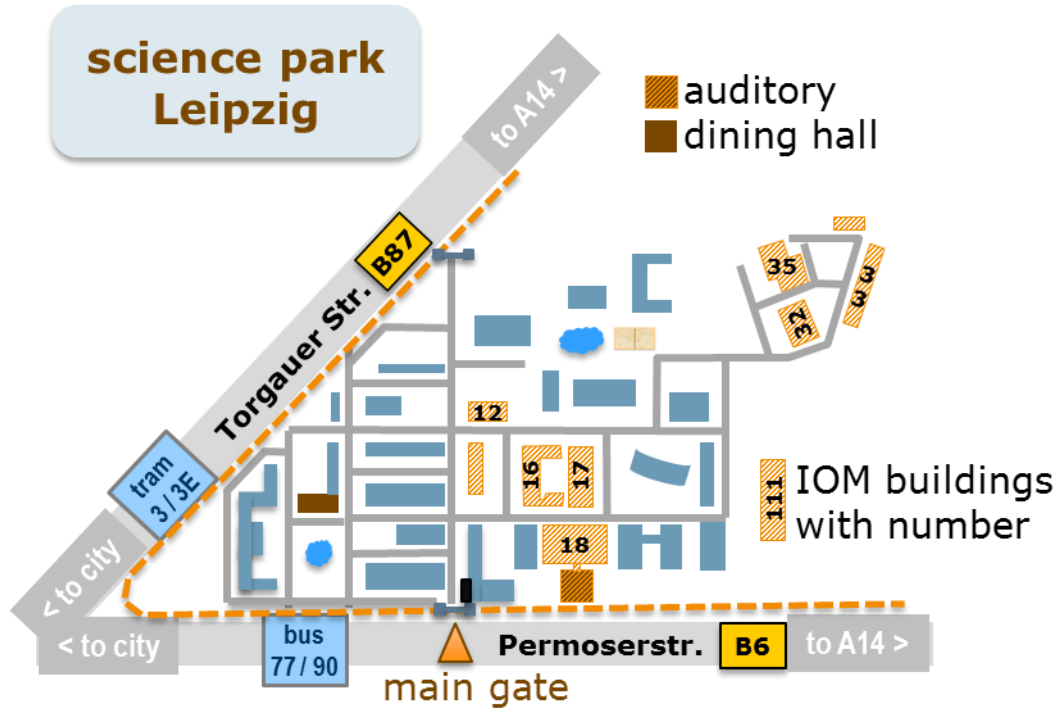
The venue

The Workshop is held at

IOM Leipzig

Permoserstr. 15, Leipzig, Germany

Building 18.0 at the science park Leipzig



See also: <http://www.iom-leipzig.de/das-institut/anfahrt/>

The evening event takes place at the city centre

Panorama Tower Leipzig

(www.panorama-leipzig.de)

Augustusplatz 9, 04109 Leipzig

