

SCOPE OF WORKSHOP

A perfect semiconductor is in principle useless for electrical and electronic application. It is the defects which allow tailoring properties like electrical conductivity, minority carrier lifetime or absorption to name a few.

Within this workshop defect properties and the impact of defects on physical properties of semiconductors will be referred and discussed. Further complementary methods used to characterize defects in semiconductors (e.g. deep level transient spectroscopy, transmission electron microscopy, positron annihilation spectroscopy, surface probe microscopy) will be presented and their strengths and weaknesses exemplified. In the end, the participants will have an overview of the electrical, morphological and structural characterization of semiconducting material and devices.

GENERAL INFORMATION

The workshop is laid out for 70 participants; therefore, early registration is suggested.

The scientific program comprises the plenary talks of the invited speakers and a poster session. Each workshop attendee is encouraged to present own work within the poster session. The posters must be prepared in portrait format with a maximal size of DIN A0. We will assign a monetary **poster award**: 1st price: 200€, 2nd: 150€, 3rd: 100€. The abstract for the poster contribution must be submitted by email (subject FAHL) by 09.09.2011. mail address: hlp@physik.uni-leipzig.de

TRAVEL INFORMATION

The airport Leipzig-Halle is recommended as the final flight destination. Every hour a train departs towards Leipzig's main station located in the city centre. The express train (ICE) lines Munich-Hamburg and Dresden-Frankfurt/Bremen cross in Leipzig. Leipzig is located at the intersection of the autobahn A9, A14 and A38.

SUGGESTED HOTELS

Hotel am Bayrischen Platz
Paul-List-Straße 5, 04103 Leipzig
phone: +49 (0)341 14086

Novotel Leipzig City
Goethestrasse 11, 04109 Leipzig
phone: +49 (0)341 99580

Radisson Blu Hotel
Augustusplatz 5-6, 04109 Leipzig
phone: +49 (0)341 21460

Leipzig Marriott Hotel
Am Hallischen Tor 1, 04109 Leipzig
phone: +49 (0)341 96530

Motel One
Nikolaistraße 11, 04109 Leipzig
phone: +49 (0)341 3374370

Ibis
Bruehl 69, 04109 Leipzig
phone: +49 (0)341 21860

Hotel Adagio
Seeburgstraße 96, 04103 Leipzig
phone: +49 (0)341 216690

Mercure Leipzig am Johannisplatz
Stephanstrasse 6, 04103 Leipzig
phone: +49 (0)341 97790

Pentahotel Leipzig
Großer Brockhaus 3, 04103 Leipzig
phone: +49 (0)341 12920

CONFERENCE VENUE

The conference will be held at the faculty of physics and geosciences of the Universität Leipzig which was founded over 600 years ago in 1409. The first professorship in physics was established in 1557. Since then, important researchers with high international reputation like Gustav Wiedemann, Ludwig Boltzmann, Paul Drude, Otto Wiener, Werner Heisenberg, Peter Debye, Friedrich Hund and Gustav Hertz have acted in the physics department. Nowadays, there are 15 different physics departments from which six are working on theoretical and nine on experimental physics.

The city of Leipzig currently has about half a million inhabitants. It received its town charter around 1165. In 1190 Leipzig received two fair privileges from Otto the Rich the margrave of Saxony. This was the starting point of the development of the city becoming a major place for trade fairs in Europe. In the cause of the 19th century Leipzig became a major publisher's centre. In that time the work of every tenth inhabitant of Leipzig was connected to book craft; Leipzig became famous as "city of books". Another nickname given to Leipzig is "Heldenstadt" (town of heroes). Actually, the people of Leipzig have earned this title because their demonstrations, that took place every Monday around St. Nikolai church, were significant for the fall of the East German regime. A famous resident of Leipzig was Johann Sebastian Bach; in his honor numerous concerts are played during the annual "Bachfest". The father of the *New Leipzig School of Artists* Neo Rauch was born and worked in Leipzig.

SOCIAL PROGRAMM

The conference fee includes the attendance of the social programm consisting of a guided city tour and the Conference Diner in the Ratskeller Leipzig located within Leipzig's New City Hall.

REGISTRATION AND CONFERENCE FEE

In order to join the workshop a registration via fax or email is required. A registration form is attached to this flyer. Further, the registration form can be downloaded from the conference homepage:

<http://www.uni-leipzig.de/~fahl/FAHL2011/>

Deadline for registration: 9.9.2011

fax: +49 (0)341 9732668

email: hlp@physik.uni-leipzig.de

Successful registration will be approved by email. The registration fee is 50€ and includes drinks during coffee breaks, lunch and the social program. The conference fee has to be remitted by 9.9.2011 to the bank account:

Remittee: Hauptkasse Sachsen – für Uni Leipzig
Account number: 315 301 1370
bank code number: 850 503 00
bank: Ostsächsische Sparkasse Dresden / OSD
Reason of transfer: FAHL 2011, 2313912, "your name"

The name of the participant must be included in the reason of transfer field of the bank transfer. For each poster contribution an abstract (<500 words) must be submitted by email to:

hlp@physik.uni-leipzig.de

Deadline for abstract submission: 31.08.2011

LIST OF INVITED SPEAKERS AND TOPICS

Prof. Tony Peaker

The University of Manchester
School of Electrical and Electronic Engineering
Deep Level Transient Spectroscopy

Prof. Dr. Reinhard Krause-Rehberg

Universität Halle
Fakultät für Physik
Positron Annihilation Spectroscopy

Prof. Francois Danie Auret

University of Pretoria
Department of Physics
Laplace-DLTS and its Application

Prof. Dr. Lukas Eng

Technische Universität Dresden
Institut für Angewandte Photophysik
Surface Probe Microscopy

Dr. Martin Albrecht

Leibniz-Institut für Kristallzüchtung (IKZ)
Transmission Electron Microscopy

Dr. Walter E. Meyer

University of Pretoria
Department of Physics
Metastable Defects

Matthias Schmidt

Universität Leipzig
Fakultät für Physik und Geowissenschaften
Space charge layer spectroscopy with optical excitation

1ST ANNOUNCEMENT OF WORKSHOP ON *DEFECTS IN SEMICONDUCTORS AND THEIR CHARACTERIZATION*



20. AND 21. SEPTEMBER 2011 IN LEIPZIG

A workshop in the framework of



FAHL ACADEMIA