



Winter Student Seminar 2015

08.02.-12.02.2015

Marburger Haus, Kleinwalsertal, Austria

Information / Registration: maenz@uni-marburg.de



SFB 1083 – Structure and Dynamics of Internal Interfaces

Winter Student Seminar 2015

Scientific Program



Sunday, 8.2.:

08:30	Departure in Marburg (Krummbogen, ggü. Aral-Tankstelle Hauptbahnhof)
12:00 – 14:00	Lunch break in Rothenburg ob der Tauber
17:00	Arrival in Hirschegg
18:00 – 20:00	Dinner
20:00	Welcome, program preview and open discussion

Monday, 9.2.:

Session 1: Synthesis, Processing and Preparation Methods (Chair: Thussing)

09:00 – 10:00	Dr. Philip Hens (<i>AG Stolz/Volz</i>) Tutorial: MOVPE - Dream and Reality
10:00 – 10:30	Niklas Rinn (<i>AG Dehnen</i>) Synthesis of discreet organotin selenides and further derivatizations
12:00 – 14:30	Lunch break / optional outdoor workshop
16:00 – 16:30	Han Han (<i>AG Stolz/Volz</i>) Chemical evaluation of GaInAs quantum wells at atomic columns
16:30 – 17:00	Jonas Schwaben (<i>AG Koert</i>) Development of Novel Ambipolar Pentacenes and <i>N</i> -Heteroacenes - Progress & Setbacks
17:00 – 17:30	Christian Fuchs (<i>AG Stolz/Volz</i>) GaInAs/GaAsSb based lasers on GaAs substrate
18:00 – 20:00	Dinner
20:00	Poster Session 1 / Science Market: Michael Kothe: Thin film growth of functionalized Phthalocyanines Sebastian Flade: Methods of Surface analysis-Structural and spectroscopical analysis of organic thin films on metals Alexander Mänz: Phthalocyanine based Contact Primers Sebastian Thussing: Organic Thin Films on Ag(111) Robert Wilson: Mild Oxidation of Heavy Metal Ternary Zintl Phases in Ionic Liquids as a Potential Route to Clathrate Materials Malte Zugermeier: Tetraphenylporphyrins on Cu(111) as an Example for Metal/Organic Systems Studied with STM and XPS

Tuesday, 10.2.

Session 2: Spectroscopy and Theory of Interfaces (Chair: Mänz)

09:00 – 09:30	Jan Oliver Oelerich (<i>AG Baranowski</i>) Theoretical modelling of semiconductor growth
09:30 – 10:00	Josua Pecher (<i>AG Tonner</i>) Adsorption pathway determination and analysis with DFT
10:00 – 10:15	coffee break
10:15 – 10:45	Christian Berger (<i>AG S.W. Koch</i>) Microscopic Theory of Semiconductor Lasers
10:45 – 11:15	Phillip Springer (<i>AG S.W. Koch</i>) Electronic Band Structures obtained from $k \cdot p$ Theory
12:00 – 16:00	Lunch break
16:00 – 16:30	Sebastian Gies (<i>AG Heimbrodt</i>) Optical spectroscopy of novel III-V- semiconductor heterostructures
16:30 – 17:00	André Rinn (<i>AG Chatterjee</i>) Time-resolved photoluminescence spectroscopy
17:00 – 17:30	Robin Carl Döring (<i>AG Chatterjee</i>) Pump-probe spectroscopy as tool for probing carrier dynamics
18:00 – 20:00	Dinner
20:00	SFB 1083 student members meeting

Wednesday, 11.2.:

Session 3: Structural Analysis of Interfaces (Chair: Zugermeier)

09:00 – 10:00	Dr. Martin Schmid (<i>AG Gottfried</i>) Tutorial: Spectroscopies for Surface Analysis: XPS, UPS, and ISS
10:00 – 10:15	coffee break
10:15 – 10:45	Markus Stein (<i>AG M. Koch</i>) Optische Anrege-Abfrage-Spektroskopie an indirekten Halbleiter Quantenfilmen
10:45 – 11:15	Katharina Werner (<i>AG Stolz/Volz</i>) Deposition of semiconductor material Si(001) by MOCVD and structural investigation of the interface
12:00 – 16:00	Excursion to Breitachklamm and Oberstdorf
16:00 – 16:30	Angel Rocio Felix (<i>AG Stolz Volz</i>) TEM Characterization of Organic Semiconductors
16:30 – 17:00	Andreas Namgalies (<i>AG Höfer</i>) 2PPE measurement principles demonstrated on thin organic layers
18:00 – 20:00	Dinner
20:00	Poster Session 2 / Science Market: Malcolm Bartlett: Thiol-Modified Phthalocyanines Michael Klues: X-ray absorption techniques: Experiment and theory Jan Kuhnert: optical spectroscopy at Phthalocyanines Niels Münster: Cyclooctynes & functionalized Acenes: Development of Novel Organic Model Systems Lisa Vondung: Iron complexes for catalytic bond activation

Thursday, 12.2.:

10:00	Departure in Hirschegg
12:00 – 14:00	Lunch break in Rothenburg ob der Tauber
18:00	Arrival in Marburg