



SFB 1083

Structure and Dynamics
of Internal Interfaces

SFB-Workshop Organics

Forschungszentrum Jülich, May 23-24, 2019



Photo: FZ Jülich, finished by Sergey Subach

Scientific Program

Thursday, 23 May 2019

12:15 – 13:15 Arrival & Lunch

13:20 **Ulrich Höfer, Christian Kumpf**
Welcome

Session I (Chair: Christian Kumpf)

13:30 – 14:20 **Moritz Sokolowski** (Universität Bonn)
The hexagonal boron nitride layer on Cu(111) as an ultrathin spacer layer for functional molecules

14:20 – 14:40 Coffee Break

Session II (Chair: François Posseik)

14:40 – 15:10 **Klaus Stallberg** (B6 – Marburg)
Energy transfer and exciton dynamics at the PTCDA/Ag(111) and PTCDA/Au(111) interfaces

cancelled **Sangam Chatterjee** (B2 – Gießen)
Excitation dynamics in PEN-PFP Heterostructures

15:10 – 15:35 **Anna Hansmann** (B8 – Marburg)
Vibronic effects in the building blocks of organic semiconductors

15:35 – 16:00 **Pierre Dombrowski** (A2 – Marburg)
Pentacene and Perfluoropentacene Bilayers - Well-Defined Interfaces vs. Molecular Intermixture

Thursday, 23 May 2019 (continued)

Session III

16:00 – 16:45 **Posters & Coffee**

Session IV (Chair: Michael Gottfried)

16:45 – 17:20 **Christian Kumpf** (A12 – Jülich)
*Low Energy Electron microscopy and Photoemission
micro-tomography: Geometric and Electronic Structure
of NTCDA / Cu(001)*

17:20 – 17:55 **Peter Jakob** (A3 – Marburg)
Temperature effects in molecular layers

Session V (Chair: Ulrich Höfer)

18:00 – 18:30 **Discussion**

18:45 Transfer to Hotels

19:30 Dinner at Hotel Hexenturm

Friday, 24 May 2019

08:40 Transfer to FZJ

Session VI (Chair: Robert Berger)

- 09:00 – 09:35 **Ruslan Temirov** (PGI-3, FZJ & A12 – Jülich)
Feature-detection scanning tunnelling spectroscopy study of the PTCDA/Ag(111) interface state
- 09:35 – 10:00 **Lukas Eschmann** (A13 – Münster)
Coverage-dependent anisotropy of the NTCDA/Ag(111) interface state dispersion
- 10:00 – 10:30 **Masahiro Shibuta** (B6 – Marburg & Keio University, Japan)
Visualization of surface plasmons propagating at the buried organic-metal interface

10:30 – 11:00 Coffee Break & Posters

Session VII (Chair: Gregor Witte)

- 11:00 – 11:35 **Michael Gottfried** (A4 – Marburg)
Reactive metal/organic Interfaces with alternant and non-alternant aromatic molecules
- 11:35 – 12:00 **Qitang Fan** (A4 – Marburg)
Synthesis and characterization of cycloarene: C108 graphene quantum ring
- 12:00 – 12:15 **Philipp Hofmann** (A8 – Marburg)
Synthesis of Bifunctionalized Cyclooctynes for Chemoselective Layer-by-Layer assembly on Si(001)
- 12:15 – 12:40 **Julian Heep** (A8 – Gießen)
Formation of Si/organic interfaces using alkyne-functionalized cyclooctynes
- 12:40 – 12:50 **Stefan Tautz**
Conclusions
- 13:00 Lunch & Departure

Poster Session

Adamkiewicz, Alexa (GRK – Marburg)

Tip-Induced Chemical Reactions of Diethyl Ether and Tetrahydrofuran on Si(001)

Bischof, Daniel (A2 – Witte)

Crystal Structure Analysis and Anisotropic Optical Characteristics of Newly Synthesized 1,2,10,11,12,14-Hexafluoropentacene

Dreher, Maximilian (A2 – Marburg)

Growth of Extended DNTT Fibers on Metal Substrates by Suppression of Step-Induced Nucleation

Felter, Janina (A12 – Jülich)

2D growth of dendritic islands: NTCDA/Cu(001) studied in real time

Flade, Sebastian (A3 – Marburg)

Diels-Alder adduct formation of pentacene and C60

Günder, Darius (A2 – Marburg)

Charge Transfer Excitons at Molecular Acceptor-Donor-Interfaces

Thussing, Sebastian (A3 – Marburg)

Phase transition and order-disorder phase transitions of NTCDA/Ag(111)

Wagner, Christian (A12 – Jülich)

Quantitative imaging of electric surface potentials with single-atom sensitivity

Yang, Xiaosheng (A12 – Jülich)

Energy level alignment at molecule/metal and molecule/insulator/metal interfaces using k-space imaging orbital tomography

List of Participants

Collaborative Research Centre SFB 1083 & Guests

Alexa Adamkiewicz	Marburg	GRK	Philipp Hofmann	Marburg	B8
Robert Berger	Marburg	B8	Peter Jakob	Marburg	A3
Daniel Bischof	Marburg	A2	Christian Kumpf	Jülich	A12
François Bocquet	Jülich	A12	You-Ron Lin	Jülich	A12
Rustem Bolat	Jülich	Gast PGI3	Miriam Raths	Jülich	A12
Sangam Chatterjee	Gießen	B2	Michael Rohlfing	Münster	A13
Pierre Dombrowski	Marburg	A2	Nafiseh Samiseresht	Jülich	A12
Maximilian Dreher	Marburg	A2	Felix Schäfer	Gießen	B2
Michael Dürr	Gießen	A8	Masahiro Shibuta	Marburg	B6
Lukas Eschmann	Münster	A13	Moritz Sokolowski	Bonn	Gast U Bonn
Qitang Fan	Marburg	A4	Klaus Stallberg	Marburg	B6
Melanie Fey	Gießen	B2	Serguei Soubatch	Jülich	Gast PGI3
Sebastian Flade	Marburg	A3	Stefan Tautz	Jülich	A12
Michael Gottfried	Marburg	A4	Ruslan Temirov	Jülich	Gast PGI3
Darius Günder	Marburg	A2	Christian Wagner	Jülich	Gast PGI3
Anna Hansmann	Marburg	B8	Gregor Witte	Marburg	A2
Julian Heep	Gießen	A8	Xiaosheng Yang	Jülich	Gast PGI3
Ulrich Höfer	Marburg	B6			



Deutsche
Forschungsgemeinschaft



SFB 1083
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Philipps



Universität
Marburg

JUSTUS-LIEBIG-
 UNIVERSITÄT
GIESSEN

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MÜNSTER