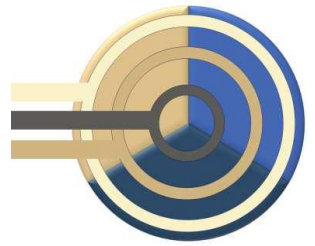


Graduiertenkolleg 1782
„Functionalization of Semiconductors“
Haus Schönblick, Schwäbisch Gmünd



Seminar Program 23. – 25.09.2019

Monday, 23.09.2019

till 12:30 Arrival

13:00 – 14:00 Lunch

Session I

Chair: *Mikko Wilhelm*

14:00 – 14:30 **Alexa Adamkiewicz:** Controlled Manipulation of Diethyl Ether on Si(001) via Tip-Induced Electronic Excitation

14:30 – 15:00 **Badal Mondal:** Morphological stability analysis of (pseudo-) ternary epitaxial surface

15:00 – 15:30 **Fabian Pieck:** Automated exploration of reaction networks in chemical vapor deposition by density functional theory

15:30– 16:00 Coffee Break

Session II

Chair: *Oliver Maßmeyer*

16:00 – 16:30 **Luise Rost:** Optical Spectroscopy of Ga(NAs)/Si and (GaIn)As/GaAs/Ga(AsSb) heterostructures

16:30 – 17:00 **Mikko Wilhelm:** Optoelectronic coupling of colloidal quantum dots and semiconductor substrates

17:00 – 17:30 **Steven Youngkin:** Investigation of coherent interface phonons in GaP/Si heterostructures by means of pump-probe differential reflection

18:00 Dinner

Tuesday, 24.09.2019

08:00 – 09:00 Breakfast

Session III

Chair: *Marcel Köster*

09:00 – 09:30 **Eike Dornsiepen:** Organotetrelchalcogenide Clusters with Nonlinear Optical Properties

09:30 – 10:00 **Thilo Hepp:** MOVPE Growth of Ga(N,As)/Ga(As,Bi)/Ga(N,As) W Type Structures

10:00 – 10:30 **Johannes Glowatzki:** Nitrogen incorporation in GaP on Si/GaP using novel metal organic N P precursor di-tert-butyl-amino-phosphan (DTBAP)

10:30 – 11:00 Coffee Break

Session IV

Chair: *Eike Dornsiepen*

11:00 – 11:30 **Marcel Kröner:** Optimization of Ga(N,As,Sb)/(B,Ga)(As,P)-heterostructures for laser applications on Si (001) substrate

11:30 – 12:00 **Oliver Maßmeyer:** Decomposition Analysis of TBAs and TBP during GaAs and GaP Growth by MOVPE

12:00 – 12:30 **Christian Ritter:** Building Interpnictogen Chains

13:00 – 14:00 Lunch Break

Session V

14:00 – 17:30 **Discussions**

Networking - Joint trip to the Tree Top Adventure Park and subsequent

18:00 Barbecue

Wednesday, 25.09.2019

08:00 – 09:00 Breakfast

09:30 – 12:00 **Postersession**
(coffee break included)

1. **Alexa Adamkiewicz:** Tip-Induced Chemical Reactions of Diethyl Ether and Tetrahydrofuran on Si(001)
2. **Eike Dornsiepen:** Organotetrelchalcogenide Clusters with Nonlinear Optical Properties
3. **Tobias Dunaj:** Interpnictogen Compounds from Diaryl Halido Bismuthanes
4. **Timo Glaser:** Azide based functionalization of Si(001)
5. **Robin Günkel:** MOVPE Growth and Characterization of GaAs based W Type Ga(N,As)/Ga(As,Bi)/Ga(N,As) Quantum Well Heterostructures
6. **Damien Heimes:** Improved Frozen Lattice Approximation by First Principles Phonon Calculations
7. **Marcel Köster:** Sila crown ethers and their coordination towards p-block cations
8. **Marcel Kröner:** *Monolithic Integrated Ga(NAsP(Sb)) Laser on Silicon (001)*
9. **Sven Christian Liebscher:** *Ab-initio based calculation of the optical and electronic properties of dilute Ga(SbBi)*
10. **Oliver Maßmeyer:** *Real time mass spectrometric gas phase investigations during MOVPE*
11. **Bertram Peters:** *Ionothermal Approach and Characterization of Telluridomercurates*
12. **Christian Ritter:** *Synthesis and Functionalization of Bis(amido)diazadiarsetidines*
13. **Luise Rost:** *Correlation of optical properties and interface morphology in type- II semiconductor heterostructures*
14. **Julian Veletas:** *Ga(As,Bi) Based W-Type Alloys*
15. **Maximilian Widemann:** *In-situ TEM growth investigations of III/V semiconductor materials*

12:30 – 13:30 Lunch Break

14:00 Departure