

PROGRAMM
Interdisziplinäres Doktorandenseminar des
Deutschen Arbeitskreises für Analytische Spektroskopie (DAAS)
6.-8. April 2016 in Ulm

Mittwoch, 6. April 2016

9:30	Registrierung und Kaffee	
10:00	Prof. Dr. Kerstin Leopold, Uni Ulm Dr. Wolfgang Buscher, Vorsitzender des DAAS	Eröffnung und Begrüßung
Gastvortrag 1		
10:15 – 10:45	Dr. Lars Müller, Diplom-Chemiker Kriminaltechnisches Institut, Bundeskriminalamt	
Vorträge Doktoranden 1		
10:45 – 11:05	Matthias Schwenk, Universität Ulm	In-situ monitoring of gas hydrates via mid-infrared fiber optic eva- nescent field absorption spec- troscopy
11:05 – 11:25	Maria Schlathauer, Universität Ulm	Mercury trace analysis using atomic fluorescence spectrometry
11:30 – 12:30	Mittagspause	
Vortragstraining in kleinen Gruppen		
12:30 – 14:30	Einteilung in Gruppen: Gruppe 1: Raum O27/121 Gruppe 2: Raum O27/122 Gruppe 3: Raum O27/123 Gruppe 4: Raum O27/2201 Gruppe 5: Raum O27/2202	Przewodnik Alexander Wörle Katharina Schlathauer Maria Schwenk Matthias Tütüncü Erhan Haas Julian
14:30 – 14:45	Kaffeepause	
Gastvortrag 2		
14:45 – 15:15	Dr. Florian Geistmann, Vertrieb, Shimadzu Deutschland GmbH	
Vorträge Doktoranden 2		
15:15 – 15:35	Julian Haas, Universität Ulm	N.N.
15:35 – 15:55	Erhan Tütüncü, Universität Ulm	Gas analysis using tunable diode laser absorption spectroscopy and substrate-integrated hollow waveguides
15:55 – 16:15	Katharina Wörle, Universität Ulm	Quantitative determination of noble metal nanoparticles by means of total reflection x-ray fluorescence analysis

16:15 – 16:30	Kaffeepause	
16:30 – 16:50	Martina Merg, Hochschule Biberach	Aggregation and Modification of Monoclonal Antibodies Induced by UVC Irradiation
16:50 – 17:10	Alina Handl, Hochschule Biberach	2D fluorescence spectroscopy for real-time bioprocess monitoring in CHO fed-batch fermentations
17:10 – 17:30	Dorothee Iffland, Johannes Gutenberg-Universität Mainz	Quantification of boron in biological samples for boron neutron capture therapy using online standard addition
17:30 – 17:50	Andrea Bellmann, Leibniz-Institut für Katalyse an der Universität Rostock e.V.	Selective catalytic reduction of NO _x with CH ₄ over Co-ZSM-5 catalysts: A catalytic and in situ spectroscopic study
18:00	Grillabend an der Uni	

Donnerstag, 7. April 2016

Gastvortrag 3		
9:00 – 9:30	Dr. Martin Wende, Senior Research Manager, Competence Center Analytics, BASF	
Vorträge Doktoranden 3		
9:30 – 9:50	Julian Heidke, Johannes Gutenberg-Universität Mainz	The halo-shaped flowing atmospheric pressure afterglow (halo-FAPA) as an ionisation source for molecular and atomic mass spectrometry
9:50 – 10:10	Andrea Käppler, IPF Dresden/TU Dresden	Identification of microplastics in marine samples by Raman and FTIR Microspectroscopy
10:10 – 10:25	Kaffeepause	
Gastvortrag 4		
10:25 – 10:55	Prof. Dr. José Broekaert, Universität Hamburg	Innovative Forschung zur Plasmaspektrometrie zur Lösung analytischer Fragestellungen
Vorträge Doktoranden 4		
10:55 – 11:15	Renata Gerhardt, Universität Leipzig	Surface enhanced Raman spectroscopy as a detection technique for lab-on-a-chip systems
11:15 – 11:25	Christin Wilske, Helmholtz-Zentrum für Umweltforschung GmbH - UFZ	PARAFAC-Models of 2D fluorescence spectra from water samples - A method validation
11:30 – 12:30	Mittagspause	

Gastvortrag 5

12:30 – 13:00

Jörg Hansmann, Produktspezialist ICP DACH, Agilent Technologies
Sales & Services GmbH & Co. KG

Workshop in kleinen Gruppen: Analytische Fragestellung

13:00 – 15:00

Einteilung in Gruppen:

Gruppe 1: Raum O27/121

Gruppe 2: Raum O27/122

Gruppe 3: Raum O27/123

Gruppe 4: Raum O27/2201

Gruppe 5: Raum O27/2202

Dr. Lars Müller, BKA

Prof Dr. Broekaert, UniHamburg

Hr. Venzago, AQura

Dr. Martin Wende, BASF

Dr. Heiß, Merck

15:00 – 15:15

Kaffee

Vorträge Doktoranden 5

15:15 – 15:35

Julia Stäb,
Universität Tübingen

Optical Sensorsystem for the
detection of nanoparticles in
consumer products

15:35 – 15:55

Patricia Weber,
Universität Tübingen

Optical detection of antibiotics
for in-line monitoring of fer-
mentation processes

15:55 – 16:15

Hale Ceren Yilmaz,
ETH Zürich

Sr isotope ratios and Rb-Sr ages
by LA-ICPMS with isobar sepa-
ration by on-line electrothermal
vaporization

16:15 – 16:35

Marc André Althoff,
LMU München

Analytics and Detection of Ami-
ton and related Compounds

16:35 – 16:50

Kaffeepause

16:50 – 17:10

Marcus Heinl,
Johannes Gutenberg-
Universität

Development and evaluation of
a post column long path sheath
flow UV/Vis absorbance detec-
tion cell for capillary electro-
phoresis

17:10 – 17:30

Andreas Schnapp,
Universität Münster

Laser Mass Spectrometry Imag-
ing of Cuticular Lipids from In-
sects Using Etched Silver Sub-
strates

17:30 – 17:50

Mandy Großgarten,
Westfälische Wilhelms-
Universität Münster

Evaluating the osseointegration
of endoprotheses using ele-
mental bioimaging

18:30

Stadtführung

Freitag, 8. April 2016

Gastvortrag 6		
9:00 – 9:30	Dr. Christian Heiß, Director Analytical Chemistry, Merck	
Präsentation der Ergebnisse zu den Workshops		
9:30 – 10:30	5 Gruppen, je 12 Minuten	
Vorträge Doktoranden 6		
10:30 – 10:50	Georgina Thyssen, Westfälische Wilhelms- Universität Münster	Investigation of the sodium distribution in arabidopsis thaliana roots by means of LA-ICP-MS
10:50 – 11:10	Kathrin Freudenberger, Universität Tübingen	Development of a biosensor for determination of immunosuppressive drugs
11:10 – 11:30	Ingo Strenge, Universität Siegen	Fast Data Acquisition with Microsecond Time Resolution in Inductively Coupled Plasma Mass Spectrometry and its Advantages for the Characterization of Nanoparticles
11:30 – 11:50	Christopher Kuhlmann, Universität Siegen	Liquid Crystal Display Surface Analysis for Fast Display Failure Investigation by Ambient Desorption/Ionization Mass Spectrometry
11:50 – 12:50	Mittagspause	
Gastvortrag 7		
12:50 – 13:20	Cornel Venzago, Head of Inorganic Analytics, Evonik Technology & Infrastructure GmbH	
Vorträge Doktoranden 7		
13:20 – 13:40	Fabian Eiersbrock, Universität Münster	Viscous Ionic Liquid Matrices (ILM) for MALDI-MSI Imaging of Brain Lipids with High Lateral Resolution
13:40 – 14:00	Martin Härtel, LMU München	Vacuum Outlet GC/MS for Quantification Applications
14:00 – 14:15	Ann-Kathrin Erlenkötter, TU Darmstadt	Operando Raman-FTIR studies on metal oxide gas sensors
14:15 – 14:30	Kaffeepause	

14:30 – 14:50	Oliver Hachmöller, Westfälische Wilhelms- Universität Münster	Investigating Wilson's disease by elemental bioimaging and speciation analysis using LA-ICP- MS, μ XRF and XANES
14:50 – 15:10	Dörthe Dietrich, Westfälische Wilhelms- Universität Münster	Determining the Distribution of Aluminum-doped Cerium Oxide Nanoparticles and their Effects in Rat Lung Tissue after Instilla- tion
15:10 – 15:30	Alexander Herrmann, LMU München/Helmholtz Zent- rum München	Identification of natural com- pounds as new antiviral prod- ucts by bioassay-guided frac- tionation
Preisverleihung und Abschluss		
15:30	Wahl der besten Vorträge und Preisverleihung	
16:00	Abschluss	

Unterstützt von



Bundeskriminalamt

