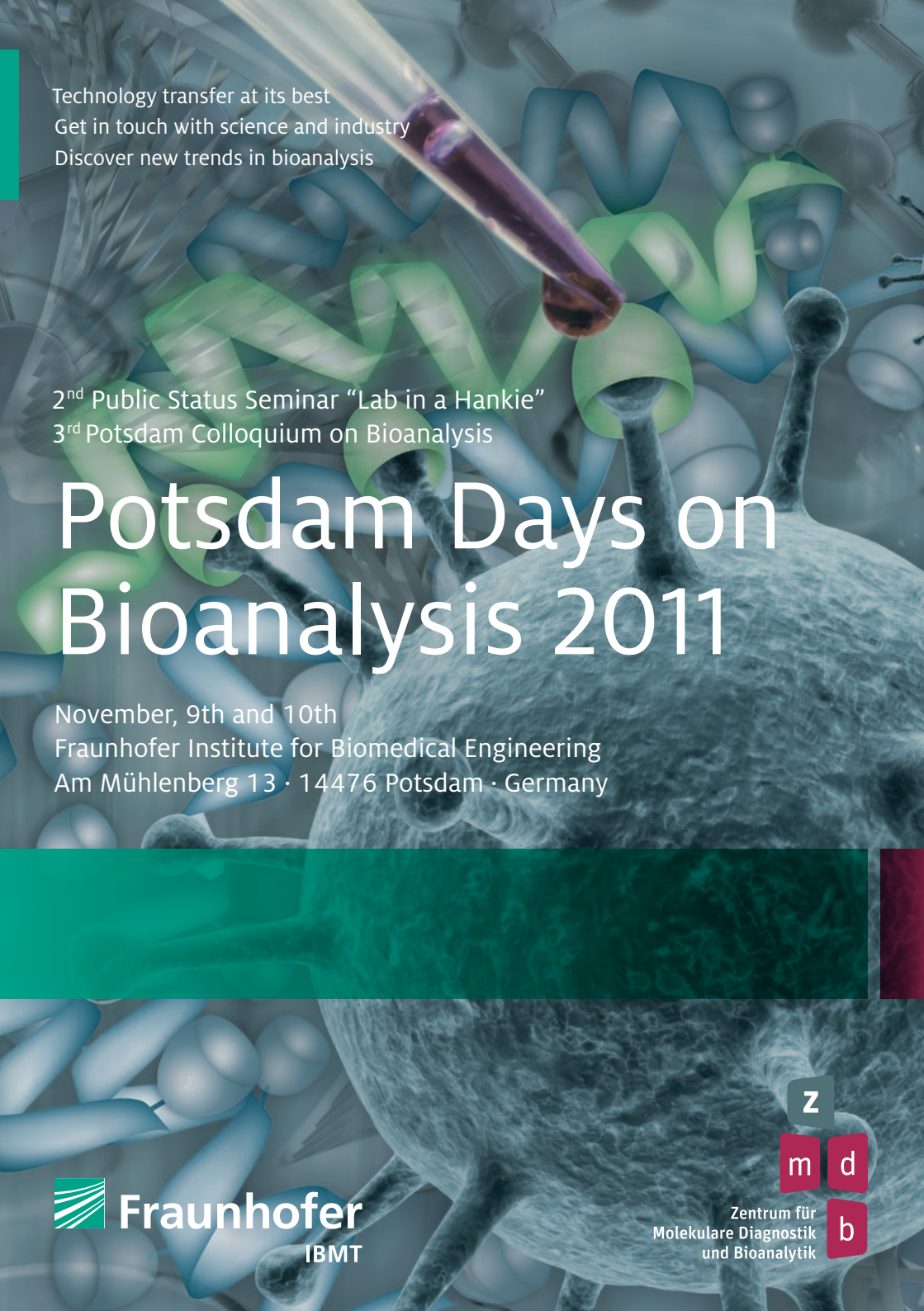


Technology transfer at its best
Get in touch with science and industry
Discover new trends in bioanalysis

2nd Public Status Seminar "Lab in a Hankie"
3rd Potsdam Colloquium on Bioanalysis

Potsdam Days on Bioanalysis 2011

November, 9th and 10th
Fraunhofer Institute for Biomedical Engineering
Am Mühlenberg 13 · 14476 Potsdam · Germany

Fraunhofer IBMT

Zentrum für Molekulare Diagnostik und Bioanalytik

Potsdam Days on Bioanalysis 2011

November, 9th and 10th

Fraunhofer IBMT

Zentrum für Molekulare Diagnostik und Bioanalytik

In cooperation with:

Universität Potsdam

GBM

Technische Hochschule Wildau Technical University of Applied Sciences

BioTOP Berlin-Brandenburg

Supported by:

Taschentuchlabor

The Project „Das Taschentuchlabor - Impulszentrum für Integrierte Bioanalyse“ is sponsored by the Federal Ministry of Education and Research through the initiative „Spitzenforschung und Innovation in den neuen Ländern“.

Bundesministerium für Bildung und Forschung

SPITZENFORSCHUNG & INNOVATION IN DEN NEUEN LÄNDERN

LAND BRANDENBURG

be Berlin

EFRE ...eine Chance durch Europa!

The Center for Molecular Diagnostics and Bioanalysis (ZMDB) is a Flagship Project of the Joint Innovation Strategy Berlin-Brandenburg at the TSB Innovationsagentur Berlin GmbH. The ZMDB is funded by the states of Berlin and Brandenburg and co-financed by the European Regional Development Fund (ERDF) of the European Union. An investment in your future!

Potsdam Days on Bioanalysis 2011

Die Bioanalytik ist in der Region Berlin-Brandenburg ein Schwerpunkt in Forschung und Entwicklung. Durch interdisziplinäre Verknüpfung von grundlagen- und anwendungsorientierter Forschung mit den rund 100 Unternehmen in der *in vitro*-Diagnostik-Branche werden Ergebnisse optimal genutzt und bei der Entwicklung neuer Produkte umgesetzt.

In der Life Science Region Berlin-Brandenburg ist der Wissenschaftspark Golm ein wichtiges Zentrum bei der Biosensor-Entwicklung. Sowohl an der Universität Potsdam als auch am Fraunhofer IBMT findet in enger Kooperation mit den anderen dort angesiedelten Forschungseinrichtungen und Unternehmen international herausragende Forschung statt. Die räumliche Nähe zu Berlin sichert den Know-How- und Technologietransfer über Ländergrenzen hinweg. Unterstützt wird dieser Prozess durch das Zentrum für Molekulare Diagnostik und Bioanalytik (ZMDB), das als Leitprojekt der Länder Berlin und Brandenburg die Entwicklung der *in vitro*-Diagnostik forciert. „Das Taschentuchlabor – Impulszentrum für Integrierte Bioanalyse“ ist ein hervorragendes Beispiel für die erfolgreiche Kooperation zwischen Wissenschaft und Wirtschaft in der Region.

Ziel ist die Entwicklung neuartiger Sensor-Aktor-Moleküle für die Diagnostik der Zukunft. Während der erstmalig stattfindenden Potsdamer Bioanalytik Tage 2011 werden Ergebnisse aus dem Projekt vorgestellt und aktuelle Entwicklungen im Bereich der Bioanalytik präsentiert.

The “Potsdam Days on Bioanalysis” will combine the annual Public Status Seminar of the project “The Lab in a Hankie – Impulse Centre for Integrated Bioanalysis” and the “Potsdam Colloquium on Bioanalysis”. With increasing the international focus, regional scientists not only get the opportunity to contact foreign researchers near to their workplace. Furthermore, the visibility of the location and the research taking place within is clearly enhanced.

This event has been organized by the project “Impulse Centre for Integrated Bioanalysis”, the Fraunhofer IBMT and the Center for Molecular Diagnostics and Bioanalysis (ZMDB).

Participation is free of charge. Prior registration is requested at www.zmdb.de/bioanalytik2011/

November, 9th

2nd Public Status Seminar

"Lab in a Hankie" – Impulse Centre for Integrated Bioanalysis

Das Ziel des Projektes "Das Taschentuchlabor – Impulszentrum für Integrierte Bioanalyse" liegt in der Entwicklung neuartiger Sensor-Aktor-Moleküle für die Infektionsdiagnostik. Diese Plattformtechnologie soll zukünftig eine schnelle und einfache Detektion unterschiedlichster Krankheitserreger ermöglichen. Das Projekt wird vom Bundesministerium für Bildung und Forschung im Rahmen der Initiative „Spitzenforschung und Innovation in den neuen Ländern" gefördert.

During the 2nd Public Status Seminar, results of two years of research are presented to an international audience. Lectures inform about progress being made in the area of recognition elements, responsive hydrogels and new signaling molecules. Participants get the opportunity to interact with the scientists and discuss the latest results during a poster session. The "Open Laboratory" introduces the scientific background and presents current methods and technologies.

Keynote Lecture

13.15 DNA-instructed compounds and assemblies for molecular diagnostics of proteins and nucleic acids
Oliver Seitz, Humboldt-Universität zu Berlin

Summarizing the Project

14.00 A roadmap towards sensor-actor molecules
Frank Bier, Fraunhofer Institute for Biomedical Engineering, Potsdam

Recognition

14.20 Multiple functions of intestinal pathogens in mucosal immunity and infection
Stefan Bereswill, Charité – Universitätsmedizin Berlin

14.40 Binding of influenza viruses through multivalent interactions
Henry Memczak, Fraunhofer Institute for Biomedical Engineering, Potsdam

Participation is free of charge. Prior registration is requested at www.zmdb.de/bioanalytik2011/

Get in Touch with Science

15.00 Coffee Break with Poster Session and Open Laboratory

Backbone

16.00 Towards bio-responsive hydrogels

André Laschewsky, University of Potsdam

16.20 Modifications for customized surfaces

Christian Heise, PolyAn GmbH, Berlin

Signalling

16.40 Redox reactions for signalling

Ulla Wollenberger, University of Potsdam

17.00 Visualisation of the hydrogel collapse using FRET

Dieter Neher, University of Potsdam

Systems Integration

17.20 Approaching the “Lab in a Hankie”

Carsten Teller, Fraunhofer Institute for Biomedical Engineering, Potsdam

Get Together

17.40 Networking and Advisory Board Meeting

November, 10th

3rd Potsdam Colloquium on Bioanalysis

In der Life Science Region Berlin-Brandenburg ist das Potsdamer Bioanalytik Kolloquium ein etablierter Treffpunkt von Wissenschaft, Wirtschaft und Politik. Das Kolloquium informiert in ausgewählten Themenbereichen über aktuelle Forschungsergebnisse und dient darüber hinaus als Plattform für den Kommunikations- und Know-How-Transfer.

Fostering R&D means also to broaden the view beyond the region. Therefore, international guests participate to present their research this year. Although the Colloquium clearly focuses on biosensor development, technologies linked to bioanalysis are also presented and discussed. The poster presentation related to "The Impulse Centre for Integrated Bioanalysis" demonstrates the enormous potential of a new important platform technology: The sensor-actor-molecules.

Keynote Lecture

09.15 Commercialisation of biosensors: Flash in the pan or paradigm change?
Anthony Turner, IFM-Linköping University, Linköping

Session I

10.00 Nanomaterials applications in biosensing platforms
Arben Merkoçi, Catalan Institute of Nanotechnology, Barcelona

10.30 Coffee break

11.00 Towards rational design of chemical sensors for biogenic amines using a concept of molecular imprinting
Włodzimierz Kutner, Polish Academy of Sciences, Warsaw

11.30 Biosensing via sandwich hybridization based assay formats
Huseyin A. Öktem, Middle East Technical University, Ankara

12.00 Novel DNA-sequencing technologies
H.-Hilger Ropers, Max Planck Institute for Molecular Genetics, Berlin

12.30 Lunch and Poster Session

Participation is free of charge. Prior registration is requested at www.zmdb.de/bioanalytik2011/

Session II

14.00 Biosensing and -analytical challenges in modern bioprocess development: From high throughput to mobile sensor solutions
Peter Neubauer, Technical University Berlin

14.20 Reversible light-controlled DNA compaction by azobenzene containing surfactant
Svetlana Santer, University of Potsdam

14.40 Detection of explosives by bioanalytical techniques
Michael Weller, Federal Institute for Materials Research and Testing (BAM), Berlin

15.00 Cell-free systems for the functional analysis of membrane proteins
Stefan Kubick, Fraunhofer Institute for Biomedical Engineering, Potsdam

15.20 Developments of direct and indirect methods for virus and toxin detection
Martin Zydek, Technical University of Applied Sciences, Wildau

15.40 Coffee break

Session III

16.20 Systems biology modelling for developing new approaches in cancer research, treatment and biomarker discovery
Bodo Lange, Alacris Theranostics GmbH, Berlin

16.40 New technologies for *in vitro*-diagnostics
Dieter Beule, MicroDiscovery GmbH, Berlin

17.00 Biofunctionalisation as key step in microarray and biosensor applications
Wilfried Weigel, Scienion AG, Berlin

17.20 Aptamers and their applications in bioanalysis
Marcus Menger, RiNA GmbH, Berlin

17.40 *In vivo* isolation of circulating tumor cells using a medical wire
Nils Morgenthaler, Gilupi GmbH, Potsdam

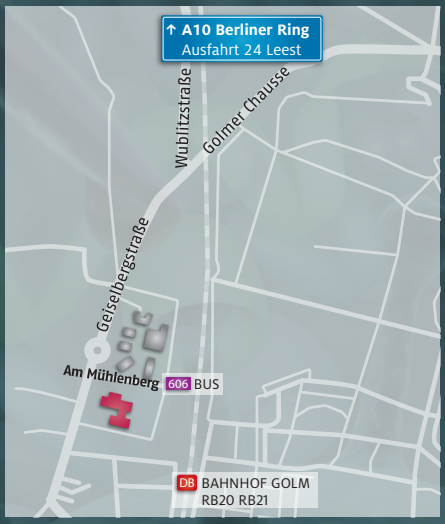
18.00 End

www.taschentuchlabor.de
www.ibmt.fraunhofer.de
www.zmdb.de
www.biotop.de
www.tsb-berlin.de

Contact
TSB Innovationsagentur Berlin GmbH
Center for Molecular Diagnostics and Bioanalysis (ZMDB)
Dr. Günter Peine
Director Management and Coordination
Phone +49 30 31862217 · hahne@tsb-berlin.de

Fraunhofer Institute for Biomedical Engineering (IBMT)
Prof. Dr. Frank Bier · Director Branch Potsdam
Phone +49 331 58187102
taschentuchlabor@ibmt.fraunhofer.de

Venue
Fraunhofer Institute for Biomedical Engineering (IBMT)
Am Mühlenberg 13 · 14476 Potsdam · Germany



TSB
TECHNOLOGIESTIFTUNG BERLIN
Innovationsagentur