Studierendentagung Lübeck 2016

BioMedTec Wissenschaftscampus

Scientific Program

Thursday, March 10, 2016

08:00		**Begrüßung**

		Biomedical Optics Chair: Prof. Dr. Alfred Vogel
08:15	01	A graphical user interface-based automatized analysis routine for the intracellular luminescence nanothermometry *D. Weng, G. Hüttmann, M. Suzuki, and Y. Miura*
08:27	02	Multi-pump diode arrangement of a diode-pumped solid state laser *T. Schmidtke, R. von Elm, and C.L. Schmidt*
08:39	03	Fiber based ytterbium amplified nanosecond pulses for 2-Photon- and stimulated Raman scattering microscopy *H. Hakert, M. Eibl, and R. Huber*
08:51	04	Ex-vivo validation of a new speckle-based retinal photocoagulation control *L. Effe, L. Stockmann, K. Bliedtner, E. Seifert, and R. Brinkmann*
09:03	05	Imaging cold-induced vasodynamic behaviour using optical coherence tomography for microangiography *M. Casper, C. Nguyen, M. Evers, H. Schulz-Hildebrandt, R. Birngruber, D. Manstein, and G. Hüttmann*
09:15	06	Development And Simulation Of An Optical Coherence Tomography Catheter For Early Screening Of Colorectal Cancer *S. Lohmann, M. Gora, J. Dong, T. Ford, L. Quénéhervé, G. Tearney, and R. Birngruber*
09:27	07	Sensitivity Characterization of an Epifluorescent Microscope for Tracking of Photoluminescent Nanoparticles in Chick Embryo Tumour Models *I. Kuschnerus, A. Nadort, Y. Lu, A. Guller, and A.V. Zvyagin*

09:39		Coffee Break

		Biochemical Physics I Chair: Prof. Dr. Robert Huber
09:54	08	Simulation of UV Absorption of the Toxic Gas Hydrogen Sulfide *P. Olenik, O. Wille, and P. Rostalski*
10:06	09	The UV-visible absorption spectrum of all-trans retinal chromophore in the gas phase A. Kluge
10:18	10	Lactate separation employing electrophoresis – Separation of blood components in an electric field – *R. Gänger, S. Fiedler, and S. Müller*
10:30	11	Method Optimisation and Preparation for Nanoparticle Induced Hyperthermia as a Novel Therapy to Treat Cutaneous Leishmaniasis *C. Grill, S. Oates, N. Telling, C. Hoskins, and H. Price*

10:42		Coffee Break

		Biochemical Physics II Chair: Prof. Dr. Christian Hübner
10:57	12	Construction of a Cryo Microscope for Single-molecule Measurements *K. Duda, V. Hirschfeld, J. Pavlita, and C. Hübner*
11:09	13	Evaluation of molecular dynamics calculations for the determination of diffusion coefficients *H. Quardokus and H. Paulsen*
11:21	14	Improving the optical properties of a fused silica capillary *K. C. Reiter, Sven Schneider, and Christian G. Hübner*
11:33	15	Inkjet printing of surfactants, proteins and enzymes for biomedical applications *K. Hering, S. Björklund, S. Klein, V. Kocherbitov, and T. Ruzgas*

11:45		Lunch Break

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		Biomedical Engineering Chair: Prof. Dr. Stefan Müller
12:45	16	Micro alignment of optical components – A comparative study about adhesives – *N. Tobies*
12:57	17	Setup for Estimation of Absolute SubcutaneousWater Content by Noninvasive Spatial Resolved Diffuse Reflectance Measurement *H. Köhler, O. Fugger, and A. Vogel*
13:09	18	Design and development of a steering platform for an innovative infusion system *M. Al Msalma, S. Abdul-Karim, J. Schroeter, and B. Nestler*
13:21	19	Characterisation, installation and functional testing of a collimator at a research linear accelerator *J. Beer*
13:33	20	Development of a Test Facility for non-invasive Ventilation Equipment *M. Apostel and S. Schimpf*
13:45	21	Validation of non-invasive, neonatal blood pressure cuffs *B. Al-Tashi and Thomas Graßl*
13:57	22	Optimization and Evaluation of a Positive End-Expiratory Pressure Valve for Dräger Anesthesia Machines *L. Davenport and R. Weikert*

14:09		Coffee Break

		Safety and Quality Chair: Dr. Alexander Neumann
14:24	23	Determination of action forces applied by users – To make a medical device more reliable – *K. Steppke, A. Kunath, F. Grüner, J. Ingenerf, and H. Handels*
14:36	24	Completion of a Test Bench to Verify the Peel Adhesion of Medical Devices: Software Development and Validation *A. Riebesel, M. Vienenkoetter, D. Dreffkorn, and P. Rostalski*
14:48	25	Qualification of a new Cutplotter for ULTRAPRO COMFORT PLUG™ *A. Boy, T. Licht, J. Haidar, and J. Völkel*
15:00	26	Creation of a new test method and a validation strategy for the visual inspection of LDPE-bags *Q. Kelmendi, C. Maser, and S. Schoenfisch*
15:12	27	Determining the proportionality of the right and left pupil distance using the video centration system and establishing a measuring method with high accuracy and high reproducibility for determining the pupil distance (PD) *P. Flesch, O. Schmidt-Kiy, and A. Ritsche*

15:24		Coffee Break

		E-Health Chair: Dr. Josef Ingenerf
15:39	28	Adaptation to a prototype system for the bidirectional communication in the MRI environment on clinical issues *M. Lewke, K. Rackebrandt, and H. Gehring*
15:51	29	Test Automation Framework for an HL7 integration engine *S. Heusel, S. Gisch, S. Mersmann, and J. Ingenerf*
16:03	30	Converting HL7v2.6 to FHIR – One method on how to perform it – *Mattes Rhein, Stefan Schlichting, and Josef Ingenerf*
16:15	31	Device Metric processing with FHIR – from device observation report to device metrics bundle – *D. Rehmann, G. Meinke, and J. Ingenerf*
19:00		Pizzaessen im Restaurant San Marco