



Track A – AM 2

Track B – AM 3

Image Processing 1, Chair:

- 8:30 1926 *Noah-Art Leinweber, Fabian Domberg, Philipp Jan Labod*
Development and Optimization of a Lightweight Drone Prototype with Real-Time Kinematic (RTK) Technology

- 8:45 1937 *Cassandra Krause, Goran Stanic, Kristina Giske, Mattias Heinrich*
Evaluation of Full-Reference Image Quality Assessment Metrics for Artifact Sensitivity in Lung CT Images for Radiotherapy

- 9:00 1970 *Mona Irsfeld, Hristina Uzunova, Heinz Handels*
MRI Synthesis for Brain Tumor Segmentation Using Conditional Diffusion Models

- 9:15 1971 *Niklas Ohlenroth, Frank Herold, Katharina Bliedtner, Maik Stille*
Feasibility Study of Fatigue Testing in 3D-Printed PLA Specimens

- 9:30 1955 *Zakaria Narjis, Erhardt Barth*
RL-Tone: A reinforcement learning approach for global tonal adjustment in photography

9:45 Coffee Break / Presentation Upload

10:00 Postersession 3

Image Processing 2, Chair:

- 10:45 2013 *Lukas Schmahl, Mattias P. Heinrich, Malte Maria Sieren, Lennart Berkel*
Privacy Risks in the Anonymization of Medical Image Data

- 11:00 1993 *Rafael Hooch, Nele Sophie Brügge, Heinz Handels*
Disentanglement Learning of Facial Expression and Appearance

- 11:15 2029 *Lennart Meyling, Christoph Großbröhmer, Jürgen Lichtenstein, Mattias Heinrich, Lasse Hansen*
Real-Time Ultrasound Guidance for Radial Head Localization

- 11:30 1952 *Bennet Kahrs, Julia Andresen, Timo Kepp, Heinz Handels*
Anomaly-guided image segmentation on retinal OCT images

- 11:45 2040 *Lugh Martensen, Christoph Willibald*
Projector-Based Augmented Reality Interface for Intuitive Robot Programming

Biomedical Engineering 2, Chair:

- 1924 *Ravichandran Monisha, Roedel Nils, Müller Stefan*
Characterization of squeegee process in the production of optochemical pO₂ and pCO₂ sensors for blood analysis

- 1976 *Leon Teege, Timo Matthews*
Development of an automated test stand for compliance measurement in ventilation accessories

- 1979 *Irin Pappachan, Pascal Stagge, Ankit Malhotra, Stefan Müller*
Electrical Characterization and Statistical Analysis of 3D-Printed Coils for Magnetic Particle Spectroscopy

- 1988 *Nadja Rothberg, Christian Brendle, Ulf Pilz*
Literature review on lung characteristics of ventilated patients

- 1992 *Pia Berger, Jens Lembke*
Optimization of the joint connection on the adjustable pressure limiting valve

Biomedical Engineering 3, Chair:

- 2001 *Mazdak Keshavarzi, Omolbanin Hosseini, Olisaemeka Nwogbo, Zeynep Merve Oguz, Jörg Schroeter, Max Urban*
Design and Simulation of the Analogue Circuitry of a 20 MHz Pulsed NMR System for Point-of-Care Applications

- 2009 *Ronja Wrage, Stefan Müller*
Testing System for Sleep apnea Masks

- 2014 *Ana Martinez Lenero, Esther Olubukola Akinola, Shu Zhang, Lisa Marshall*
Closed-loop acoustic stimulation paradigm in mice

- 2015 *Tisna Thomas, Roman Leonov, Hannes Schwenke, Thomas Friedrich, Stefan Müller*
Novel Approaches to Silicone Vascular Model Production: An Emphasis on Carotid Arteries, and Aorta

- 2021 *Sophia Weigl, Maximilian Besold, Stefan Schätzl, Max Urban*
Biomechanical Simulation of the Human Thorax Behaviour during Cardiopulmonary Resuscitation



Track A – AM 2

Track B – AM 3

12:00	Lunch Break / Presentation Upload	
13:00	Postersession 4	
13:45	Group Picture	
	Biomechanics, Chair:	Biomedical Engineering 4, Chair:
14:00	1928 <i>Elena Reznikova, Nils Zander, Andreas Heede, Robert Wendlandt</i> Distal Fibula Fracture Treatment with Intramedullary Implant: Concept Assessment and Initial Verification	2025 <i>Mitra Rahmati Kahrudi, Benjamin Kern, Stefan Müller</i> Automated Quality Control of Optochemical Sensors for a Portable Blood Gas Analyzer
14:15	1931 <i>Swantje Richter, Robert Wendlandt</i> Determination of the yield strength through bending tests and finite element analysis	2031 <i>Florian Hartwig</i> Reusability of 1D simulation models implementing a workflow and estimating the reduction of verification and validation efforts
14:30	2023 <i>Chitrang Narendrabhai Patel, Tolga-Can Çallar</i> Development of a kinematic structure for ultrasound guided cannula placement	2032 <i>Hümeýra Ertugrul, Fiete Winter</i> Heart Rate Analysis in Phonocardiograms
14:45	2024 <i>Mit Patel, Tolga-Can Çallar</i> Development of a Remote Center of Motion Manipulator Attachment for Robotic Ultrasound Imaging	2033 <i>Somayyeh Nazari, Nils Roedel, Stefan Müller</i> Effect of ionic strength on optochemical pH sensor response
15:00	Coffee Break / Presentation Upload	
	Medical Electronics 1, Chair:	Biomedical Engineering 5, Chair:
15:15	2045 <i>Laura Groenewold, Jan Wellmann, Insa Wolf</i> Investigation of a movement platform for the simulation of head movements for the evaluation of EEG systems	2041 <i>Zeynep Merve Oguz, Fareeha Afzal, Omolbanin Hosseini, Mazdak Keshavarzi, Olisaemeka Nwogbo, Jörg Schroeter, Max Urban</i> FPGA-Based Optimization of Signal Processing and High-Speed Data Acquisition in a 20 MHz-Pulsed NMR System
15:30	2046 <i>Muhammad Ahmed Raza Kamal, Christopher Kranz, Max Urban</i> Evaluation of opportunities to integrate an electric track vehicle logistics solution into a lab and pharmacy	2043 <i>Jonas Fanenbruck, Mark Gradert, Ulf Pilz</i> Simulation and measurement of mixing processes in air-oxygen mixtures for emergency ventilation
15:45	2047 <i>Omolbanin Hosseini, Mazdak Keshavarzi, Zeynep Merve Oguz, Olisaemeka Nwogbo, Jörg Schroeter, Max Urban</i> Design and implementation of an analog circuit for a 20 MHz pulsed NMR system for point-of-care applications	2044 <i>Kilian Schmidt, Thomas Graßl</i> Development of an SpO2 connector
16:00	2050 <i>Jay Shah, Mladen Berekovic, Henrik Jahnke</i> Design and Integration of a Calibration Circuit for Laser Beam Alignment in LPBF for Selective Laser Melting Systems	1978 <i>Catherine Marie-Sophie Matthies</i> Eye - Drive – System and technology for recognizing the driving ability of persons