



## Postersessions 5<sup>th</sup> of March, 2025

### Postersession 2

2025	<i>Mitra Rahmati Kahrudi, Benjamin Kern, Stefan Müller</i> Automated Quality Control of Optochemical Sensors for a Portable Blood Gas Analyzer
2031	<i>Florian Hartwig</i> Reusability of 1D simulation models implementing a workflow and estimating the reduction of verification and validation efforts
2032	<i>Hümeýra Ertugrul, Fiete Winter</i> Heart Rate Analysis in Phonocardiograms
2033	<i>Somayyeh Nazari, Nils Roedel, Stefan Müller</i> Effect of ionic strength on optochemical pH sensor response
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
2043	<i>Jonas Fanenbruck, Mark Gradert, Ulf Pilz</i> Simulation and measurement of mixing processes in air-oxygen mixtures for emergency ventilation
2044	<i>Kilian Schmidt, Thomas Graßl</i> Development of an SpO2 connector
1978	<i>Cathérine Marie-Sophie Matthies</i> Eye - Drive – System and technology for recognizing the driving ability of persons
2003	<i>Luis Manuel González Villa, Tolga-Can Çallar</i> Simulation Framework for a Collision Avoidance Inverse Kinematics model of a 7 degrees of freedom Ultrasound Imaging Robot
1927	<i>Leano Bohn, Javad Ghofrani, Mladen Berekovic</i> 6-DoF Staubli Robot Control via Siemens PLC for Trajectories on Conveyor-Moved Objects
1983	<i>Finn Niklas Horn</i> A Web Application for Demonstrating Hardware-Assisted Code Coverage Analysis
1995	<i>Arian Sindram</i> Fault simulator for neonatal flow sensor
2028	<i>Mahsa Yamini, Benjamin Kern, Stefan Müller</i> Design and Implementation of a Calibrator for Optochemical Sensors
1940	<i>Jonas Manuel Kremmers, Javier Galán Méndez, Álvaro Escarpenter, Georg Schildbach</i> Outlier Detection versus Specialist Knowledge - Engine Misperformance Detection
1941	<i>Aly Elzoghol</i> Generative Artificial Intelligence for Digitalization of Manual Workflows
1943	<i>Enno Friedl, Yuya Hamamatsu, Martin Leucker</i> Deep Learning-Based Dead-Reckoning for a Fin-Propelled Autonomous Underwater Vehicle with Limited Sensors
1947	<i>Laeticia Moosdorf, Niklas Kueper, Heinz Handels, Elsa Andrea Kirchner</i> Comparison of Models for EEG-based Cross-Subject Movement Prediction



1954	<i>Neele Kohle, Coşku Can Horuzi, Sebastian Otte</i> Extended-Long-Short-Term-Memory: A Reproducibility Study
1986	<i>Bjarne Clement, Solveig Kathleen Najork, Axel Steinhage, Marcin Grzegorzec</i> Developing a Seclusion Detection Algorithm for Nursing Homes based on a Floor Sensor
2012	<i>Ahmet Muaz Salah, Ahmed Mahmoudi, Mladen Berekovic</i> Performance Evaluation of RISC-V-Based Cores for Machine Learning Workloads
2016	<i>Lucas Beer, Norbert Linz</i> Differentiation of high-grade glioma tissue with hyperspectral imaging
1957	<i>Shubham Bhadani, Tolga-Can Çallar, Jens Temminghoff</i> Position-dependent Friction Identification of 6-DOF Robotic Manipulator
1923	<i>Shrawan Kumar Mehta, Franziska Bilda, Jan Graßhoff</i> Analyzing Patient-Ventilator Interaction with Neural Networks
1960	<i>Laraib Ahmad, Christian Nehls, Thomas Gutschmann</i> Permeabilization of reconstituted Lipid Bilayers containing mycobacterial TDM through the AMP LL32: Insights into Membrane-Peptide Interactions
1961	<i>David Kaltwasser, Aiyana Brown, Xinge Liu, Spencer Smyth, Claudiu Gradinaru</i> Implementation of FRET-FCS Methods to Study Conformational Dynamics in Proteins
2000	<i>Nidal Can Battikh, Yamil Maluje, Darko Castven, Hauke Busch, Anke Fähnrich</i> Analysis of Single-Cell RNA Sequencing Data from Cholangiocarcinoma Patients
2011	<i>Blessing Esu</i> Measurement of growth curve of adult bovine skin-derived (BSD) cell population under 5% and 10% fetal calf serum (FCS )
2052	<i>Jingxuan Zhou, Lisa Marshall</i> Effects of exogenous stimulation during sleep on brain electric activity and the autonomic nervous system