

OCM 2023 Program Sequence

Program March 22, 2023

| Time | Aktion | Autor | Organisation | Titel |
|-------|---------------|---------------------------------|--|---|
| 10:00 | | Tour Fraunhofer IOSB (optional) | | |
| 11:30 | | Registration and Snack | | |
| 12:30 | | Prof. Dr. Jürgen Beyerer | Fraunhofer IOSB | Opening Ceremony |
| | | | | Session 1: Recycling 1 |
| 12:50 | Talk | Sabine Schlögl | Montanuniversität Leoben | Monitoring the sorting performance in lightweight packaging waste sorting plants using data of sensor-based sorters |
| 13:15 | Talk | Paul Bäcker | Fraunhofer IOSB | Detecting Tar Contaminated Samples in Road-rubble using Hyperspectral Imaging and Texture Analysis |
| 13:40 | | Coffee break | | |
| | | | | Session 2: Food Inspection |
| 14:00 | Talk | Erviatasia Djaw | Fraunhofer IVV | Method Development for Spatially Resolved Detection of Adulterated Minced Meat |
| 14:25 | Postersession | Marcel Mlynarik | UWE Bristol | Multispectral analysis for the determination of lycopene concentration in tomatoes |
| 14:35 | Talk | Oliver Lischtschenko | Ocean Insight | Rapid classification of pork from different origin by mobile Raman spectroscopy |
| 15:00 | Postersession | Hannah Frank | Cognitive Systems-Universität Tübingen | Self-supervised Pretraining for Hyperspectral Classification of Fruit Ripeness |
| 15:10 | Video Talk | George Nychas | AUA Greece | An overview of implementing Multispectral Imaging coupled with machine learning for the assessment of microbiological quality and authenticity in foods |
| 15:35 | Teams Talk | Fady Mohareb | AUA Greece | Demonstration of EU food identification database |
| 15:45 | | Coffee break and Postersession | | |
| | | | | Session 3: Sensors 1 |
| 16:15 | Talk | Bernd Jähne | IWR-Uni Heidelberg | Thermographic Techniques to Explore Small-Scale Processes at Water Surfaces |
| 16:40 | Talk | Chia-Wei Chen | KIT-IES | Sensitivity enhanced glucose sensing by return-path Mueller matrix ellipsometry |
| 17:05 | Talk | Dennis Hofmann | IUP-Uni Heidelberg | Fluorescence Imaging of Concentration Fields of Dissolved Gases at Water Interfaces |
| 17:30 | | Coffee break and Postersession | | |
| | | | | Plenary lecture |
| 17:50 | | Carsten Lorz | VP Hochschule Weihenstephan-Triesdorf | Cooperation in innovation and education in agriculture and nutrition with Africa |
| 18:35 | | End of the first day | | |
| | | Change of Location | | |
| 19:30 | | Special Presentation and Dinner | | |

Program March 23, 2023

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|-------|--------|------------------|---|--|
| | | | | Panel discussion |
| 09:00 | | | | Requirements on food quality - definition of quality characteristics in their development |
| 10:15 | | Coffee break | | |
| | | | | Session 4: Algorithm |
| 10:35 | Talk | Achim Kehrein | Rhine-Waal University of Applied Sciences | Quick-and-Dirty Computation of Voigt Profiles, Classification of Their Shapes, and Effective Determination of the Shape Parameter |
| 11:00 | Talk | Claudia Beleites | Julius Kühn Institute | Towards better Model Optimization: An Experimental Design Perspective on Cross-Validation |
| 11:25 | Talk | Andreas Polywka | Fraunhofer IOSB | Modeling of the effective reflectance of droplet-covered surfaces |
| 11:50 | | Lunch break | | |
| | | | | Session 5: Sensors 2 |
| 12:50 | Talk | Sven Leuchs | Fraunhofer FHR | Imaging radar systems for non-destructive material testing. An overview of the state of the art, the limitations and the opportunities of radar technology |
| 13:15 | Talk | Simon Amann | ITO-Uni Stuttgart | Material Characterization using a Compact Computed Tomography Imaging Spectrometer with Super-resolution Capability |
| 13:40 | Talk | Bernd Jähne | IWR-Uni Heidelberg | Sulfur Dioxide Fluorescence Imaging |
| 14:05 | | Coffee break | | |
| | | | | Session 6: Recycling 2 |
| 14:25 | Talk | Lukas Roming | Fraunhofer IOSB | Increasing the use of waste wood bulky waste using artificial intelligence and image processing in the VIS, IR and terahertz range |
| 14:50 | Talk | Manuel Bihler | KIT-IIIIT | Semi-supervised methods for CNN based classification of multispectral imagery |
| 15:15 | Talk | Felix Kronenwett | Fraunhofer IOSB | Regression-based Age Prediction of Plastic Waste using Hyperspectral Imaging |
| 15:40 | | | | Best Paper Award, Summary and conclusion |
| 16:00 | | End | | |