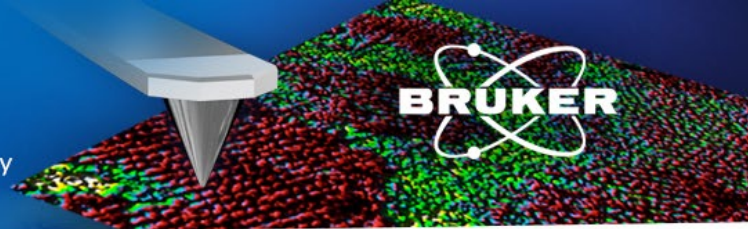


# Bruker 2024 BioAFM Conference and User Meeting

Leibniz Institute for Food Systems Biology, Freising, Germany  
7-8 May 2024

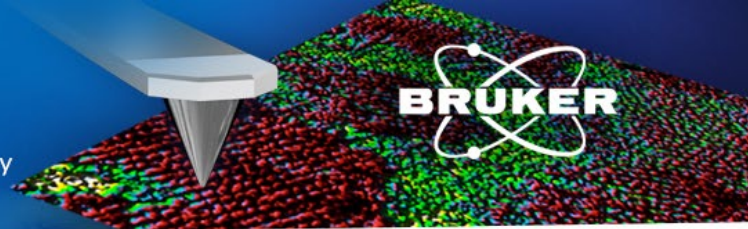


## Agenda Day 1 | Tuesday 7<sup>th</sup> May, 2023 Science Day

- 09:30 - 10:00**      **Registration and Coffee**
- 10:00 - 10:10**      **Welcome & Introduction**  
*Klaus Pross, Sales Manager, Bruker*
- 10:10 - 10:30**      **Maximizing flavor: Leveraging Nano-Biophysical Methods in Food Perception and Formulation Research**  
*Dr. Melanie Koehler, Leibniz Institute for Food Systems Biology at the Technical University of Munich, Germany*
- 10:30 - 10:50**      **Latest Developments in Bruker BioAFM**  
*Dr. Alexander Dulebo, Application Scientist, Bruker BioAFM*
- 10:50 - 11:10**      **DNA Origami Fiducial for Accurate 3D Atomic Force Microscopy Imaging**  
*Prof. Tim Liedl, Faculty of Physics, Ludwig-Maximilians-University, Germany*
- 11:10 - 11:50**      **Practical Session 1**
- 12:00 - 12:40**      **Practical Session 2**
- 12:40 - 14:00**      **Lunch & Poster Session**
- 14:00 - 14:20**      **Desmosomal Cadherin Interactions - an AFM Perspective**  
*Dr. Franziska Hartig-Vielmuth, Dept. of Anatomy and Cell Biology, Faculty of Medicine, Ludwig-Maximilians-University, Germany*
- 14:20 - 14:40**      **Virus Force Spectroscopy Studies of Reovirus Attachment to Cellular Receptors**  
*Dr. Rita dos Santos Natividade, Université Catholique de Louvain, Belgium*
- 14:40 - 15:00**      **Using AFM to Measure and Manipulate Brain Tissue Stiffness In Vivo**  
*Prof. Kristian Franze, Dept. of Physiology, Development and Neuroscience, University of Cambridge, UK*
- 15:00 - 15:20**      **Coffee Break**
- 15:20 - 16:10**      **Flash Talks & Poster Presentation**
- 16:10 - 16:30**      **Soft Barriers Restrict Cancer Cell Invasion - Determining Basement Membrane Mechanics with AFM**  
*Prof. Hauke Clausen-Schaumann, Dept. of Applied Sciences and Mechatronics, Munich University of Applied Science, Germany*
- 16:30 - 17:10**      **Practical Session 3**
- 17:10 - 18:00**      **Practical Session 4**
- 19:00 - 22:00**      **Conference Dinner**

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## Practical Sessions Day 1

- Nanomechanical Measurements using an AFM (NanoWizard V BioAFM)
- High-Resolution, High-Speed Imaging of Biomolecules using an AFM (NanoWizard ULTRA Speed 3)
- Introduction to the Optical Tweezers Technology (remote session)
- Introduction to Nanoscale Infrared Spectroscopy (nanoIR) (remote session)

## Agenda Day 2 | Wednesday 8<sup>th</sup> May, 2024

### Advanced Training and Sample Measurements Day

09:30 - 10:00	Get Together and Coffee
10:00 - 11:00	<b>Topic 1: Advanced Mechanical Measurements: Measuring Elastic and Viscoelastic Properties, Q&amp;A, and Data Processing</b> <i>NanoWizard V AFM, Dr. Alexander Dulebo</i>
	<b>Topic 2: Tips &amp; Tricks for Performing High-Resolution Imaging in Liquid, Q&amp;A, and Data Processing</b> <i>NanoWizard ULTRA Speed 3 AFM, Dr. Prem Viji Babu, Application Specialist</i>
11:15 - 12:15	<b>Topic 3: Measuring Adhesion between Molecules and Cells, Q&amp;A, and Data Processing</b> <i>NanoWizard V AFM, Dr. Alexander Dulebo</i>
	<b>Topic 4: Visualizing Molecular Dynamics using High-Speed AFM, Q&amp;A, and Data Processing</b> <i>NanoWizard ULTRA Speed 3 AFM, Dr. Prem Viji Babu, Application Specialist</i>
12:15 - 13:30	Break
13:30 - 17:00	<b>Sample Measurements – Bring Your Own!</b> Limited availability – please register your sample in advance. <i>NanoWizard V and NanoWizard ULTRA Speed 3 AFMs</i>

## Conference Location

**Leibniz Institute for Food Systems Biology**  
at the Technical University of Munich  
(Leibniz-LSB@TUM)  
Lise-Meitner-Str. 34, 85354 Freising, Germany



Conference fee is € 70 per person, € 40 for students (includes conference dinner, lunch, and refreshments), [click here to register](#). Please contact [productinfo.emea@bruker.com](mailto:productinfo.emea@bruker.com), if you have any questions.