

08:30	OPENING Dr. Marc Mauermann (Fraunhofer IVV) Vice-Rector Research Prof. Dr. Angela Rösen-Wolff (TUD Dresden University of Technology) Richard Clemens (VDMA)
09:10	SESSION 1 DIGITALIZATION AND APPLICATION OF AI CHAIRMAN: HEIN TIMMERMANN Data-Driven Identification and Modeling for Cleaning of Surfaces Covered With Film-Like Soils , Christian Golla (TUD Dresden University of Technology, Germany) Harnessing Digital-Twin Technology for Performance Analysis and Energy Efficiency in the Food Industry , Hans Zettler (HTRI, UK) Virtual Cleaning Simulation to Develop and Optimise Reliable And Resource-Saving Cleaning Processes , Felix Sternberg (ADVITEC Informatik GmbH, Germany)
10:15	BREAK
10:45	Cleaning-In-Place (CIP) in Dairies Assisted by Digital Twin , Alan Friis (FORCE Technology, Denmark) Sinner's Circle Reloaded: A New Concept to Understand the Real Cleaning Mechanisms of Dishwashing , Alfredo Calvimontes (BSH Hausgeräte GmbH, Germany) Predictive Fouling Detection in Dairy Industry Heat Exchangers Using Sequence-To-Sequence Deep Learning Models , Jialiang Yin (Fraunhofer IVV, Germany)
11:45	LUNCH
12:45	SESSION 2 SURFACES AND ADDITIVE MANUFACTURING CHAIRWOMAN: OLGA SANTOS Surface and Formulation Modifications to Reduce Bacterial and Organic Fouling the Food Industry , Kathryn Whitehead (Manchester Metropolitan University, UK) Vegetable-Inspired Biomimetic Surfaces for Preventing Bacterial Binding in the Food Industry , Fábio Carvalho (LEPABE, Portugal) Achieving Clean, Antifouling and Antibacterial Surfaces With Lasers , Frederic Schell (Fraunhofer IWS, Germany) Hygiene of Surface Structures in Collaborative Robots , Gun Wirtanen (Seinäjoki University of Applied Sciences, Finland) Efficacy of Biomimetic Surfaces in Mitigating Escherichia Coli Biofilms in the Presence of Conditioning Films , Luciana Gomes (LEPABE, Portugal)
14:30	BREAK
15:00	Effect of Mechanical Cleaning on Surface Cleanability , Natacha Holmud (FORCE Technology, Denmark) Additive Manufacturing for Hygienic Applications , Simone Paggetti (University of Modena and Reggio Emilia, Italy)
15:40	SESSION 9 POSTER SESSION CHAIRMAN: GERHARD SCHLEINING
18:00	END OF DAY 1

08:00

SESSION 3 | FOULING AND CLEANING OF HEAT TRANSFER DEVICES

CHAIRMAN: IAN WILSON

Predictive Modelling of Whey Protein Fouling in Heat Exchangers During Heat Treatment, Deniz Yilmaz (University of Lille, France)

Optimizing Thermal Preservation in Oat Drink Production: Tackling Fouling Challenges, Roland Feilner (Krones AG, Germany)

Increase Uptime With Alfa Laval Extend™ - Keep Your Pasteurizer Running, Anna Andrys (Alfa Laval Technologies AB, Sweden)

Application of Microbubbles for Fouling Mitigation in Milk Pasteurization, Kevin Rodriguez Maldonado (Purdue University, USA)

Microfluidic Investigation of Fouling Mechanisms in Falling-Film Evaporators, Luca Lanotte (INRAE - L'Institut Agro, France)

09:45

BREAK

10:15

SESSION 4 | SUSTAINABILITY AND RESILIENCE IN FOOD PRODUCTION

CHAIRMAN: JÖRG ZACHARIAS

Hygienic Design Business Benefits, Functional Performance and Cost of Ownership, Dimitri Tavernarakis (Mondelez International, Poland)

Study on Water and Energy Savings Through the Application of Hygienic Design in Food Industry Processes, Irene Llorca Pellicer (AINIA Technological Centre, Spain)

Achieving Hygienic Excellence by Design - A Habasit Case-, Enrico Visconti (Habasit International AG, Switzerland)

Simple Measures for Greater Sustainability in Industrial Cleaning Systems, Jochen Schlag (Belimed Life Science AG, Switzerland)

Cleaning in Practice: The Next Level of Hygiene, Hein Timmerman (Diversey, a Solenis company, Belgium)

12:00

LUNCH

13:00

SESSION 5 | FOULING AND CLEANING CHALLENGES FOR A CIRCULAR ECONOMY

CHAIRMAN: WOLFGANG AUGUSTIN

Mitigating Gold Nanoparticle Fouling in Microfluiding Tubing, Joseph William Carver (University of Bath, UK)

Scaling-Related Phenomena of Cleaning Protein Based Soils in Micro Structured Equipment, Felicitas Aselmeyer (TU Braunschweig, Germany)

Is Cleaning in Place Ready for the Future? A Critical Assessment, Arjan van Asselt (FrieslandCampina, Netherlands)

Intelligent and Adaptive Tank Cleaning Using Motor-Driven Jet Cleaners and Optical Inline Sensors, Chris Henze (Fraunhofer IVV, Germany)

Understanding Cleaning of Molasses Foulants in a Distillation Column: An Industrial Case Study, Phanida Saikhwan (Thammasat University, Thailand)

14:45

BREAK

15:15

Industrial Tours: Sachsenmilch, Radeberger Brewery, Lohrmanns Brewery

19:00

END OF DAY 2

08:00	Welcome address by the State Secretary Prof. Dr. Heike Graßmann
08:10	AWARDS CEREMONY
08:25	SESSION 6 STRATEGIES AND BEST PRACTICES IN CLEANING AND DISINFECTION CHAIRWOMAN: KATHRYN WHITEHEAD Plasma-Treated Liquids as an Environmentally Friendly Alternative to Conventional Disinfectants for the Sanitization of Food Processing Facilities Shelf Life Characteristics and Antibacterial Efficacy, Linda Steinhäuser (Fraunhofer FEP, Germany) Validation of UV Decontamination Methods Using New Test Microorganisms, Peter Muranyi (Fraunhofer IVV, Germany) Flushing Out the Tough Stuff: Advanced Strategies for Cleaning Complex Fluid Residues, Seyed Mohammad Taghavi (Université Laval, Canada) New Spray Jet Cleaning System Based on a Bionic Model - How Can the Archerfish Hunting Technique Be Utilized?, Andy Spitzenberger (TU Bergakademie Freiberg, Germany)
09:50	BREAK
10:20	Experimental and Numerical Investigation Into the Cleaning of Particulate Soils Based on Swelling and Adhesion Behavior, Oleg Barteld (TUD Dresden University of Technology, Germany) Experimental Study on the Interaction of Falling Films and Spray Jets During Cleaning, Matthias Joppa (Fraunhofer IVV, Germany)
11:00	SESSION 7 INNOVATIVE APPROACHES TO MEMBRANE FOULING AND CLEANING PROCESSES CHAIRMAN: JEN-YI HUANG Influence of Microfibers on Membrane Filtration: Fouling Mechanisms and Mitigation Strategies, Garyfalia Zoumpouli (University of Bath, UK) Application of a Benchtop TFF System for the Assessment of CIP Performance of Detergent Formulations for Dairy UF Membrane Cleaning, Killian Barton (Munster Technological University, Ireland) 3D Printed Wavy Composite Membranes for Organic Fouling Mitigation in Membrane Distillation, Garyfalia Zoumpouli (University of Bath, UK)
12:05	LUNCH
13:05	SESSION 8 MONITORING AND ANALYSIS OF FOULING AND CLEANING PROCESSES CHAIRWOMAN: DRAGANA ARLOV Fouling and Cleaning Studies of a Plant-Based Beverage Using Quartz Crystal Microbalance With Dissipation (QCM-D), Mrunmayee Joshi (The Ohio State University, USA) Ensuring Food Safety Through Effective Cleaning Validation, Verification and Monitoring, Dirk Nikoleiski (Commercial Food Sanitation/Intralox GmbH, Germany) Modelling the Removal of a Diffusive Food Soil, D. Ian Wilson (University of Cambridge, UK)
14:10	BREAK
14:15	First Insights Into Changing Cleaning Mechanisms Based on Experimental and Numerical Investigations, Hannes Köhler (TUD Dresden University of Technology, Germany) CDF Investigation of Suspension-Based Pigs in Chocolate Processing Plants, Christian Golla (Fraunhofer IVV, Germany) New Strategies for Monitoring and Improving Flushing Processes Used in Chocolate Manufacturing, Matti Heide (TUD Dresden University of Technology, Germany)
15:15	SUMMARY & CLOSE Dr. Marc Mauermann (Fraunhofer IVV)