

SCIENTIFIC WORKSHOP 1:

**Characterization of non-biotoxic, antimicrobial,
anti-adhesive and biomimetic surfaces**

29th and 30th June 2021 (online)

Manchester Metropolitan University, UK

W W W . S U R F S A F E P R O J E C T . E U



Tuesday, 29th June 2021

9.00 An overview of surfaces and methodologies – antiadhesive vs antimicrobial

Prof Kathryn Whitehead, Manchester Metropolitan University, UK

10.30 Break

11.00 Surface topography

Dr Russell Evans, Omniscan, UK

12.30 Lunch

1.30 Surface chemistry and methodologies

Prof Kathryn Whitehead, Manchester Metropolitan University, UK

3.00 Break

3.30 Surface physicochemistry and methodologies

Dr Joels Wilson Nieuwenhuis, Kersia Group/ Manchester Metropolitan University, UK

5.00 Finish

Wednesday, 30th June 2021

9.00 The effect of conditioning films on surface properties

Prof Kathryn Whitehead, Manchester Metropolitan University, UK

10.30 Break

11.00 Modelling of cleaning and decontamination

Dr Jim Taylour, Chemical Cleaning Solutions, UK

12.30 Lunch

Participant Presentations. Surface related biofouling and control

1.30 Drawing Lessons from Nature to Develop Antifouling Surfaces for the Food Industry

Dr. Luciana Calheiros Gomes, University of Porto, Portugal

1.45 Development of multifunctional antimicrobial supramolecular biomaterials

Dr. Martijn Riool, Amsterdam UMC, The Netherlands



2.00 Optimizing CNT loading in antibiofilm composites for future application in urinary tract devices

Marisa da Conceição Lima Gomes, University of Porto, Portugal

2.15 Probiotics: a Novel Approach to Fight Biofilms in Urinary Tract Devices

Fábio Rafael Moreira Carvalho, University of Porto, Portugal

2.30 Preventing biofouling formation in RO membrane systems with biocidal macroparticles

Ana C. Barros, University of Porto, Portugal

2.45 Green Fluorescent Protein (GFP) expression in Escherichia coli biofilms: effects of surface and nutrient conditions

Ana Cláudia Moreira Azevedo, University of Porto, Portugal

3.00 Break

Participant Presentations. Water related biofouling and methods of detection

3.30 Characterization of cyanobacterial biofilms formed under different conditions.

Maria João Leal Romeu, University of Porto, Portugal

3.45 Development of an early-warning biofouling monitoring system for Legionella prevention in cooling water systems

Tomás Moreira Soares da Costa, University of Porto, Portugal

4.00 How an integrated monitoring model can improve Legionella management in water systems

Ana Alexandra da Silva Pereira, University of Porto, Portugal

4.15 The impact of different biofilm architectures on Legionella proliferation

Ana Rosa Moreira da Silva, University of Porto, Portugal

4.30 Bacterial detection using NAM-FISH and Spectral imaging

Andreia S. Azevedo, University of Porto, Portugal

4.45 Towards more reproducible biofilm experiments

Jontana Allkja, University of Porto, Portugal

5.00 Summary of the workshop and conclusions

5.30 Finish

