

Wednesday, July 3rd

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| 8:30-9:00 | <i>Registration</i> |
| 9:00-9:20 | <i>Welcome address</i> |
| | Session 1 Cancer: treatment and detection. <i>Chair : Fouzia Boulmedais</i> |
| 9:20-10:00 | Invited talk by Elena Ishow (Nantes Université) “Photoactive organic nanoparticles as tunable actors for theranostics” |
| 10:00-10:20 | Axelle AUBERT “Towards a development of electro-apta-sensors to detect biomarkers of inflammation” |
| 10:20-10:40 | Wilfrid BOIREAU “Multiplex characterization and quantification of extracellular vesicles in multiple myeloma” |
| 10:40-11:00 | <i>Coffee break & posters</i> |
| | Session 2 Cell & protein / material interactions <i>Chair : Luc Vellutini</i> |
| 11:00-11:20 | Eve RANDRIANARIDERA “Development of an in vitro foreign body reaction model to evaluate silicone influence on fibrinogen conformation and macrophage polarization” |
| 11:20-11:40 | Guillaume LEKS “Evaluation of a new pediatric prosthesis made of thermoplastic elastomeric poly(urethane) (TPU) functionalized with polydopamine and type I collagen” |
| 11:40-12:00 | Marie-Ly CHAPON “Role of substrate curvature in cell migration and tissue morphogenesis” |
| 12:00-12:20 | Charlotte VENDRELY “Interactions of a protein inspired from a barnacle adhesive cement with different material surfaces” |
| 12:20-12:30 | Erik NILEBÄCK (Quantum Design) “Introducing QSense Omni – a new era for QCM-D analysis” |
| 12:30-14:30 | <i>Lunch & posters & demo</i> |

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| | Session 3 Materials and Light <i>Chair : Yoann Roupioz</i> |
| 14:30-15:10 | Invited talk by Christophe Moser (EPFL) “Volumetric Bioprinting: a new tool for producing artificial tissue models” |
| 15:10-15:30 | Hippolyte DURAND “Development of an integrated biofunctionalized silicon photonic platform for allergen immuno-detection in food matrices” |
| 15:30-15:50 | Angélique SIMON-MASSERON “Zeolite-based composites for biomedical applications” |
| 15:50-16:00 | Grégory MICHEL (ZEISS) “3D Imaging Technology: what & why?” |
| 16:00-16:20 | <i>Coffee break & posters</i> |
| | Session 4 Nano-objects & nano-structuration <i>Chair : Charlotte Vendrely</i> |
| 16:20-16:40 | Laurent VONNA “Macrophage internalization dynamics of adsorbed submicron and nanoscale silica particles: insights for biomedical coatings” |
| 16:40-17:00 | Dahlia SAAD “1D and 3D-AFM characterization of liquid/polymer brushes (PAA, PEO)/gold interfaces” |
| 17:00-17:20 | Jilong LI “Lysozyme-responsive core-shell nanoparticles formed by pH-drive and transglutaminase cross-linking and their properties” |
| 17:20-17:40 | Milan TOLEDO NAUTO “Non-covalent nanobody biofunctionalization of organic electrochemical transistor (OECT) for the specific detection of chlordecone” |
| 17:40-18:00 | Philippe STEMPFLE “Optimization of a new venous stenosis treatment self- expanding nitinol stent using a multi-scale tribological approach from catheter to the veins” |
| 18:00-18:10 | Véronique SCHLOUPT (DATAPHYSICS INSTRUMENTS) “How to analyse surfaces in regard to their electrical charge in a liquid solution: Zeta potential measurements in practice” |
| 18:10-19:30 | <i>Social event</i> |
| 19:30 | <i>Evening at Lerchenberg</i> |

Thursday, July 4th

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| | Session 5 Bacteria/material interactions <i>Chair : Karine Glinel</i> |
| 9:00-9:40 | Invited talk by Régis Grimaud (UPPA) “Biofilm formation: a microbial strategy to assimilate particular substrate” |
| 9:40-10:00 | Thibaut ZWINGELSTEIN “Development of a specific microfluidic bio-interface for the detection of pathogenic bacteria in the agro-food industry” |
| 10:00-10:20 | Capucine LOTH “Ion triggered self-assembly of antibacterial Fmoc-based tripeptide: physical chemistry and MD simulation” |
| 10:20-10:50 | <i>Coffee break & posters</i> |
| | <i>Chair : Vincent Humblot</i> |
| 10:50-11:10 | Marie CHAMPION “Hydrophilic antiadhesive coating to prevent marine organisms' colonization” |
| 11:10-11:30 | Lydia FELLAH “Study of the antibacterial impact of photocatalytic surfaces in the marine environment” |
| 11:30-11:50 | Corinne NARDIN “Polymer coatings to prevent microbially influenced corrosion” |
| 11:50-12:10 | Gwenaél CORBEL “Water disinfection with Cu(OH) ₂ nanorods” |
| 12:10-12:30 | Lydie VIAU “Antibacterial surfaces prepared by electropolymerization of pyrrole-tailed imidazolium ionic liquids” |
| 12:30-12:50 | Ahmed HAMRAOUI “Challenges in modulating surface energy to optimize axonal growth” |
| 12:50-13:00 | <i>Awards & Conclusion</i> |
| 13:00 | Lunch (box) |