

NanoSMH - PROGRAM

| Monday 21 June | | |
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| 9.00 - 12.00 | | Official Welcome |
| 12.00 - 14.00 | | Lunch |
| 14.00-14.15 | Prof. Y. Fort | Official opening |
| 14.15 - 15.00 | M. Textor | Design of interfaces for directing biological response of proteins, cells and bacteria |
| 15.00 - 15.20 | C.Ellie-Caille | Nano-bio-engineering and multiscale characterization of molecular and cellular chips |
| 15.20 - 15.40 | M. Epple | Functionalized calcium phosphate nanoparticles: Tools for gene delivery and imaging |
| 15.40 - 16.25 | P. Schaaf | Towards mechanotransductive materials for biomedical applications |
| 16.25 - 16.45 | | Coffee Break |
| 16.45 - 17.30 | J-M. Devoisselle | Nanostructured silica materials : host-guest chemistry and drug delivery systems |
| 17.30 - 17.50 | E. Reimhult | Stabilization of superparamagnetic iron oxide nanoparticles (SPIONs) using catechol derivative anchored dispersants: opportunities of ultra- stable SPIONs for targeted imaging and drug delivery |
| 17.50 - 18.10 | G. Zuber | Nanometric systems for delivery of antibodies and oligonucleotides into mammalian cells |
| 18.10 - 18.30 | S. Begin | Dendronized iron oxide nanoparticles for biomedical applications |
| 18.30 - 19.30 | | Flash posters |

| Tuesday 22 June | | |
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| 8.30 - 9.10 | J-L. Viovy | Microfluidic systems: some examples of applications for biomedical research and diagnosis. |
| 9.10 - 9.30 | M. Tarek | Transport of functionalized nanostructures through model cell membranes: Insights from Molecular Dynamics Simulations, |
| 9.30 - 10.15 | B. DeGeest | From Test Tube to In Vivo Protection : Polyelectrolyte Microcapsules as Versatile Antigen Carriers |
| 10.15-10.35 | | Coffee break |
| 10.35 - 11.20 | V. Vogel | Tissue Engineering and Regeneration: the extracellular matrix acts as mechanotransducer |
| 11.20 - 11.40 | P-H. Puech | Using AFM to investigate cell adhesion and mechanics |
| 11.40 - 12.00 | C. Padeste | Large area nanostructures for application in biology and bio-analytics |
| 12.00 - 12.45 | D. Muller | Developing and applying nanotools to image and probe biology to molecular scale |
| 12.45 - 14.30 | | Lunch |
| 14.30 - 16.00 | | Posters and discussion |
| 16.00-17.00 | | Travel to Nancy |
| 17.00-18.30 | C. Vieu | Des nanobiotechnologies à la nanomédecine, un cheminement interdisciplinaire de la connaissance vers les applications |
| 19h30 - 23.00 | | Conference dinner - Nancy City Hall |

Wednesday 23 June

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| 8.30 - 9.15 | S. Demoustier | Multifunctional Nanotubes for controlled and targeted drug delivery |
| 9.15 - 9.35 | C. Frochot | Interest of nanoparticles for anti-cancer PDT applications |
| 9.35 - 9.55 | Ms. C. Thiele | The Cyclodextrin Construction Kit for Drug Delivery |
| 9.55 - 10.40 | O. Tillement | Multifunctional lanthanides based hybrid nanoparticles for imagery and therapy |
| 10.40-11.00 | | Coffee break |
| 11.00 - 11.45 | N.Jessel | Nanostructured Active Biomaterials for Clinical Applications |
| 11.45 - 12.05 | L. Ploux | How to fight against biomaterial-related infections: Example of a "smart" antibacterial surface |
| 12.05 - 12.25 | M. Michel | Atmospheric plasma polymerization: A new tool in the creation of Molecularly Imprinted Polymer (MIP) for biosensors |
| 12.30 - 14.00 | | Lunch |
| 14.00 - 15.00 | | Travel to Nancy |
| 15.00 - 16.15 | | Lorraine Museum visit |
| 16.15 - 16.45 | | Travel to Faculty of Science & Technic (FST) (Nancy) |
| 16.45 - 17.30 | | Visit of FST |
| 17.30 - 18.30 | | Travel back to Pont-à-Mousson |
| 18.30 - 20.00 | | DISCUSSION |

Thursday 24 June

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| 8.30 - 9.15 | C-M. Lehr | Nanomedicines for advanced Drug Delivery |
| 9.15 - 10.00 | M. Möller | MPEG-hexPLA micelle carriers for diagnostics and hydrophobic drug formulations |
| 10.00 - 10.45 | M.H. Hofmann | Spion as Diagnostic Tool at Molecular Level |
| 10.45-11.05 | | Coffee Break |
| 11.05 - 11.25 | F. Klein | Tailored Three-dimensional Microstructure Scaffolds for Cell Culture Studies |
| 11.25 - 12.10 | T. Zambelli | FluidFM and open questions in biology: from single-virus dispensing to cell-organellae transplantation |
| 12.10 - 12.30 | P. Didier | Fluorescence microscopy techniques to investigate viral molecular interactions in solution and cells |
| 12.30 - 14.30 | | Lunch |
| 14.30 - 15.15 | A.Gutleb | Ag, TiO ₂ and SiO Nanoparticles: Effects on Aquatic Model Organisms |
| 15.15 - 16.00 | M-C. Jaurand | What similarities between carbon nanotubes and asbestos fibers ? |
| 16.00 - 16.20 | D. Lison | Toxicology of nanomaterials : silica nanoparticles and carbon nanotubes. |
| 16.20 - 16.40 | O.Witschger | Inhalation exposure assessment to engineered nanoparticles and nanomaterials. |
| 16.40 - 17.00 | | Coffee Break |
| 17.00 - 18.30 | | ROUND TABLE |

Friday 25 June

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| 9.00 - 9.45 | M. Ruehe | Tailor-made polymer surfaces for biomedical applications |
| 9.45 - 10.05 | V. Ball | Functionalization of polyelectrolyte multilayers with nanoparticles and melanin : diffusion of nanoparticles into the films, synthesis in the film structure, and reactive Layer by layer sol-gel chemistry. |
| 10.05 - 10.25 | M. Dahoun | Composites resins for use in odontology: Challenges and perspectives |
| 10.25 - 10.45 | | Coffee Break |
| 10.45 - 11.30 | L. Auvray | Transport of proteins and macromolecules through natural and solid-state nanopores |
| 11.30 - 11.50 | A. Specht | Two-Photon Uncaging: Development and Prospect. |
| 11.50 - 12.10 | S. Harlepp | DNA Interaction with organo- metallic compounds based on Ruthenium (RDC). |
| 12.30 - 14.30 | | Lunch |
| Official closing | | |

Flash Poster Session I (21 June / 18.30 - 19.30)

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| 18.30 - 18.35 | Blanka Halamoda - Kenzaoui | Development of methods for testing the toxicological profile of nanoparticles used in the biomedical field. |
| 18.35 - 18.40 | H. Kerdjoudj | Nano-structures for vascular tissue engineering |
| 18.40 - 18.45 | J. Tournebize, P. Leroy, A. Sapin-Minet, A. Boudier, P. Maincent, L. Balan, R. Schneider | Synthese de nanoparticules d'or fonctionnalisées par l'acide dihydrolipoique. Caractérisation et étude de stabilité |
| 18.45 - 18.50 | Didier ROBERT | Preparation And Optimization of TiO ₂ /SiC Foam For Photocatalytic Treatment of Hospital effluent |
| 18.50-18.55 | Gabriela Popa, Fouzia Boulmedais, Peng Zhao, Joseph Hemmerlé, Loïc Vidal, Eric Mathieu, Olivier Felix, Pierre Schaaf, Jean-Claude Voegel and Gero Decher | Nanoscale precipitation coating: The deposition of inorganic films through step-by-step spray-assembly |
| 18.55 - 19.00 | J. Böhmler | Surfaces of versatile functional group density for bacteria adhesion analysis |
| 19.00 - 19.05 | Michele Léonard, Cécile Gavory, Cécile Nouvel, Jean Raynaud, Emmanuelle Marie, Edith Dellacherie, Alain Durand, Jean-Luc Six | Synthesis and characterization of PLA-grafted dextran nanoparticles prepared by O/W emulsion or by nanoprecipitation |
| 19.05 - 19.10 | N. Cottenye | Antimicrobial surface based on self-assembled nanoreactors: from bloc copolymer to bacterial adhesion study |
| 19.10 - 19.15 | Muhammad Imran | Implications of nano-biotechnology: Will nano-vectorization enhance protective efficacy through target delivery? |
| 19.15 - 19.20 | NGUYEN Van Son | Nanoparticle dispersion and characterization for toxicological studies |
| 19.20 - 19.25 | E. Paternotte, Vincent, R. Hadji, N. Salmon, P. Menu, D. Rouxel | B. Brillouin spectroscopy as a tool for analysis of nanoscale films on biological tissue |
| 19.25 - 19.30 | E. Paternotte, Rouxel, B. Vincent, R. Hadji, H. Kerdjoudj, P. Menu | D. A new piezoelectric polymer nanocomposites for therapeutic applications: build-up and cytotoxic evaluation |