

Program

Tuesday, April 14, 2015

12:30 REGISTRATION OPENS

13:45 Opening session by the Head of the IPBS and presentation of the COST TD 1104 Action and of the World Congress on Electroporation by Prof. Damijan Miklavčič.

14:00 Session: Electro-eradication of spores

14:10 Keynote lecture: Jean-Yves MAILLARD, Cardiff School of Pharmacy and Pharmaceutical Sciences, United-Kingdom
Bacterial spore structures and their protective role in biocide resistance

14:50 Vincent BLANCKAERT- IUT Laval, France
Spore eradication of *Bacillus subtilis* var niger by streamers in water

15:15 Flavien PILLET, IPBS-CNRS 5089, France
Bacterial spores inactivation by microsecond Pulsed electric fields and electric arcs

15:40 Flash presentations (3 minutes presentation of posters)

16:10 Coffee break and Poster session

16h40 Juergen F. KOLB - INP, Germany
Pulsed Electric Fields and Non-Thermal Plasmas for the Decontamination of Bacteria, Spores and Viruses

17h05 Zdenko MACHALA- Faculty of Mathematics, Physics and Informatics, Comenius University, Slovakia
Decontamination of *Bacillus cereus* Spores and Streptococci Biofilms on Plastic Surfaces with DC and Pulsed Corona Discharges

18h00 Welcome reception, Toulouse city Hall, Capitole

19h30 Gala Dinner

Wednesday, April 15, 2015

8:50 Session: effect of strong electric fields on macromolecules

9:00 Keynote lecture: Eberhard NEUMANN, U Bielefeld, Germany.
Macromolecular membrane complexes in electric fields - functional significance

9:40 Olga MARTIN-BELLOSO, University of Lerida, Spain
Pulsed electric fields effect on quality and related enzymes of fruit juices

10:05 Flash presentations (3 minutes presentation of posters)

10:35 Coffee break and Poster session

11:05 Mounir TAREK, CNRS Nancy, France
Biophysical Effects of High Intensity Electric Fields on Proteins

11:30 Dietmar PORSCHKE, MPI Gottingen, Germany
Effects of external electric fields on DNA

11:55 Lunch and Poster session

13:20 Session "tools for imaging electric field effects"

13:30 Keynote lecture: Antoni IVORRA, Universitat Pompeu Fabra, Spain
In vivo imaging of irreversible electroporation by means of electrical impedance tomography

14:10 Sandrine POUVREAU, Institut Interdisciplinaire de Neurosciences, France
Reactive Oxygen Species detection using Genetically Encoded Indicators

14:35 Matej KRANJC, Faculty of Electrical Engineering, Slovenia
Monitoring of electric field distribution in tissue during electroporation by means of MREIT

15:00 Flash presentations (3 minutes presentation of posters)

15:30 Coffee break and Poster session

16:00 Lluis MIR, IGR-CNRS, France
CARS spectroscopy to probe interfacial water of biological samples exposed to electric pulses

16:20 Xavier ORLIK, DOTA-ONERA, France
Adapted Polarimetric Imaging : study of mouse melanoma

16:40 David DUBUC, LAAS-CNRS, France
Microwave Dielectric Spectroscopy for Cells Viability Analysis

17:00 Elisabeth BELLARD, IPBS-CNRS 5089, France
Intravital microscopy: a direct approach for imaging electropermeabilization effects

17:20 Final Conclusions and Meeting Closure