

**PEF SCHOOL 2019**

**Monday, 3<sup>rd</sup> June 2019**

15.00 -16.00	Registration
16.00-16.30	Welcome to PEF School - Opening session (P.Rocculi & D. Miklavcic)
16.30-17.30	Basic Principles of Cell Membrane Electroporation (J.Teissie)
17.30-18.30	PEF Equipment Design (W. Frey)
19.00 -21.00	Welcome reception

**Tuesday, 4<sup>th</sup> June 2019**

08.30-09.30	Modeling and simulations (C.Rauh)
09.30-10.15	Electrochemical reactions during PEF treatment (G.Pataro)
10.15-10.30	Students presentations(3x5min)

**10.30-11.00 COFFEE BREAK AND POSTER SESSION**

11.00-12.00	Method to detect electroporation (N.Lebovka)
12.00-12.15	Case study: NMR in PEF processing (UNIBO)
12.15-12.30	Case study: MREIT and CDI of potato and field distribution (M. Kranjc)

**12.30-14.00 LUNCH**

14.00-14.45	Health aspects of PEF treated juices (K. Aganovic)				
15.00-17.00	<b>Practical Course 1: Microbial inactivation (UNIBO)</b>	<b>Practical Course 2: PEF treatment for mass transfer enhancement (UNIBO)</b>	<b>Practical Course 3: Modeling and simulation (TU Berlin)</b>	<b>Practical Course 4: Pulse Generation and Equipment Design (Ljubljana)</b>	<b>Practical Course 5: Other non-thermal technologies (UNIBO)</b>
18.00-23.00	Social event				

**Wednesday, 5<sup>th</sup> June 2019**

8.30-9.30	Plant tissue electroporation (G.Ferrari)
9.30-10.30	Animal tissue electroporation (to be defined)
<b>10.30-11.00 COFFEE BREAK AND POSTER SESSION</b>	
11.00-12.00	Microbial inactivation (J. Raso)
12.00-12.15	Case study: Microbial metabolic response (UNIBO)
12.15-12.30	Students presentations(3x5min)

**12.30-14.00 LUNCH**

14.00-15.00	PEF based bio-refineries (E. Vorobiev)				
15.00-17.00	<b>Practical Course 1: Microbial inactivation (UNIBO)</b>	<b>Practical Course 2: PEF treatment for mass transfer enhancement (UNIBO)</b>	<b>Practical Course 3: Modeling and simulation (TU Berlin)</b>	<b>Practical Course 4: Pulse Generation and Equipment Design (University of Ljubljana)</b>	<b>Practical Course 5: Other non-thermal technologies (UNIBO)</b>
17.30-23.00	Visit to Cesena and dinner				
<b>Thursday, 6<sup>th</sup> June 2019</b>					
8.30-9.30	Biomedical applications (D. Miklavcic)				
9.30-10.15	Drying enhancement (A. Wiktor)				
10.15-10.30	Case study: Osmotic dehydration enhancement (UNIBO)				
<b>10.30-11.00 COFFEE BREAK AND POSTER SESSION</b>					
11.00-12.00	Other emerging technologies in food processing (H. Jaeger)				
12.00-12.15	Case study: Plasma (UNIBO)				
12.15-12.30	Case study: HPH (UNIBO)				
<b>12.30-14.00 LUNCH</b>					
14.00-14.15	Case study: PEF+OH (UNIBO)				
14.15-15.00	PEF for improving freezing tolerance (F. Gomez Galindo)				
15.00-17.00	<b>Practical Course 1: Microbial inactivation (UNIBO)</b>	<b>Practical Course 2: PEF treatment for mass transfer enhancement (UNIBO)</b>	<b>Practical Course 3: Modeling and simulation (TU Berlin)</b>	<b>Practical Course 4: Pulse Generation and Equipment Design (Ljubljana)</b>	<b>Practical Course 5: Other non-thermal technologies (UNIBO)</b>
19.00-23.00	Visit to Cesenatico and GALA dinner				
<b>Friday, 7<sup>th</sup> June 2019</b>					
9.15-10.15	Industrial applications (S. Toepfl)				
10.15-10.30	Case study: Chips processing (UNIBO)				
<b>10.30-11.00 COFFEE BREAK AND POSTER SESSION</b>					
11.00-12.00	Legislation and consumer acceptance (J. Lyng)				
12.30-14.00	<b>LUNCH</b>				
14.00-14.30	<b>Closing session</b>				