

PROVISIONAL SCHEDULE	
8:15	Registration
8:45 opening the conference	Sosnowski, Ciambelli, Bogle, Manca
Session 1: 8:50 – 10:30	FUNCTIONAL MATERIALS AND SYSTEMS IN BIOMEDICAL APPLICATIONS
1. 8:50-9:10	ADVANCED MEMBRANE SYSTEMS AND DEVICES FOR BIOMEDICAL APPLICATIONS Morelli S. Salerno S. Piscioneri A. De Bartolo L.
2. 9:10-9:30	MEMBRANES OF CELLULOSE ACETATE-SILICA/METAL ORGANIC FRAMEWORK FOR THE REMOVAL OF UREMIC TOXINS Guerreiro J.F. Pereira Da Silva M. Bordonhos M. Minhalma M. Luzia Pinto M. De Pinho M.N.
3. 9:30-9:50	ADVANCED ORGANOTYPIC MEMBRANE SYSTEMS AND MESENCHYMAL STEM CELLS IN SKIN AND LIVER TISSUE ENGINEERING Salerno S. Drioli E. De Bartolo L.
4. 9:50-10:10	PLGA MEMBRANE TOOL FOR BRAIN TISSUE ENGINEERING Morelli S. Piscioneri A. Guarnieri G. Morelli A. Drioli E. De Bartolo L.
5. 10:10-10:30	SMART HYDROGELS IN BIOMEDICAL APPLICATIONS: PH ROLE ON THEIR BEHAVIOR De Piano R. Caccavo D. Barba A.A. Lamberti G.
Coffee break and poster viewing: 10:30-11:00 (30 min)	
Session 2: 11:00 – 13:00	MODELING IN PHYSIOLOGY AND DRUG DELIVERY
6. 11:00-11:20	MULTIPHYSICS MODELING FOR PREDICTING DRUG RELEASE FROM HYDROGELS IN BREAST TUMOUR TREATMENT Gonzalez Garcinuño Á. Tabernero A. Nieto C. Kenjeres S. Martin Del Valle E.
7. 11:20-11:40	MOLECULAR DYNAMICS AND QUANTUM CHEMISTRY MODELLING OF DEHYDRATION AND EXPOSURE EFFECT ON SKIN LIPID BILAYER STRUCTURE AND BARRIER PROPERTY Lian G. Nicola P. Chen T. Cai Q.
8. 11:40-12:00	COMPUTATIONAL MODELLING OF FRUCTOSE-INDUCED LIPID DEPOSITION AND LIVER DISEASE Liao Y. Davies N. Bogle D.
9. 12:00-12:20	HEMOLYSIS RISK ASSESSMENT IN CARDIOVASCULAR DEFECTS USING COMPUTATIONAL FLUID DYNAMICS SIMULATIONS Wojtas K. Jedrzejczak K. Truchel K. Antonowicz A. Orciuch W. Kozłowski M.
10. 12:20-12:40	OPTIMIZING LEVOTHYROXINE DOSAGE FOR HYPOTHYROIDISM TREATMENT: A MODEL-BASED APPROACH Manca D.
11. 12:40-13:00	CONSTRUCTING 3D VORONOI STRUCTURES: A TOOLKIT WITH BIOMEDICAL CASE STUDIES Todd L. Chin M. Coppens M.O.
Lunch break and poster viewing: 13:00-14:10 (1h 10 min)	
Session 3: 14:10-15:40	MICRO- AND NANOSYSTEMS
12. 14:10-14:30	AN AEROSOL GENERATOR FOR THE DIRECT PULMONARY DELIVERY OF MICRO AND NANOPARTICLES

	Santamaria J. Lobera P.
13. 14:30-14:50	A COMPARATIVE STUDY ON LIPOSOMES AND NIOSOMES PRODUCED BY A SUPERCRITICAL CO ₂ ASSISTED PROCESS Baldino L. Reverchon E.
14. 14:50-15:10	BLOOD-ON-A-CHIP FOR REAL-TIME INVESTIGATION OF BLOOD CLOTTING DYNAMICS Pero E. Tomaiuolo G. Guido S.
15. 15:10-15:30	NANOLIPOSOMAL FORMULATIONS IN MEDICINE: THE COAXIAL-INJECTION METHOD AS RELIABLE AND HIGH THROUGHPUT PROCESS Caccavo D. De Piano R. Lamberti G. Barba A.A.
16. 15:30-15:50	PRODUCTION OF SODIUM ALGinate DROPLETS IN AN X-MICRODEVICE Tomasi Masoni S. Mariotti A. Galletti C. Mauri R. Salvetti M.V. Brunazzi E.
Coffee break and poster viewing: 15:50-16:20 (30 min)	
Session 4: 16:20-18:00 DIAGNOSTICS AND PHARMACEUTICALS	
17. 16:20-16:40	UNVEILING THE MECHANICAL PROPERTIES OF CANCER CELL SPHEROIDS BY RHEO-MICROSCOPY Ferraro R. Caserta S. Guido S.
18. 16:40-17:00	INVESTIGATING THE RESPONSE OF ORGANIC ELECTROCHEMICAL TRANSISTORS FOR BIOSENSING APPLICATIONS Preziosi V. Barra M. Tomaiuolo G. Marasso S.L. Cocuzza M.
19. 17:00-17:20	DEVELOPMENT OF ANTIBACTERIAL MATERIALS BASED ON IN-SITU SYNTHESIS OF VOLATILE ALLICIN Kaspar O. Maskova L. Tokarova V.
20. 17:20-17:40	MACHINE LEARNING-AIDED TOOLS IN PERSONALISED MEDICINE SUPPLY CHAINS Papathanasiou M.
21. 17:40-18:00	SUPERCRITICAL CO ₂ USED AS STERILIZATION AGENT FOR POLYMERIC MEDICAL DEVICES Warambourg V. Mouahid A. Crampon C. Pepe V. Le Rest M. Masmoudi Y.
18:00-18:10 Final thoughts and closing the event	
POSTER	
1	CURRENT ENGINEERING CHALLENGES IN THE TARGETING AEROSOLIZED MEDICINES TO THE NASAL CAVITY Sosnowski T.
2	COMPUTATIONAL MODELLING OF THE IMPACT OF EVAPORATION ON IN-VITRO DERMAL ABSORPTION Deacon B. Silva S. Lian G. Chen T.
3	DECIPHERING POPULATION HETEROGENEITY IN VACCINE-INDUCED IMMUNITY: A MECHANISTIC MODEL FOR IMMUNE FINGERPRINTING Schiafone C. Joseph C. Wang Z. Caserta S. Cristini V. Dogra P.
4	SUPERCRITICAL FLUID EXTRACTION OF ACTIVE PHARMACEUTICAL INGREDIENTS FROM IRIS

	Baldino L. Scognamiglio M. Reverchon E.
5	<p>HIGH PRESSURE HOMOGENIZATION AS ADVANCED PROCESS FOR THE FABRICATION OF ANTIMICROBIAL HYDROGEL NANOPARTICLES</p> <p>Szczesna-Gorniak W. Lamch L. Zboinska E. Szyk-Warszynska L. Warszynski P. Wilk K.</p>
6	<p>TOWARD ANESTHESIA MANAGEMENT VIA PHYSIOLOGICALLY BASED PKPD MODELS</p> <p>Piazza O. Cascella M. Caccavo D. Califano B. Barba A.A.Lamberti G.</p>
7	<p>IN-SITU PRODUCTION OF ALLICIN VAPOUR FROM COMPOSITE FILMS TO TREAT SKIN INFECTIONS</p> <p>Tokarova V. CZECH REP. Maskova L. Zavisova L. Knejzlik Z.Kaspar O.</p>