

COST Action TD1208

International Conference on Electrical
Discharges with Liquids
(ICEDL 2016)

Kocaeli, 14th-17th March 2016

FULL PROGRAMME

Full Programme

Sunday, March, 13th

16:00 REGISTRATION

19:00 **DINNER**

Monday, March, 14th

08:00 REGISTRATION

08:50 **OPENING**

Session I Chair: A. Rousseau

09:00 INVITED TALK: Liquid Plasma Generation Using Picosecond High-Voltage Pulses
A. Starikovskiy

09:40 INVITED TALK: Modelling of Prebreakdown Phenomena in Dielectric Liquids
G. Naidis

10:20 Detection of Metals in Waterdroplets Using Double Pulse Laser Induced Breakdown Spectroscopy Technique
A. Demir

10:40 **COFFEE BREAK**

Session II Chair: P. Lukes

11:15 INVITED TALK: Dynamics of Reactive Oxygen Species Generated in Liquid Exposed to Gas Discharges
S. Hamaguchi

11:55 Generation of Antimicrobial NO_x by Transient Spark Discharge in Atmospheric Dry Air, and with Water
M. Janda

12:15	Raman Spectra of "7-acetoxy-6-(2,3-dibromopropyl)-4,8-dimethylcoumarin" Molecule Under the Effect of Atmospheric Pressure Plasma Jet of Neon (Ne) <u>M. Tanışlı</u>
12:35	Imaging Diagnostics of the Interaction of a Filamentary Plasma Jet with Liquids <u>M. Theodorescu</u>
13:00	LUNCH
14:30	Future Project Proposals
16:10	COFFEE BREAK
16:50	POSTER SESSION
19:00	DINNER

Tuesday, March, 15th

	Session III Chair: C. Paradisi
09:00	INVITED TALK: Natural Mechanisms of Photodegradation of Organic Pollutants in Water <u>C. Lopez</u>
09:40	Degradation of Non-ionic and Anionic Surfactants in Water Falling Film DBD Reactor <u>B. Obradović</u>
10:00	Plasma Activated Water - degradation Agent for Organic Colorants <u>I. E. Vlad</u>
10:20	Peroxynitrite Post-discharge Kinetics in Liquids Treated by Gas Phase Plasma Discharges Driven by Nanosecond High Voltage Pulses <u>R. Laurita</u>
10:40	COFFEE BREAK

	Session IV Chair: S. Reuter
11:15	INVITED TALK: Decomposition of Pesticides: Products analyzes and toxicity tests <u>A. Nikiforov</u>
11:55	Sterilization Effect of Non-thermal Plasma Activated Water on Clinical Important Bacterial Species <u>M.Mares</u>
12:15	Degradation Mechanisms of Small Unilamellar Liposome in Physiological Liquids by Nanosecond Pulsed Cold Atmospheric Plasma Under Nitrogen <u>S. Maheux</u>
12:35	Can Deionized Water Substitute Bleaching Agents by Utilizing Non-Thermal DBD Plasma for Non-vital Tooth Bleaching Purpose? <u>U.K. Ercan</u>
13:00	LUNCH
14:30	WG Highligths
16:10	COFFEE BREAK
16:50	Management Committee
20:00	GALA DINNER
Wednesday, March, 16th	
	Session V Chair: D. Mariotti
09:00	INVITED TALK: Chemical questions around the plasma – induced synthesis of gold and silver nanoparticles in water solution <u>F. Renier</u>
09:40	Plasma-controlled solvated electron colloidal chemistry for high quality nanomaterials synthesis <u>P. Maguire</u>
10:00	Plasma assisted synthesis of Au/PEDOT:PSS nanocomposites <u>D. Sun</u>

10:20	Non-equilibrium nanopulsed plasma jet for the synthesis of copper-based nanostructures in liquid environments <u>A. Liguori</u>
10:40	COFFEE BREAK
	Session VI Chair: D. Maric
11:15	INVITED TALK: Properties of oxidized lipid bilayers: A multi-level modeling approach <u>M. Yusupov</u>
11:55	Numerical Modelling of Plasma Liquids <u>A. Papadakis</u>
12:15	Plasma polymerization in contact with liquids <u>R. Molina</u>
12:35	Electrical discharge synthesis of carbon nanoparticles with tunable luminescent properties <u>N. Tarasenko</u>
13:00	LUNCH
14:00	VISIT of MUSEUM
16:50	Informal Discussions, Future Collaborations
19:00	DINNER
Thursday, March, 17th	
DEPARTURE	

Poster Presentations

P-1	Plasma-initiated liquid aerosol chemistry and the effect on bacteria
P-2	Plasma activated water as sustainable method to control bacterial leaf spot of tomato
P-3	Plasma pre and post-treatment of electrospun nanofibrous Li-ion battery separators
P-4	Antimicrobial Activity of Nebulized Plasma-Treated Solutions
P-5	Production of TiO ₂ NPs in Liquid Environment Using Nanosecond Double Pulse Lasers
P-6	Plasma Enhancement of DLC Thin Films Using Double Pulse LIBS Technique
P-7	Modelling of Microwave Plasma Torch in Contact with Liquids
P-8	Intra- and Interspecific Variations of Anti-staphylococcal Effect of Non-thermal Plasma Activated Water
P-9	Plasma-Liquid Synthesis of Quantum Dots for Photovoltaics
P-10	Electrical and Optical Characterization of Plasmas in High Conductivity Solutions
P-11	Bacteria Inactivation in a Liquid Environment Using Filamentary Argon Plasma Jet Generated in Ambient Atmosphere
P-12	Syngas Production from Liquid Waste by Water Vapour Plasma Technology
P-13	Numerical Investigation of the Spatiotemporal Distribution of Chemical Species in Atmospheric Surface Barrier Discharge
P-14	Study the Effect of Atmospheric Pressure Plasmas Jet on Colon Cancer

P-15	Atmospheric Pressure DBD Air Plasma for Fungi Decontamination
P-16	Design and Construction of Q-switched Ho:YAG Laser and its Application in Water
P-17	Thermo-sensitive NIPAAm Based Coatings Obtained by Plasma Initiated Polymerization in Contact with Liquids
P-18	Characterisation of Discharges in a Highly Conductive Liquid
P-19	Electrical Breakdown of Microdischarges in Water Vapor
P-20	Application of Particle in Cell/Monte Carlo Collision Code to Problem of Identification of Impurities within the Plasma Electron Spectroscopy
P-21	Influence of DBD Plasma Jet on Free Surface Energy of Polymer Materials
P-22	Degradation Mechanisms of Small Unilamellar Liposome in Physiological Liquids by Nanosecond Pulsed Cold Atmospheric Plasma Under Nitrogen Atmosphere
P-23	Emission Properties of Low-current dc Discharges in Alcohol Vapours
P-24	Mobility of OH ⁻ and H ₃ O ⁺ ions in H ₂ O
P-25	Theoretical and Experimental Investigation of Various Configurations of Surface-wave-sustained Plasma in Contact with Liquids
P-26	Plasma-liquid Synthesis of High Quality Surfactant-free CuO Quantum Dots
P-27	Bactericidal Properties of a Solar Powered Air Plasma System
P-28	Generation of NO ₂ ⁻ and NO ₃ ⁻ in Water by Negative Corona Discharge
P-29	RF Atmospheric Pressure Plasma Jet in Cucumber Seeds' Conditioning

P-30	Influence of Liquid Phase Ion Mobilities and Atmospheric Corona Discharge on Water Electrospray
P-31	The Contribution of Thermal Evaporation in Transfer of Liquid Electrolyte Cathode Components to Plasma
P-32	Surface Properties of Antibacterial Textiles Deposited by Silver and Copper
P-33	Investigation of surface characteristics of textiles deposited by magnetron sputtering method
P-34	Properties of Ternary Compound Nanoparticles Synthesized by Electrical Discharge Processing of Micropowders Mixtures in Solution and Modified by Laser Irradiation
P-35	Water Contact Angles on Cellulose Exposed to Radio Frequency Atmospheric Pressure Plasma Jet (Page: 62)
P-36	Immobilization of Stabilizer-free Silver Nanoparticles on the Silicon and Glassy Carbon Surfaces
P-37	Electrolyte Plasma Processing for the Corrosion-Resistant Tubing Surfaces
P-38	Properties of Ternary Compound Nanoparticles Synthesized by Electrical Discharge Processing of Micropowders Mixtures in Solution and Modified by Laser Irradiation