

| SUNDAY, 26/6 | | MONDAY, 27/6 | | |
|---------------|---|---|---|---------------|
| 08:00 - 08:15 | | Opening ceremony Room Progress | | 08:00 - 08:15 |
| 08:15 - 08:30 | | Session Chair: Prof. Gerrit Kroesen; Prof. Matteo Gherardi, Prof. Ana Sobota, Prof. Romolo Laurita, Prof. Eun-Ha Choi | | 08:15 - 08:30 |
| 08:30 - 08:45 | | Cristina Canal - Lessons learnt in plasma-treated liquid therapies for bone cancer: opportunities for plasma medicine P1 | | 08:30 - 08:45 |
| 08:45 - 09:00 | | Room Progress | | 08:45 - 09:00 |
| 09:00 - 09:15 | | Session Chair: Prof. Gerrit Kroesen | | 09:00 - 09:15 |
| 09:15 - 09:30 | | Refreshment break | | 09:15 - 09:30 |
| 09:30 - 09:45 | | (30 min) | | 09:30 - 09:45 |
| 09:45 - 10:00 | | 1st Cost Annual Meeting Room Mission 1 Session Chair: Prof. Cristina Canal | Room Mission 2 Session Chair: Prof. Jean-Michel Pouveste | |
| | | Hiromasa Tanaka -Molecular mechanisms of cell death by plasma-activated solutions in glioblastoma cells I1 D1A1 | Ita Junkar -Gaseous plasma treatment of vascular stents - a powerful tool for new generation vascular stents O1 D1B1 | 09:45 - 10:00 |
| 10:00 - 10:15 | | | Elaine Biscop -Elucidating Non-Thermal Plasma-induced Cell Death Mechanisms for Direct and Indirect Treatment Conditions O2 D1B1 | 10:00 - 10:15 |
| 10:15 - 10:30 | | Sander Bekeschus -Medical gas plasma augments bladder cancer cell toxicity and immunogenicity in preclinical models and patient-derived tumor tissues O1 D1A1 | Vandana Miller -Plasma immunomodulation: secondary and tertiary effects O3 D1B1 | 10:15 - 10:30 |
| 10:30 - 10:45 | | Francesco Tampieri -Biocompatible Composite Hydrogels for Storage and Delivery of Plasma-Generated Reactive Species O2 D1A1 | Johanna Striesow -Formation of lipid peroxidation products by gas plasmas - translation from the liposome model to human platelets O4 D1B1 | 10:30 - 10:45 |
| 10:45 - 11:00 | | Lukes Petr -Chemistry and cytotoxic properties of amino acids modified by He/O2 plasma in saline solutions O3 D1A1 | Kai Masur -Plasma modulation of human progenitor cells O5 D1B1 | 10:45 - 11:00 |
| 11:00 - 11:15 | | Andjelija Petrovic -Optimization of a DBD plasma jet in contact with liquids for application in biomedicine O4 D1A1 | Shinya Kumagai -Analysis of cell irradiated with non-thermal atmospheric pressure plasma for effective gene transfer O5 D1B2 | 11:00 - 11:15 |
| 11:15 - 11:30 | | Parisa Shali -Plasma directly generated in liquids as an innovative method to treat cancer O5 D1A1 | Sybille Hasse -Investigations on microbiome and proteome in chronic wound exudates under plasma and standard wound treatment O7 D1B1 | 11:15 - 11:30 |
| 11:30 - 11:45 | | Valeria Veronico -The active role of the liquid in the formation of long-lived RONS in Plasma Treated Water Solutions I2 D1A1 | Osvaldo Daniel Cortázar -Healing of torpid ulcers treated with atmospheric cold air plasma jet: preliminary results O8 D1B1 | 11:30 - 11:45 |
| 11:45 - 12:00 | | | Augusto Stancampiano -In-vivo safety assessment for fractioned and continuous direct plasma treatments O9 D1B1 | 11:45 - 12:00 |
| 12:00 - 12:15 | | Lunch break (1h 30min) | | 12:00 - 12:15 |
| 12:15 - 12:30 | | | | 12:15 - 12:30 |
| 12:30 - 12:45 | | | | 12:30 - 12:45 |
| 12:45 - 13:00 | | | | 12:45 - 13:00 |
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| 13:15 - 13:30 | | | | 13:15 - 13:30 |
| 13:30 - 13:45 | | | | 13:30 - 13:45 |
| 13:45 - 14:00 | | Poster session | | 13:45 - 14:00 |
| 14:00 - 14:15 | | | | 14:00 - 14:15 |
| 14:15 - 14:30 | | WG41 meeting of International standard IEC60601-2-91 ; Plasma wound treatment Mission 2 | | 14:15 - 14:30 |
| 14:30 - 14:45 | | | | 14:30 - 14:45 |
| 14:45 - 15:00 | | | | 14:45 - 15:00 |
| 15:00 - 15:15 | | Refreshment break (30 min) | | 15:00 - 15:15 |
| 15:15 - 15:30 | | | | 15:15 - 15:30 |
| 15:30 - 15:45 | | 15:30 - 15:45 | | |
| 15:45 - 16:00 | | 1st Cost Annual Meeting Room Mission 1 Session Chair: Dr. Sander Bekeschus | 1st Cost Annual Meeting Room Mission 2 Session Chair: Dr. Nevena Puac | 15:45 - 16:00 |
| 16:00 - 16:15 | Registration | Zdenko Machala -Cold plasma/photocatalysis decontamination of FFP2 respirators and indoor air contaminants O1 D1A2 | Susana Sérgio -Interaction of a Cold Atmospheric Argon Plasma Jet Device with Human Skin Cells O1 D1B2 | 16:00 - 16:15 |
| | | Pasquale Isabelli -Cold Plasma Systems to reduce airborne transmission of Hospital Acquired Infectious & COVID-19 O2 D1A2 | Benjamin Harris -Tailoring reactive oxygen species production in pulsed He+H2O plasmas through Pulse Repetition Rate O2 D1B2 | |
| 16:15 - 16:30 | | Gabriele Neretti -Sterilization of disposable devices performed by indirect plasma treatment O3 D1A2 | James Walsh -Influence of external factors on plasma jet dynamics II D1B2 | 16:15 - 16:30 |
| 16:30 - 16:45 | | Ana Sainz-García -Atmospheric Pressure Cold Plasma for Mask Disinfection O4 D1A2 | | 16:30 - 16:45 |
| 16:45 - 17:00 | | Torsten Gerling -Development of a mobile sensory device to trace treatment conditions for various medical plasma devices O5 D1A2 | František Kréma -Diagnostics of Dielectric Barrier Discharge Based Plasma Pen for Skin Treatment O3 D1B2 | 16:45 - 17:00 |
| 17:00 - 17:15 | Welcome reception Jaarbeurs, 1st floor, Supernova space | | Katayoon Hadian Rasnani -Electrical and optical investigation of the long term operation of an endoscopic plasma device O4 D1B2 | 17:00 - 17:15 |
| 17:15 - 17:30 | | | Li Lin -The Physical Effects of Plasma Medicine on Cells: Radio Frequency Stimulated Intercellular and Intracellular Mechanical Waves O6 D1B1 | 17:15 - 17:30 |
| 17:30 - 17:45 | | | | 17:30 - 17:45 |
| 17:45 - 19:00 | | | | 17:45 - 19:00 |

| Legend |
|---|
| Plenary |
| Fundamentals of atmospheric plasmas |
| Plasma agricultural applications |
| Plasma for pharmaceutical applications, biochemical and biomolecular engineering |
| Plasma liquid interactions, plasma activated liquids |
| Plasma medical applications - clinical and animal studies |
| Plasma sources for biomedical applications |
| Plasma-based decontamination and sterilization |
| Plasma-cell and plasma-tissue interactions - biological and biochemical reactions |
| Plasma-surface interactions/modifications for biomedical applications |
| Regulatory issues in plasma medicine |

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| 08:00 - 08:15 | | | 08:00 - 08:15 |
| 08:15 - 08:30 | | | 08:15 - 08:30 |
| 08:30 - 08:45 | Peter Bruggeman -Plasma Regulated Biology: A Pathway Towards Defining a 'Dose' in Plasma-Medicine P2 Room Progress Session Chair: Prof. Eun-Ha Choi | | 08:30 - 08:45 |
| 08:45 - 09:00 | | | 08:45 - 09:00 |
| 09:00 - 09:15 | | | 09:00 - 09:15 |
| 09:15 - 09:30 | Refreshment break (30 min) | | 09:15 - 09:30 |
| 09:30 - 09:45 | | | 09:30 - 09:45 |
| 09:45 - 10:00 | 1st Cost Annual Meeting Room Mission 1 Session Chair: Prof. Daniela Bohem | Room Mission 2 Chair: Prof. Lenka Zajíčková | 09:45 - 10:00 |
| | Utku Kürşat Ercan -Determination of Antimicrobial Strength of Cold Atmospheric Plasma Activated Water by Colorimetric and Electrochemical Methods O1 D2A1 | Konstantin Kostov -Development of Remote Atmospheric Plasma Jets for Biomedical Applications I1 D2B1 | |
| 10:00 -10:15 | Romolo Laurita -On the use of cold atmospheric pressure plasmas and plasma activated water for food processing O2 D2A1 | | 10:00 -10:15 |
| 10:15 - 10:30 | Yury Gorbanev - Plasma-Liquid Interactions: The role of liquid I1 D2A1 | Eun Ha Choi -Calculation of O3 and O density containing humidity generated from nonthermal atmospheric plasma O1 D2B1 | 10:15 - 10:30 |
| 10:30 - 10:45 | | Julien Bissonnette-Dulude -Coupling of microfluidic devices with reference cold plasma jet O2 D2B1 | 10:30 - 10:45 |
| 10:45 - 11:00 | Ana Megia -Plasma Activated Water (PAW) Against Virus and Multidrug Resistant Bacteria: characterization and in vitro experiments O5 D2A1 | Sebastian Burhenn -Impact of humidity on the OH distribution in the effluent of the COST1-jet measured by laser induced fluorescence O3 D2B1 | 10:45 - 11:00 |
| 11:00 - 11:15 | Olivera Jovanović -Plasma pin-jet for treatment of water: production of reactive species in distilled and tap water O4 D2A1 | Andra-Cristina Bostanaru-Mycobactericidal Efficacy of Non-Thermal Plasma Activated Water O4 D2B1 | 11:00 - 11:15 |
| 11:15 - 11:30 | Jean-Michel Pouvesle -The, so-called blob, slime mold Physarum polycephalum as a new model for biological applications of atmospheric pressure non-thermal plasmas O5 D2A1 | Paul Maguire -Electron and hydroxyl radical interactions with liquids, biomolecules and cells O5 D2B1 | 11:15 - 11:30 |
| 11:30 -11:45 | Aleksandra Lavrikova -Bacteria inactivation pathways induced by cold atmospheric plasma O6 D2A1 | Mário Janda -The role of HNO2 in the generation of plasma activated water by transient spark discharge I2 D2B1 | 11:30 -11:45 |
| 11:45 -12:00 | Nishtha Gaur -Methods to enhance the anti-microbial effects of an argon plasma jet O7 D2A1 | | 11:45 -12:00 |
| 12:00 -12:15 | Lunch break (1h 30 min) | ISPM Board of Director meeting Quest Room | 12:00 -12:15 |
| 12:15 -12:30 | | | 12:15 -12:30 |
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| 13:00 - 13:15 | | | 13:00 - 13:15 |
| 13:15 - 13:30 | | | 13:15 - 13:30 |
| 13:30 - 13:45 | Poster session | | 13:30 - 13:45 |
| 13:45 - 14:00 | | | 13:45 - 14:00 |
| 14:00 -14:15 | | | 14:00 -14:15 |
| 14:15 - 14:30 | WIPM, Women in Plasma Medicine Room Mission 1 Session Chair: Prof. Vandana Miller | | 14:15 - 14:30 |
| 14:30 - 14:45 | | | 14:30 - 14:45 |
| 14:45 - 15:00 | | | 14:45 - 15:00 |
| 15:00 - 15:15 | | | 15:00 - 15:15 |
| 15:15 -15:30 | Refreshment break (30 min) | | 15:15 -15:30 |
| 15:30 - 15:45 | | | 15:30 - 15:45 |
| 15:45 - 16:00 | 1st Cost Annual Meeting Room Mission 1 Session Chair: Prof. František Krčma | Room Mission 2 Session Chair: Prof. Theresa Freeman | 15:45 - 16:00 |
| 16:00 - 16:15 | Allan Pavy -Remodeling of cholangiocarcinoma microenvironment by cold atmospheric plasma through in vitro approach O1 D2A2 | Joseph Lorent -Spatial distribution of cold atmospheric plasma reactive species displaying activity on bacterial cell membranes O1 D2B2 | 16:00 - 16:15 |
| | Matteo Gherardi -Control strategies for atmospheric pressure PECVD O2 D2A2 | Thomas Thompson -Comparison of the antimicrobial activity of three Cold Plasma jets against S. aureus O2 D2B2 | |
| 16:15 - 16:30 | Beatrice Olayiwola -Deposition of Antibiotic Layers onto Implant Surfaces using Low Temperature Plasma O3 D2A2 | Nagendra Kumar Kaushik -Nonthermal biocompatible plasma for immuno-modulation, synergy with nanomaterials, and corona virus inactivation O3 D2B2 | 16:15 - 16:30 |
| 16:30 - 16:45 | Metka Benčina -Plasma treated nanostructured TiO2 surface for vascular stents applications O4 D2A2 | Julia Sutter -Nonthermal Plasma as an Antiviral and Immunomodulatory Agent Effective Against HSV-1 Infection O4 D2B2 | 16:30 - 16:45 |
| 16:45 - 17:00 | Fernando Alba-Elias-Anti-friction coatings on medical needles using atmospheric-pressure plasma-polymerization O6 D2A2 | Ross Duncan -Cold plasma treatment of macrophages and biofilms affects their interaction with free antibiotics and liposomes O5 D2B2 | 16:45 - 17:00 |
| 17:00 - 17:15 | Lieze Dankers- Atmospheric plasma-(bio)functionalization of polymer surfaces for low cost microfluidic devices O7 D2A2 | Jordanne-Amec Maybin -Cold atmospheric pressure plasma as a method to improve efficacy of antibiotics against biofilm-forming Pseudomonas aeruginosa. O6 D2B2 | 17:00 - 17:15 |
| Legend | | | |
| Plenary | | | |
| Fundamentals of atmospheric plasmas | | | |
| Plasma agricultural applications | | | |
| Plasma for pharmaceutical applications, biochemical and biomolecular engineering | | | |
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| 08:00 - 08:15 | | | 08:00 - 08:15 |
| 08:15 - 08:30 | | | 08:15 - 08:30 |
| 08:30 - 08:45 | Katharina Stapelmann -Plasma and Plasma-Liquid Chemistry in the Presence of Organic Matter P3 Room Progress Session Chair: Kristina Lachmann | | 08:30 - 08:45 |
| 08:45 - 09:00 | | | 08:45 - 09:00 |
| 09:00 - 09:15 | | | 09:00 - 09:15 |
| 09:15 - 09:30 | Refreshment break (30 min) | | 09:15 - 09:30 |
| 09:30 - 09:45 | | | 09:30 - 09:45 |
| 09:45 - 10:00 | 1st Cost Annual Meeting Room Mission 1 Session Chair: Prof. Eric Robert | Room Mission 2 Session Chair: Prof. Zdenko Machala | 09:45 - 10:00 |
| 10:00 - 10:15 | Evelien Smits -The tumor immunologist's point of view on preclinical and clinical studies in the context of plasma oncology I1 D3A1 | Nicholas L Sponzel -Atmospheric Plasma Generated Nitrate Production and Optimization in a Water-sealed DBD Bubbler O1 D3B1 | 10:00 - 10:15 |
| 10:15 - 10:30 | Augusto Stancampiano -Cold plasma and Electrochemotherapy: in vivo combined treatment O1 D3A1 | Hemadiya Malla -Identifying Important Reactive Oxygen-Nitrogen Species in Sub-nanosecond Pulsed Discharges using Zero-dimensional Simulations O3 D3B1 | 10:15 - 10:30 |
| 10:30 - 10:45 | Thierry Dufour -Cold plasma endoscopy applied to cholangiocarcinoma: therapeutic study & feasibility study on porcine anatomical models O2 D3A1 | Vasyl Shvalya -Plasma-made optical sensors for ppb level mycotoxins diagnostics O4 D3B1 | 10:30 - 10:45 |
| 10:45 - 11:00 | Maja Miletić -Does cold plasma pretreatment of beta-tricalcium phosphate together with periodontal ligament stem cells enhance bone regeneration in vivo? O3 D3A1 | Alexandra Waskow -Understanding the molecular mechanisms of non-thermal plasma treatments on Arabidopsis thaliana seeds O5 D3B1 | 10:45 - 11:00 |
| 11:00 - 11:15 | Sander Bekeschus -Repeated exposure of the oral mucosa over 12 months with cold plasma is not carcinogenic in mice O4 D3A1 | Nevena Puac -Plasma treatment of seeds and plant cells: role of reactive oxygen and nitrogen species in formation of plantlets and embryos in non-permissive conditions I1 D3B1 | 11:00 - 11:15 |
| 11:15 - 11:30 | Kai Masur -Standardization in Plasma Medicine: From DIN Spec to IEC standards O5 D3A1 | | 11:15 - 11:30 |
| 11:30 - 11:45 | Albert Espona-Noguera -Dual action of RONS/Biomolecule-loaded Hydrogels: Killing Cancer Cells and Enhancing Stem Cells Viability O6 D3A1 | Sonal Chaple -The effects of Cold Plasma treatment on physicochemical and rheological modification of hydrocolloids O6 D3B1 | 11:30 - 11:45 |
| 11:45 - 12:00 | Abraham Lin -Investigating Non-Thermal Plasma-Resistant Molecular Pathways through Development and Interrogation of a Resistant Melanoma Cell Line O7 D3A1 | Anna Dzimittrowicz -Continuous flow plasma brush as an effective tool for degradation of drugs from liquid disposals O7 D3B1 | 11:45 - 12:00 |
| 12:00 - 12:15 | Group Photo | | 12:00 - 12:15 |
| 12:15 - 12:30 | | | 12:15 - 12:30 |
| 12:30 - 12:45 | | | 12:30 - 12:45 |
| 12:45 - 13:00 | | | 12:45 - 13:00 |
| 13:00 - 13:15 | | | 13:00 - 13:15 |
| 13:15 - 13:30 | | | 13:15 - 13:30 |
| 13:30 - 13:45 | Lunch break (2h) | | 13:30 - 13:45 |
| 13:45 - 14:00 | | | 13:45 - 14:00 |
| 14:00 - 14:15 | | | 14:00 - 14:15 |
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| 15:00 - 15:15 | | | 15:00 - 15:15 |
| 15:15 - 15:30 | Afternoon excursion | | 15:15 - 15:30 |
| 15:30 - 15:45 | | | 15:30 - 15:45 |
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| 17:00 - 17:15 | | | 17:00 - 17:15 |

| Legend | |
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| | Plenary |
| | Fundamentals of atmospheric plasmas |
| | Plasma agricultural applications |
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| | Plasma liquid interactions, plasma activated liquids |
| | Plasma medical applications - clinical and animal studies |
| | Plasma sources for biomedical applications |
| | Plasma-based decontamination and sterilization |
| | Plasma-cell and plasma-tissue interactions - biological and biochemical reactions |
| | Plasma-surface interactions/modifications for biomedical applications |
| | Regulatory issues in plasma medicine |

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|---------------|--|---|
| 08:00 - 08:15 | | 08:00 - 08:15 |
| 08:15 - 08:30 | | 08:15 - 08:30 |
| 08:30 - 08:45 | Yuzuru Ikehara -Understanding and uses the plasma effects as what interacts with the biomolecules having the electric charge P4 Room Progress Session Chair: Prof. Masaru Hori | 08:30 - 08:45 |
| 08:45 - 09:00 | | 08:45 - 09:00 |
| 09:00 - 09:15 | | 09:00 - 09:15 |
| 09:15 - 09:30 | Refreshment break (30 min) | 09:15 - 09:30 |
| 09:30 - 09:45 | | 09:30 - 09:45 |
| 09:45 - 10:00 | Room Mission 1 Session Chair: Prof. Peter Bruggeman | Room Mission 2 Session Chair: Prof. Stefan Emmert |
| | Robin Mentheour -Antibacterial combination of cold plasma-activated water and pulsed electric fields O1 D4A1 | Ramona Clemen -Gas Plasma Technology Augments Ovalbumin Immunogenicity and OT-II T Cell Activation Confering Tumor Protection in Mice II D4B1 |
| 10:00 - 10:15 | Anna Machková -Comparing the biocidal properties of non-thermal plasma sources with controlled treatment parameters by reference protocol O2 D4A1 | 10:00 - 10:15 |
| 10:15 - 10:30 | Suresh Joshi -Plasma-Based Solution for Bacterial Inactivation: A Novel Approach II D4A1 | Martin Weiss -Cell type-specific anti-adhesion properties of peritoneal cell treatment with plasma-activated media (PAM) O1 D4B1 |
| 10:30 - 10:45 | | Vikas Soni -In-Vitro and In-Vivo Treatment of Cancer Using Various Plasma Devices and Drugs O2 D4B1 |
| 10:45 - 11:00 | Min Xie -Growth phase, short-living RONS and acidity govern cold atmospheric plasma (CAP) antibacterial membrane activity in suspension O3 D4A1 | Utku Kürsat Özcan -Irrigation of Peritoneal Cavity with Cold Atmospheric Plasma Treated Solution Effectively Reduces Microbial Load in Rat Acute Peritonitis Model O3 D4B1 |
| 11:00 - 11:15 | Courti Ibtissam -Impact of Bacterial Growth Phase on Liquid Decontamination Efficiency Using Atmospheric Pressure Plasma. O4 D4A1 | Kristian Wende -Relevance and limitation of plasma-driven protein oxidation in model and clinical application O4 D4B1 |
| 11:15 - 11:30 | Soukaina Barroug -Optimizing Plasma Functionalized Liquids for Control of Microbiological Risks Associated with Poultry Processing Chain O5 D4A1 | Torsten Gerling -Development, qualification and preliminary certification of a dental plasma device for a multicenter clinical study O5 D4B1 |
| 11:30 - 11:45 | Maxime Sahun -Rapid viral inactivation by cold atmospheric plasma offering great opportunities to decontaminate materials in hospital environments O6 D4A1 | Hiroaki Kajiyama -The aqueous plasma therapy for ovarian cancer ~Aiming for controlling disseminated peritoneal metastasis~ I2 D4B1 |
| 11:45 - 12:00 | Florin Bileca -The influence of chemical and physical parameters on plasma driven antibiotic degradation O7 D4A1 | |
| 12:00 - 12:15 | Lunch break (1h 30min) | 12:00 - 12:15 |
| 12:15 - 12:30 | | 12:15 - 12:30 |
| 12:30 - 12:45 | | 12:30 - 12:45 |
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| 13:00 - 13:15 | | 13:00 - 13:15 |
| 13:15 - 13:30 | | 13:15 - 13:30 |
| 13:30 - 13:45 | | Room Mission 1 Session Chair: Prof. Thomas von Woedtke |
| 13:45 - 14:00 | Steffen Emmert -Clinical Plasma Medicine: From Routine Application in Wound Healing to New Applications in Dermatology II D4A2 | Juliette Harley -Plasma activated liquid synergistically enhances response to radiation for improved cancer therapy O1 D4B2 |
| | | Zahra Nasri -The impact of oxidative stress on the barrier properties of lipid bilayers O2 D4B2 |
| 14:00 - 14:15 | Theresa Freeman -Developing Plasma based Therapies to combat Orthopaedic Infection - Update from R01 Tripartite (USA, NL,ROD) O1 D4A2 | Kyriakos Sklias -The role of short- and long-lived reactive species on the anti-cancer action of plasma-activated liquids: in-vitro and in-vivo applications II D4B2 |
| 14:15 - 14:30 | Lucie Blahova -Role of Glycocalyx in Cell Adhesion on Plasma Polymer Coated Surfaces O2 D4A2 | Vladimir Scholtz-The non-thermal plasma and its potential utilization in the treatment of onychomycosis O3 D4B2 |
| 14:30 - 14:45 | Eric Robert -Boost of cosmetic active ingredients penetration triggered and controlled by the delivery of non-thermal kHz plasma jet on human skin explants O3 D4A2 | |
| 14:45 - 15:00 | Ivana Sremacki -Potentials of a plasma-aerosol system coupled with drug introduction for wound healing: in vitro study O4 D4A2 | Blaise Océane -Cold Atmospheric Plasma Promotes Killing of Staphylococcus aureus by Macrophages. O4 D4B2 |
| 15:00 - 15:15 | Theresa Freeman -Cold Plasma Treatment Reduces Osteolytic Bone Resorption O5 D4A2 | Xiaoliang Yao -Cold Plasma Discharge Tube Enhances Anti-tumoral Efficacy of Temozolomide O5 D4B2 |
| 15:15 - 15:30 | Refreshment break (45 min) | 15:15 - 15:30 |
| 15:30 - 15:45 | | 15:30 - 15:45 |
| 15:45 - 16:00 | | 15:45 - 16:00 |
| 16:00 - 16:15 | Room Mission 1 Session Chair: Prof. Kristian Wende | Room Mission 2 Session Chair: Prof. Julia Bandow |
| | Kristina Lachmann -Investigations on DBD treated PVC foils to reduce the migration of plasticizers in blood bags O1 D4A3 | María Herrera Quesada -Combining EPR, Photometric Assays, Mass Spectrometry, and FTIR to explicate possible chemical pathways influenced by the COST-jet with an NO-rich gas admixture in a simple biological model O1 D4B3 |
| 16:15 - 16:30 | Alexander Robson -Plasma Polymerised Coatings to Prevent COVID-19 Fomite Transmission O2 D4A3 | Olivier van Rooij -Electron Density Measurements using Stark Broadening of Spectral Hydrogen Lines in Plasma-Activated-Water O2 D4B3 |
| 16:30 - 16:45 | Anjar Anggraini Harumngtyas -Polyether ether ketone (PEEK) functionalization by SrTiO3 for lumbar interbody fusion cage O3 D4A3 | Steffen Schüttler -Hydrogen peroxide production in water treated by a capillary plasma jet O3 D4B3 |
| 16:45 - 17:00 | Bernard Nisol -Organic virucidal coatings based on an atmospheric plasma deposition process O4 D4A3 | Camelia Miron -Physicochemical Investigation of Plasma Activated Liquids Organically Engineered by Cold Atmospheric Pressure Plasma for Cancer Treatment O4 D4B3 |
| 17:00 - 17:15 | Sohail Zaidi -Bacterial Inactivation by using a DBD Plasma Sheet Generator O5 D4A3 | Ahmad Hamdan -Streamer propagation at water surface: influence of gap distance and quantification of injected charge O5 D4B3 |
| 17:15 - 17:30 | | 17:15 - 17:30 |
| 17:30 - 17:45 | | 17:30 - 17:45 |
| 17:45 - 19:00 | | 17:45 - 19:00 |
| 19:00 | Gala Dinner Plasma Medicine Award and the Early Career Award in Plasma Medicine Ceremonies | |

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| Fundamentals of atmospheric plasmas |
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| Plasma-cell and plasma-tissue interactions - biological and biochemical reactions |
| Plasma-surface interactions/modifications for biomedical applications |
| Regulatory issues in plasma medicine |

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| 08:00 - 08:15 | | 08:00 - 08:15 |
| 08:15 - 08:30 | | 08:15 - 08:30 |
| 08:30 - 08:45 | Julia Bandow -Plasma-driven biocatalysis: challenges and opportunities P5 Room Progress Session Chair: Prof. Vandana Miller | |
| 08:45 - 09:00 | | |
| 09:00 - 09:15 | | |
| 09:15 - 09:30 | Refreshment break (30 min) | |
| 09:30 - 09:45 | | 09:30 - 09:45 |
| | Room Mission 1 Session Chair: Prof. Evelien Smits | Room Mission 2 Session Chair: Prof. Katherina Stapelmann |
| 09:45 - 10:00 | Lea Miebach -Conductivity augments ROS and RNS delivery and tumor toxicity of an argon plasma jet I1 D5A | Sarah-Johanna Klose -Formation of H2O2 in a cold atmospheric pressure plasma jet O1 D5B |
| 10:00 -10:15 | | Pablo Escot-Bocanegra -Cold Plasma in Zero Gravity and Reduced Pressure Conditions for Disinfection and Decontamination in Spacecraft and Aerospace Environments O2 D5B |
| 10:15 - 10:30 | Bruce Locke -Development of a Formic Acid Degradation Cell for Coupling of Gas-Liquid Plasma Chemical Reactors with Enhanced Bioreactors O1 D5A | Andrew Gibson -Control of plasma-chemical processes in atmospheric pressure plasmas for life science-related applications II D5B |
| 10:30 - 10:45 | Hanne Verswyvel -Elucidating the Immunogenicity of Non-Thermal Plasma Combination Therapy in a 3D Tumour Model of Head and Neck Squamous Cell Carcinoma O2 D5A | |
| 10:45 - 11:00 | Ruben Verloy -Triple co-culture spheroid model of pancreatic cancer for plasma research O3 D5A | Masafumi Ito -Growth Enhancement of Fibroblast Cells Using Quantitatively Controlled Nitric-oxide Radicals O3 D5B |
| 11:00 - 11:15 | | 11:00 - 11:15 |
| 11:15 - 11:30 | General assembly, awards ceremony + lectures and announcement of ICPM10 Room Progress Session Chair: Prof. Gerrit Kroesen; Prof. Matteo Gherardi, Prof. Ana Sobota, Prof. Romolo Laurita, Prof. Eun-Ha Choi | |
| 11:30 -11:45 | | |
| 11:45 -12:00 | | |
| 12:00 -12:15 | | |
| 12:15 -12:30 | | 12:15 -12:30 |

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| <i>Legend</i> |
| Plenary |
| Fundamentals of atmospheric plasmas |
| Plasma agricultural applications |
| Plasma for pharmaceutical applications, biochemical and biomolecular engineering |
| Plasma liquid interactions, plasma activated liquids |
| Plasma medical applications - clinical and animal studies |
| Plasma sources for biomedical applications |
| Plasma-based decontamination and sterilization |
| Plasma-cell and plasma-tissue interactions - biological and biochemical reactions |
| Plasma-surface interactions/modifications for biomedical applications |
| Regulatory issues in plasma medicine |

Poster session MONDAY 27-6-2022

- P1 1 Anthony Cordero: Characterization of non-thermal plasma jet kINPen® IND by Optical Emission Spectroscopy
- P1 2 Felix Matthias Fuchs: In vitro analysis of the efficacy of an atmospheric dielectric barrier discharge on hidradenitis suppurativa (acne inversa) associated bacteria
- P1 3 Maria C. Garcia: Optical Emission Spectroscopy Diagnosis of Helium Cold Atmospheric Plasmas
- P1 4 Niklas Nawrath: Influence of nitrogen, oxygen and water admixture on chemical modifications of cysteine by a dielectric barrier discharge
- P1 5 Luise Semmler: Assessment of How Modulation of Treatment Time Effects the Outcome of Cold Plasma Treatment in Different Cell Types and Cell States
- P1 6 Hiroshi Hashizume: Effectiveness of Plasma Treatment for Various Rice Cultivation
- P1 7 Yoshihisa Ikeda: Mechanism of molecular introduction into plant callus by plasma treatment
- P1 8 Cristina Muja: Low pressure plasma as a tool in crop molds and mycotoxins management
- P1 9 Zuzana Okruhlicová: Effects of plasma activated water on germination and growth of maize
- P1 10 Jinjie He: Plasma-activated Water Disinfection of Escherichia coli O157:H7 on Spinach, Kale and Lettuce
- P1 11 Anna Machková: Effect of cold plasma treatment on germination and early growth of leguminous plants
- P1 12 Nina Recek: Improved germination and yield of corn seeds after treatment with low-pressure oxygen plasma in an industrial reactor
- P1 13 Conner Robinson: Harnessing Atmospheric Low Temperature Plasmas Reactive Oxygen-Nitrogen Species for On-Demand Fertilizer Production
- P1 14 Mohsen Ahmadi: Potential of Cold Physical Plasma in Prodrug Activation
- P1 15 Daniela Boehm: The role of bacterial growth phase in determining the susceptibility to inactivation by plasma activated liquids
- P1 16 Tim Dirks: Immobilization protects enzymes from inactivation in plasma-driven biocatalysis
- P1 17 Mostafa Elsayed Hassan: Transport of Gaseous Species H₂O₂, HNO₂, NO₂, NO, and O₃ into Water Microdroplets
- P1 18 Kinga Kutasi: RONS enriched alginate hydrosols and hydrogels
- P1 19 Beatriz Pinheiro Lopes: Combined effect of Plasma Activated Water and Topotecan on cell growth and cell survival in glioblastoma cells
- P1 20 Laura Mc Clenaghan: Investigating the antimicrobial efficacy of plasma activated water against food pathogens and spoilage organisms
- P1 21 amaury Rouillard: Continuously Plasma Treated Water Spray for Medical and Cosmetic Applications
- P1 22 Calum Thomas Ryan: Particle Image Velocimetry for Plasma-Fluid Interactions
- P1 23 Orla Nic Shiurdain: Optimising Plasma functionalised liquids for the prevention and control of device associated and invasive infections
- P1 24 Fernando Alba-Elías: Long-term antimicrobial effect of plasma activated water generated with two different plasma-water interactions
- P1 25 Kyriakos Sklias: The role of short- and long-lived reactive species on the anti-cancer action of plasma-activated liquids: in-vitro and in-vivo applications
- P1 26 Ross Fladeland: Exposure to helium gas discharge tube results in blood brain barrier disruption
- P1 27 Kenjiro Onishi: A simple method for establishing cells with higher safety for gene therapy by using surface discharge.
- P1 28 Thoralf Bernhardt: Evaluation of Methods for Standardized Testing of Cytotoxicity and Genotoxicity of Cold Plasma Sources for Medical Use
- P1 29 Ramona Clemen: Defective wound healing and antimicrobial drug resistance – a target for gas plasma therapy?
- P1 30 Mestre Eloïse: Electrical characterization of an argon/CO₂ and helium/CO₂ plasma jet for wound healing
- P1 31 Vladimir Scholtz: Portable Plasma Sources for Biomedical Applications Based on Cometary and Point-to-Ring Corona Discharges
- P1 32 Mahreen Khan: Use of low-frequency pulse modulation for control of RF atmospheric pressure helium plasma jet

Poster session TUESDAY 28-6-2022

- P2 1 Rita Agus: Investigation of plasma activated water inactivation mechanisms of Escherichia coli through single-cell microfluidic experiments
- P2 2 Filippo Capelli: Plasma assisted decontamination of food packaging material
- P2 3 Utku Kürşat Ercan: Utilization of a Machine Learning Method for the Prediction of Antimicrobial Activity of Cold Atmospheric Plasma-Activated Liquids
- P2 4 Karol Hensel: Effects of cold plasma generated by transient spark discharge on proteins and amino acids in water solutions
- P2 5 Carmen Kirner: Viability of commercially available non-thermal atmospheric pressure plasma (APP) sources for decontamination of polypropylene surfaces
- P2 6 Emilio Martines: On the Occurrence of Resistance to Helium Plasma Treatment in Bacteria
- P2 7 Martina Modic: Investigating the Mechanisms of Plasma Activated Water Deactivation of Medically Important Biofilms
- P2 8 Erika Muratov: Analysis of biofilm inactivation mechanisms under cold plasma treatment
- P2 9 Inna Orel: Gram-negative and gram-positive bacteria disinfection by cold atmospheric plasma using an in vitro agar plate model of a chronic wound
- P2 10 Jovana Petkovic: Are bubbles efficient in the production of plasma-treated water?
- P2 11 Stephan Reuter: Plasma Tailoring for Pathogen Inactivation
- P2 12 Roopesh Mohandas Syamaladevi: Inactivation mechanisms of Listeria monocytogenes during in-package atmospheric cold plasma treatment and post-treatment
- P2 13 Kristína Trebulová: Impact of cold plasma treatment on the yeast candida glabrata
- P2 14 Darina Truchlá: Cold air plasma of streamer corona discharge for decontamination and wound healing
- P2 15 Behnaz Bagheri: Molecular dynamics study of effect of oxidation induced by plasma on properties of lipid bilayers
- P2 16 Fred Krebs: Immunomodulatory effects of non-thermal plasma in a model of latent HIV-1 infection: Implications for an immunotherapy effective against HIV
- P2 17 Jaroslav Kristof: Rat Intestine Cells Absorption of Fluorescein Isothiocyanate–Dextran Induced by Microplasma Treatment
- P2 18 Angela Maldonado: Cold atmospheric plasma does not affect stellate cells phenotype in pancreatic tissues in ovo
- P2 19 Aurélie Marches: Cold atmospheric helium plasma activates migration but not proliferation of human keratinocytes
- P2 20 Jose Moreno Martinez: Application of cytogenetic marker for the quantification of radio-induced damage produced by a pulsed x-ray plasma focus devices
- P2 21 Aled Morton: Cold atmospheric plasma for the treatment of intracellularly infected osteoblasts and osteoclasts
- P2 22 Kae Nakamura: Immunostimulatory Effect of Plasma-Activated Solutions in the Intraperitoneal Environment of Ovarian Cancer
- P2 23 Slavomír Pásztor: Chemical Analysis of Four Types of Plasma Activated Liquid Stored at Different Temperatures and Neutrophils Treated by PAL
- P2 24 Yokoyama Ryo: Study on Control of Macromolecular Drug Transfer to Epithelial Cells Using Non-Invasive Microplasma
- P2 25 Ilva Noa Stellingwerf: Cancer cell metabolism and cold atmospheric plasma treatment
- P2 26 Shu Xiao: Nanosecond Pulses Delivered by Plasma Streamer Channels Modulate Cell Response in Space (in-vitro Study)
- P2 27 Mohamed Boudifa: On the effect of atmospheric plasma jet on 3D printing of hydrogels for tissue engineering
- P2 28 Amy Crisp: Polyethylene Oxide Coatings Towards the Prevention of Biofilm Development
- P2 29 Chloe Frewen: Deposition of an anti-adherent coating onto implant surfaces using Low Temperature Plasma.
- P2 30 Laurine Martocq: Allylamine Plasma Polymer Coatings for Biomedical Applications
- P2 31 Aysegul Uygun Oksuz: POLYMER BASED SURFACE MODIFICATION USING CAP
- P2 32 Alessio Quadrelli: Surface-regulated growth of TEMPO plasma polymers
- P2 33 Nikola Skoro: Cold Atmospheric Plasma treatment of dentin substrate for adhesive dental procedures
- P2 34 Lenka Zajíčková: Copper-coated Polymer Nanofibers for Antibacterial and Antiviral Applications
- P2 35 Konstantinos Papangelis: Characterisation of a Cold Atmospheric Pressure Plasma Torch for Medical Applications: Demonstration of Device Safety