



# Plasma Science & Entrepreneurship 2019

2-day workshop, 14 & 15 November 2019, LIST, Luxembourg



10:30-10:50 November 14<sup>th</sup>  
Morning Track "Salle Europe A"

**Tuning the chemistry of air plasma-water interaction and  
biomedical/agriculture applications of plasma activated water**

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Control and tunability of the chemical composition and biomedical effects of plasma activated water/media for emerging applications in biomedicine and agriculture is possible by controlling the discharge regime, deposited power, plasma-liquid interface area, and gas flow conditions. We compare gaseous and aqueous RONS of several cold air plasma sources: streamer corona, transient spark and glow discharge, interacting with water in open and closed reactors with water electrospray or in batch treatment of water/cell cultivation media. Examples of successful applications of such plasma activated water/media for disinfection, urinary tract infection treatment, melanoma cancer cell viability reduction, or plant growth promotion will be shown.

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