

## Posters for poster session 1

- 1 Sayadmahaleh Adhami **Toluene abatement by use of non-thermal plasma and metal-free catalyst**
- 2 Matthias Albrechts **Kinetic modeling of oxygen plasma at low and atmospheric pressure**
- 3 Margherita Altin **The energy cost of N<sub>2</sub> dissociation in a microwave discharge: combining modelling and experiments**
- 4 Edmond Baratte **Experimental and numerical study of the fundamental processes in a CO<sub>2</sub>-CH<sub>4</sub> RF plasmas**
- 5 Jairo Barauna **Plasma Catalysis for CO<sub>2</sub> reduction using liquid water as hydrogen source**
- 6 Yuri Barsukov **Multiscale modeling of boron nitride nanotube synthesis and carbon nanotube synthesis and hydrogen production from natural gas pyrolysis**
- 7 Jean-Paul Booth **Probing the kinetics of oxygen atoms in oxygen-containing discharges by cavity ringdown spectroscopy: potential applications to CO<sub>2</sub> conversion and plasma-assisted combustion**
- 8 Yuxiang Cai **Plasma-catalytic CO<sub>2</sub> hydrogenation over Fe-Cu-based perovskite catalysts**
- 9 Guoxing Chen **A novel plasma-assisted hollow fiber membrane concept for efficiently separating oxygen from CO in a CO<sub>2</sub> plasma**
- 10 Richard Cimerman **Nonthermal plasma regeneration of deactivated catalysts used for plasma-catalytic VOC/PAH removal**

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| 11 | Panagiotis Dimitrakellis          | <b>Sustainable chemical synthesis through plasma-liquid interactions in a helical DBD microreactor</b>  |
| 12 | Martin Dröbiger<br>Christian Koch | <b>CO<sub>2</sub> valorization via plasma catalysis</b>   |
| 13 | Albert Engstfeld                  | <b>Restructuring of catalyst materials by high voltage electrolysis</b>   |
| 14 | Lukas Forschner                   | <b>Electric fields during high voltage electrolysis</b>   |
| 15 | Carolina Garcia Soto              | <b>DC glow discharge - Fluidized bed reactor for CO<sub>2</sub> recycling</b>   |
| 16 | Yury Gorbanev                     | <b>Nitrogen fixation into NO<sub>x</sub> by plasma: Pulsed spark plasma versus arc plasma</b>   |
| 56 | Vasco Guerra                      | <b>Volume and surface kinetics in CO<sub>2</sub> plasmas</b>  |
| 17 | Karin Hansen                      | <b>Ignition and characterization of non-thermal, low-pressure plasmas in highly porous and lightweight aeromaterials</b>  |
| 18 | Mery Hernandez                    | <b>Analysis of reactive species during plasma-water interaction for H<sub>2</sub>O<sub>2</sub> formation using nanosecond pulsed microwaves</b>   |
| 19 | Rezvan Hosseini Rad               | <b>High pressure coaxial dielectric barrier discharge for CO<sub>2</sub> splitting by combined action of packed bed</b>   |
| 20 | Muzammil Iqbal                    | <b>Investigation of non-thermal atmospheric pressure plasma-based nitrogen fixation using water in nitrogen arc discharge for sustainable and environmentally-friendly ammonia production</b> |

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- 21 Vít Jirásek Nitrogen fixation in sub-micrometer-size water aerosol using micro-hollow surface DBD reactor
- 22 Chanmi Jung Plasma-induced toluene conversion into acetylene with high selectivity
- 23 Christopher Kondratowicz Kinetic interaction between plasma and catalyst in plasma-assisted ammonia synthesis
- 24 Saeed Kooshki Plasma-Activated Water (PAW) as a sustainable technology for wastewater treatment and agricultural development
- 25 Konstantinos Kourtzanidis Numerical modeling of atmospheric pressure plasma discharge dynamics
- 26 Victor Lafaurie Nanosecond surface dielectric barrier discharge: Experimental investigation of streamer to filament transition in high-pressure gases
- 27 Shangkun Li One-step steam reforming of methane to methanol by plasma catalysis: experiments and DFT modelling
- 28 Stein Maerivoet Effect of O<sub>2</sub> on the dry reforming of methane in an atmospheric pressure glow discharge
- 29 Jean Maillard CO<sub>2</sub> conversion by NRP discharges: spotlight on two parallel CO production mechanisms