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**Development of atmospheric pressure large area plasma jet for sterilisation and investigation of molecule and plasma interaction** KRISTINA ZERBE, MARCUS IBERLER, JOACHIM JACOBY, CHRISTOPHER WAGNER, IAP, Goethe-University — The intention of the project is the development and improvement of an atmospheric plasma jet based on various discharge forms (e.g. DBD, RF, micro-array) for sterilisation of biomedical equipment and investigation of biomolecules under the influence of plasma stress. The major objective is to design a plasma jet with a large area and an extended length. Due to the success on small scale plasma sterilisation the request of large area plasma has increased. Many applications of chemical disinfection in environmental and medical cleaning could thereby be complemented. Subsequently, the interaction between plasma and biomolecules should be investigated to improve plasma strerilisation. Special interest will be on non equilibrium plasma electrons affecting the chemical bindings of organic molecules.

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