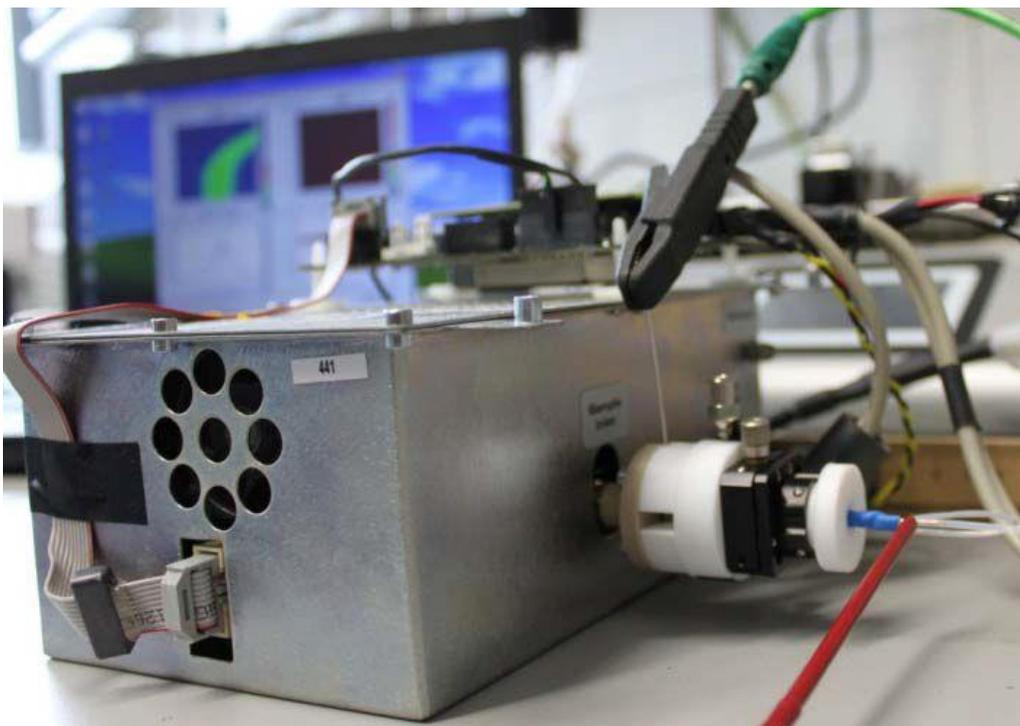


Ion Mobility Spectrometry

Ion mobility spectrometry, originally used to detect gaseous pollutants of organic contaminants e.g. chemical warfare agents, explosives and illegal drugs in air is a promising technique combined with a suitable sample introduction system also for analyzing aqueous samples. The interest in simple, inexpensive and fast techniques, which can be used for online monitoring, has grown also in terms of water analysis in recent years. Although IMS has been conceived for monitoring volatile analytes, IMS equipment rarely comes with a specific inlet system to produce gaseous compounds. An efficient sample-introduction system is therefore an essential supplement to IMS in order to open new fields of applications. Our research interests are the development of sample introduction systems coupled to ion mobility spectrometry (IMS, DMS, FAIMS) for the robust on-site screening analysis of organic contaminants in water and the development of new coupling techniques for selectivity and sensitivity enhancement within ion mobility spectrometric techniques (AiF-ZIM, BMBF, EU funding).

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Overview research areas Ion Mobility Spectrometry for water analysis

