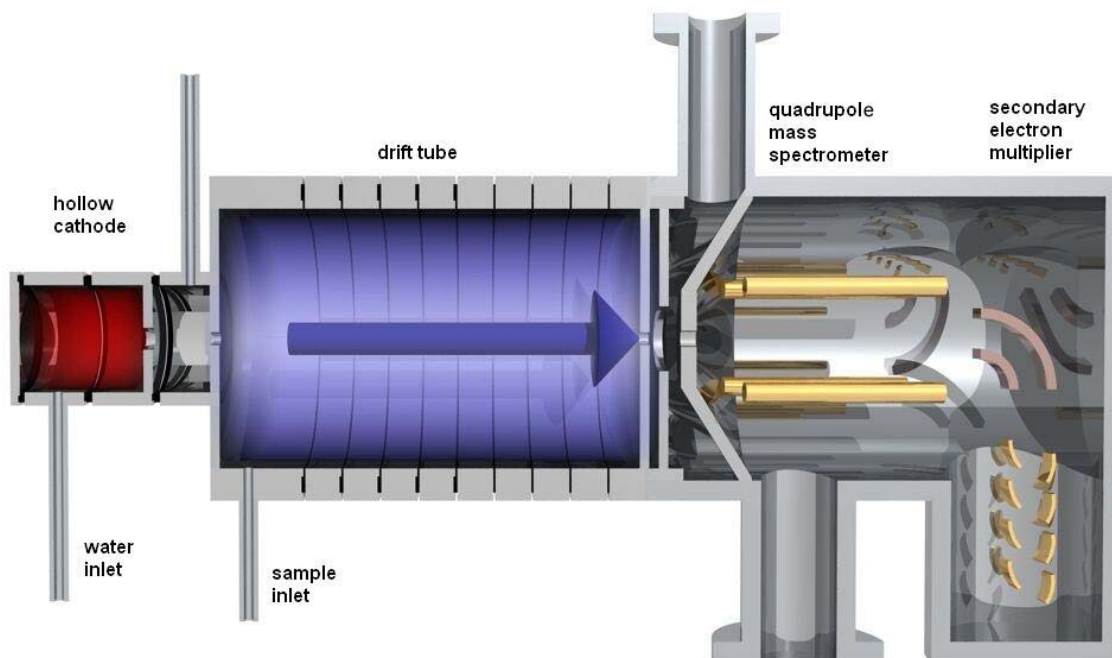


***Proton Transfer Reaction Mass Spectrometry – PTR MS -a technology for On Line measurement of VOCs in gases down to the low PPT***

***Bengt Sandgärde, Massanalyt Spectrometry Nordic AB, [www.msnordic.se](http://www.msnordic.se)***

**An Overview of the The Technology**



**Where are the advantages of the PTR-MS compared to other MS ?**

Low detection limit

Proton transfer rates are for all compounds in the same range (if the reaction is exotherm or Ligand switching)!

It is possible to measure absolute concentration if the reaction rateconstant is known because of the well defined conditions in the reaction chamber

Soft ionisation compared to electron impact or charge transfer reactions!

**Applications in the Environmental Analysis**

**Example of recent studies**