

# **SAPHIRA TORCH**

Absolutely essential for Si-detection in ICP-MS



### **NEW DESIGN**

With its long-time experience AHF has developed a **silicon-free** demountable torch and additional components for stringent sample introduction.

**Silicon** is a widespread element in nature and makes up more than 25 percent of the earth's crust. Therefore ppb-trace analysis of this element has ultimate requests in its instrumental set-up.

## **APPLICATIONS**

- :: Detection and analysis of Si in ultratrace by ICP-MS
- :: Process liquids in semiconductor industry
- :: Si-transfer to human tissue by implants
- :: Analysis of ultrapure metals and materials (samples with HF)



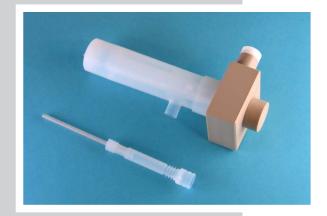
# **WORLD OF ULTRA PURE ICP**



### SET-UP OF SAPHIRA TORCH

The sapphire tubes are perfectly fixed by a holding made of a pure, inert and temperature resistant polymer

- :: Aerosol, plasma and gases contact no glass
- :: Easily adjustable to nearly all ICP-MS instruments
- :: Aerosol injectors made of sapphire or Pt
- :: Protection ring made of ceramics (for Pt-shield)



### TANDEM COMBINATION

For completion of the inert sapphire torch design AHF offers a tandem combination of a cyclonic and double pass spray chamber

- :: High precision and low RSD
- :: Ultra clean and HF resistent (PEEK/PFA)
- :: Best wash out conditions
- :: Fits to common injectors and nebulizers



### **EXCELLENT SELECTION**

AHF offers a stringent selection of Si-free sample introduction components to avoid any contamination or blanks:

- :: Nebulizers made of PFA, PTFE or PEEK
- :: Spray chambers made of PFA and PEEK
- :: O-ring free end caps and adaptors
- :: Gas fittings made of PFA and PEEK