

## CRACKER (Hydrogen Cracker)

### Objectives

Creating atomic hydrogen from molecular hydrogen. Home-made hydrogen cracker powered by the reuse of the ionization open head of a mass quadrupole spectrometer (Prisma® mass spectrometer).

### Technical parameters

- All materials compatible with UHV: Stainless Still, Aluminium, Alumina, Cooper.
- Maximum temperature for bake-out: 300°C.
- Flow gas controller by a leak UHV valve.
- Mounted flange on a DN40CF.
- With filament switch off, introduce gas inside the sample.
- Efficiency of cracking around 10%. Measure in real time by a mass quadrupole spectrometer with hydrogen tuning.
- Easy replacement of head of ionization and to exchange the filaments.
- Possibility of enlarge the length of capillary and electrodes easily.

