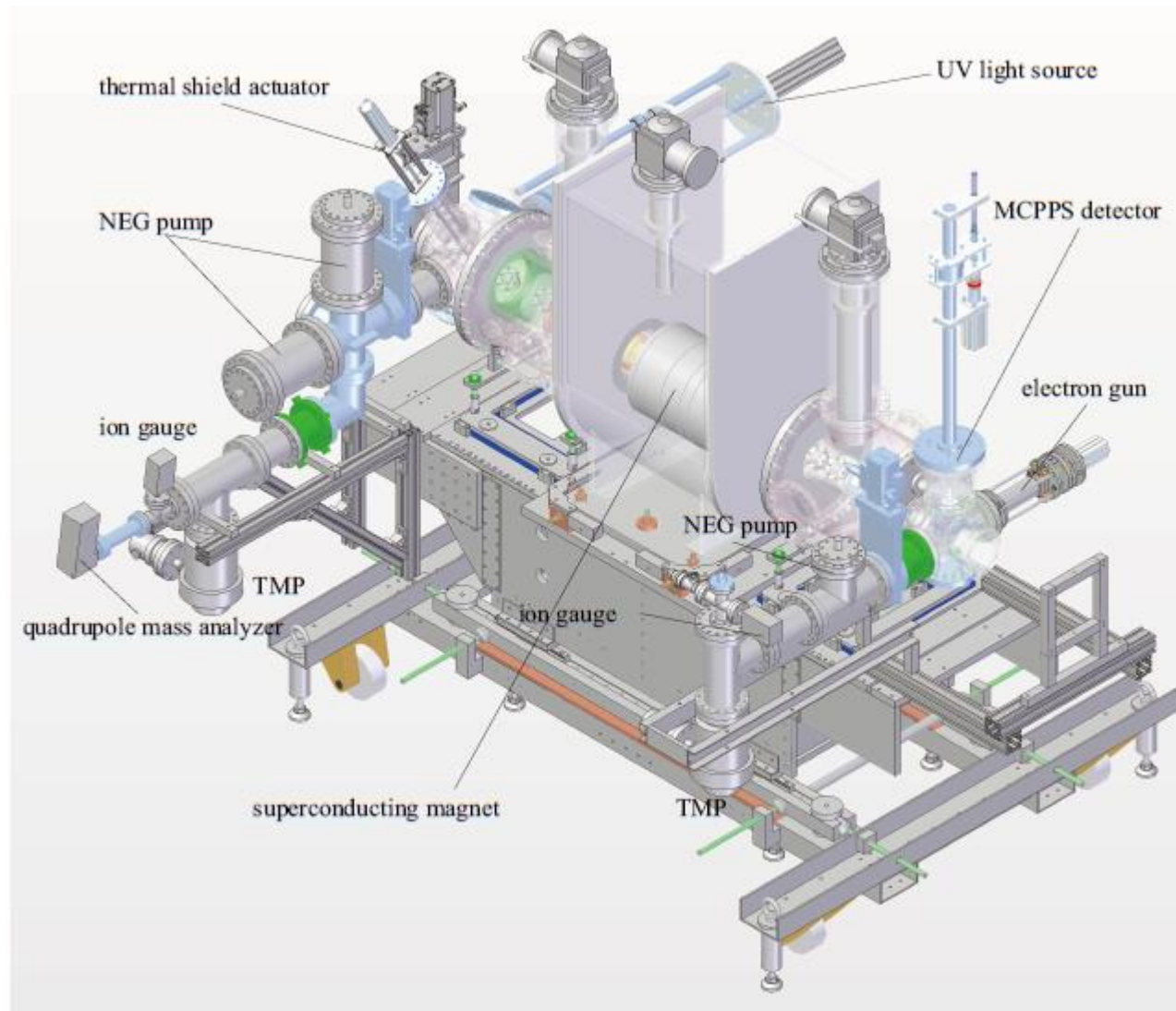


Review: Antihydrogen production in cusp trap-

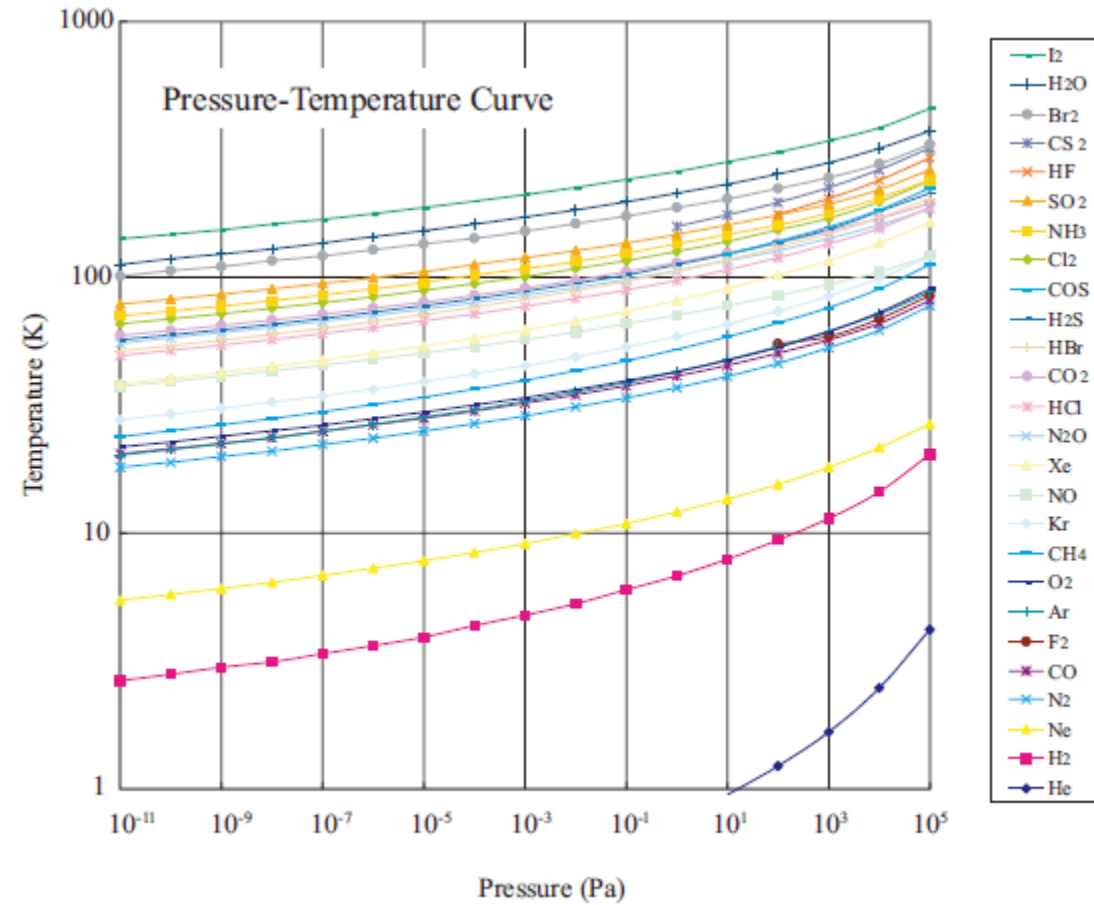
3.4.4 Vacuum system

Won Dong Hwan

Cusp trap



Relation between temperature and vapor pressure of various gases

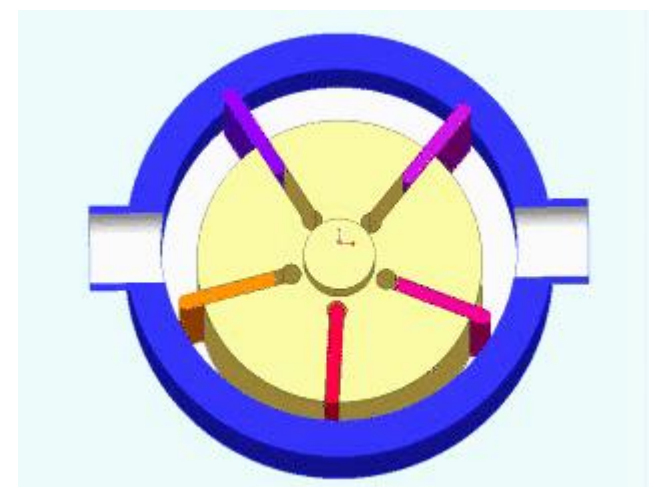




TMP(Turbo molecular pump)



NEG(Non-evaporable getter)



Rotary vane pump

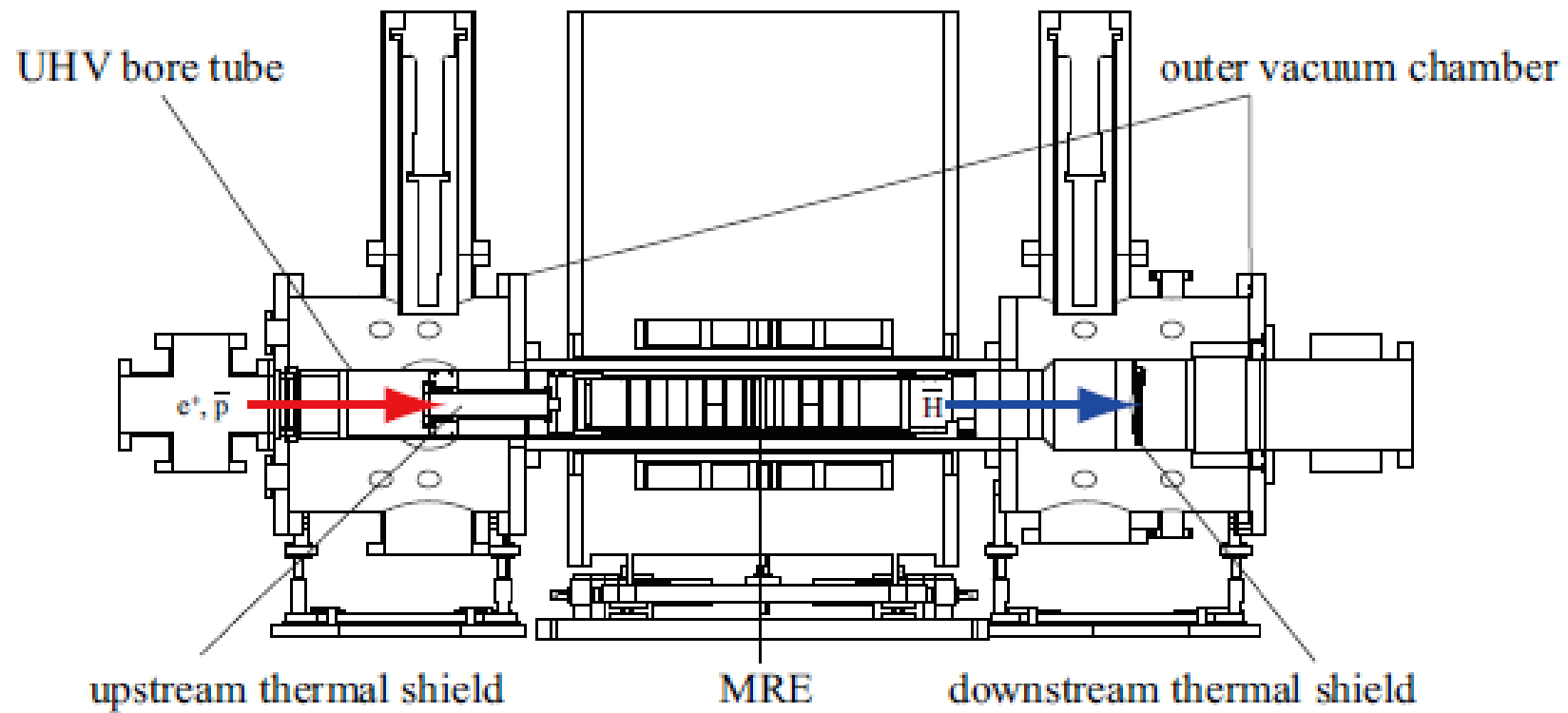
List of vacuum pumps and gauges

description	manufacturer	type
Main TMP	Shimadzu	TMP-303M
backing TMP	Varian	V-81
backing rotary vane pump	Edwards	RV5
NEG pump	Saes	CapaciTorr D400-2
Nude ion gauge	Yamamoto	VX-200B
full range gauge (B-A ion/Pirani)	Pfeiffer	PBR 260

Upstream side

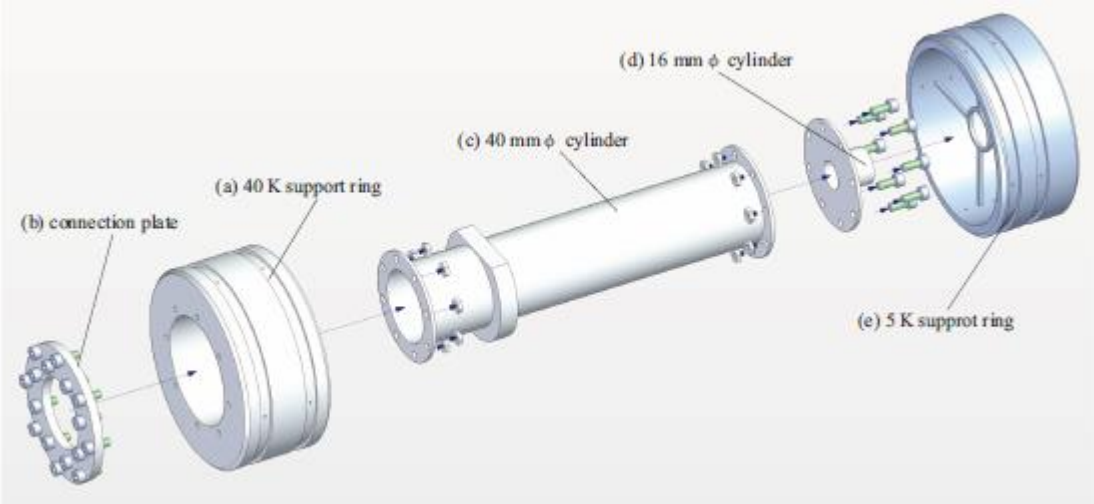
description	manufacturer	type
Main TMP	Shimadzu	TMP-303
backing TMP	Varian	V-81
backing rotary vane pump	Edwards	RV5
NEG pump \times 2	Saes	CapaciTorr B1300-2 MK5
quadrupole mass analyser	Anelva	M-066QG
full range gauge (B-A ion/Pirani)	Pfeiffer	PBR 260

Downstream side

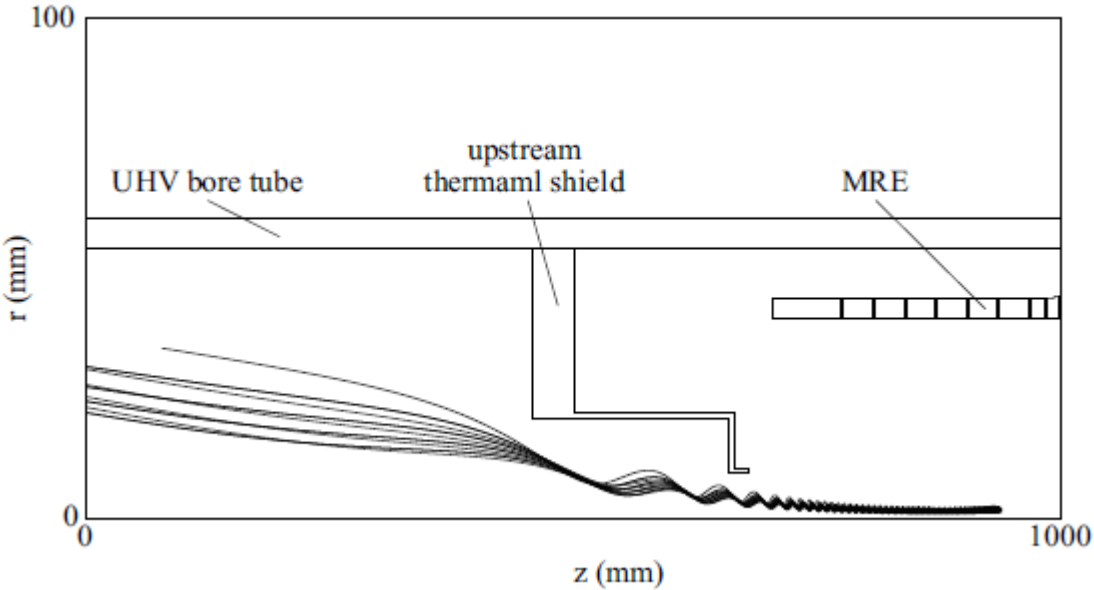
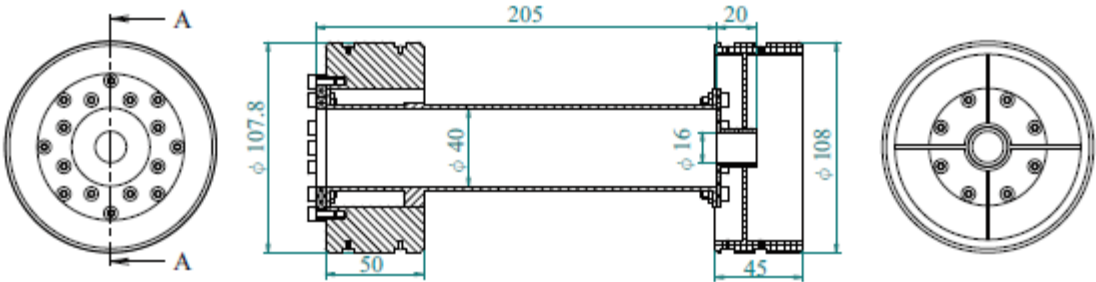


A cross sectional drawing of the cusp trap

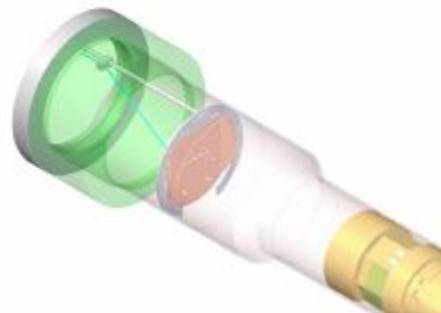
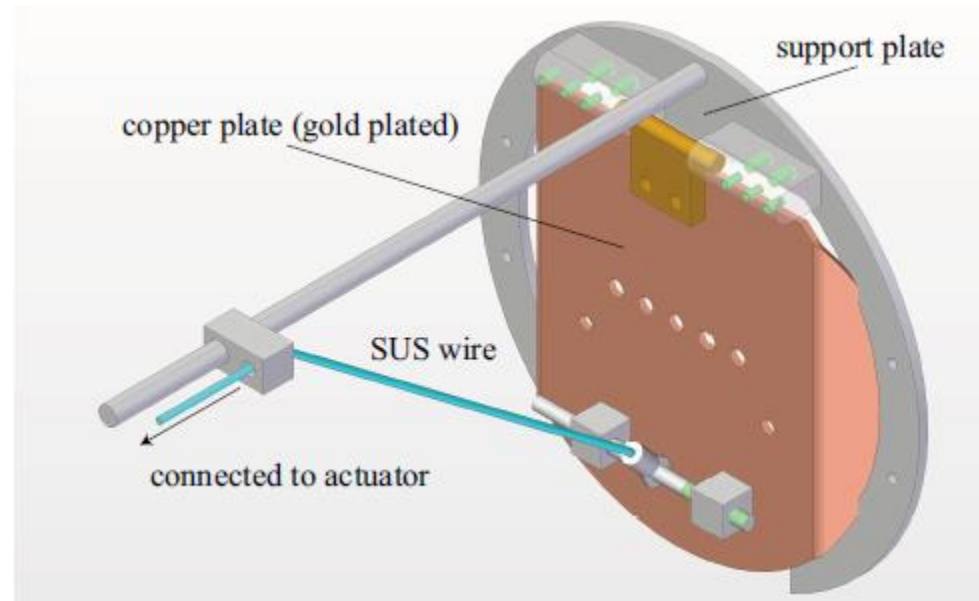
Upstream thermal shield



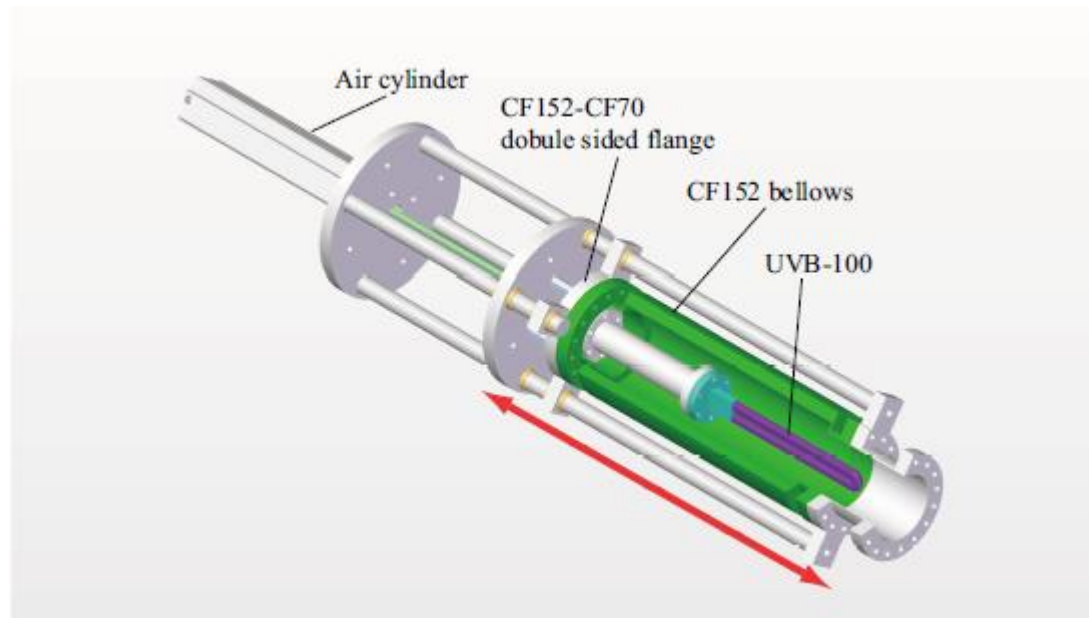
section	conductance (l/s)
(b) connection plate and (c) 40 mm cylinder	30
(d) 16 mm cylinder	11.7
(c)-(d)	25
total	6.3
without the upstream thermal shields	380



Downstream thermal shield



UV light source



RDB instruments, UVB-100

