What’s up in Helsinki?

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Facility

TAMIA
EGP-10-II
5MV Tandem
Efremov Institute
1981
Facility

Two MC-SNICS ion sources

Five beam lines

IBA methods (AMS, ERDA, RBS, PIXE, PIGE, NRA, DSA)
Facility

KIIA
D-9-05-015
500 kV
Implanter
High Voltage Engineering
2002
Facility

Positron beams
Home made at Aalto University (Helsinki University of Technology), moved to HAL in 2019
Facility

...& smaller equipment, involving
- 30 kV ion implanter
- 5 kV cluster deposition
- Sputtering systems
- Deposition systems
- SIMS, XPS, AES...
Activities at TAMIA tandem

2020: 1176 hours in 83 runs
Recent technical issues

Change of belt to thinner PU (14 mm)
- and back PU (31mm)

Cause: Breaking of the step-down transformer at charge exchanger caused an excess voltage that broke the belt
Recent technical issues

Major water leak at the switching magnet

Cause: corroded connection at the output of the water flow
Recent improvements

Gas AMS successfully tested and in use!

For 12 CO_2 samples

Labview automated
Recent improvements

Gas AMS successfully tested and in use!

Figure courtesy of K. Mizohata
The team

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