

Reasons for downtimes of the AWI-MICADAS



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October 2016: Delivery of the MICADAS 15



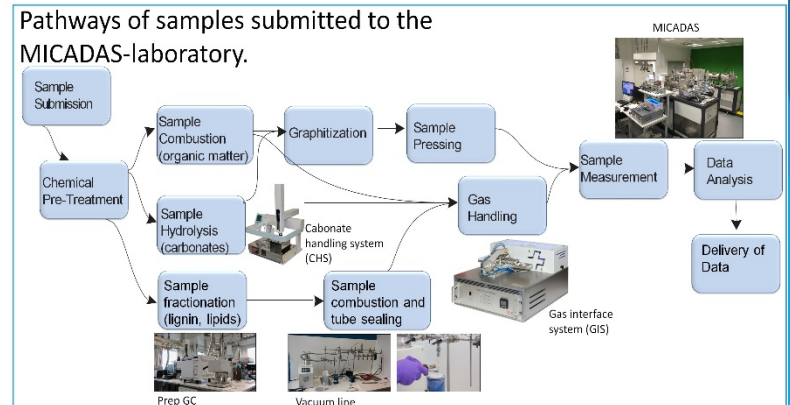
2016

2017

2018



Routine operation



Reasons for downtime:

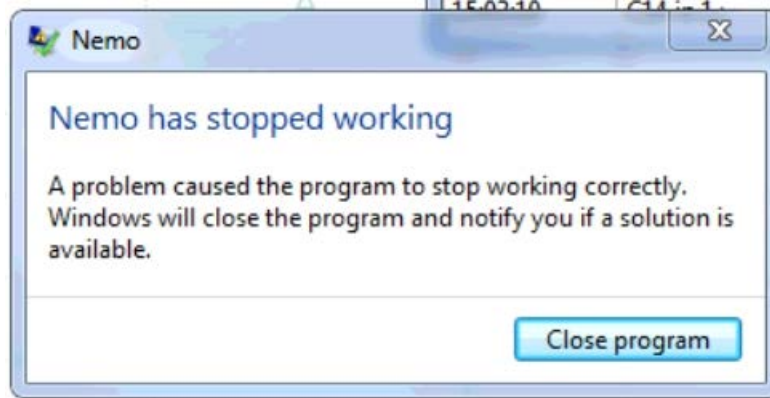
- Chiller failed
 - No more targets in stock
 - Mismanagement in the preparation of samples
 - Interruption of the power supply
-
- Leakage in helium supply
 - Pressure of compressed air was not sufficient to cool GIS and the ion source
-
- Crash of the software
 - Ion source
 - Sample changer
 - Capillary of GIS blocked



Entirely
our own
fault

Crash of software

Nemo, BATS



Squirrel while
GIS was used.



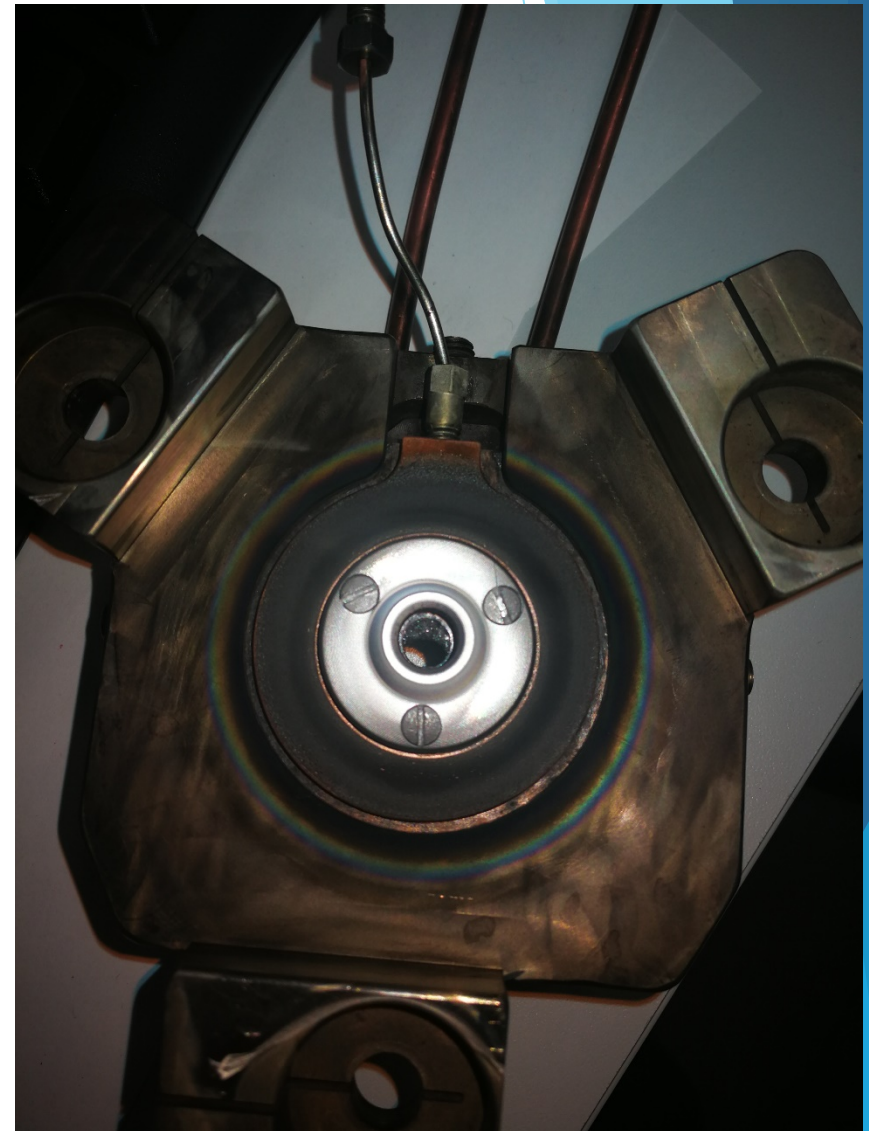
Ion source



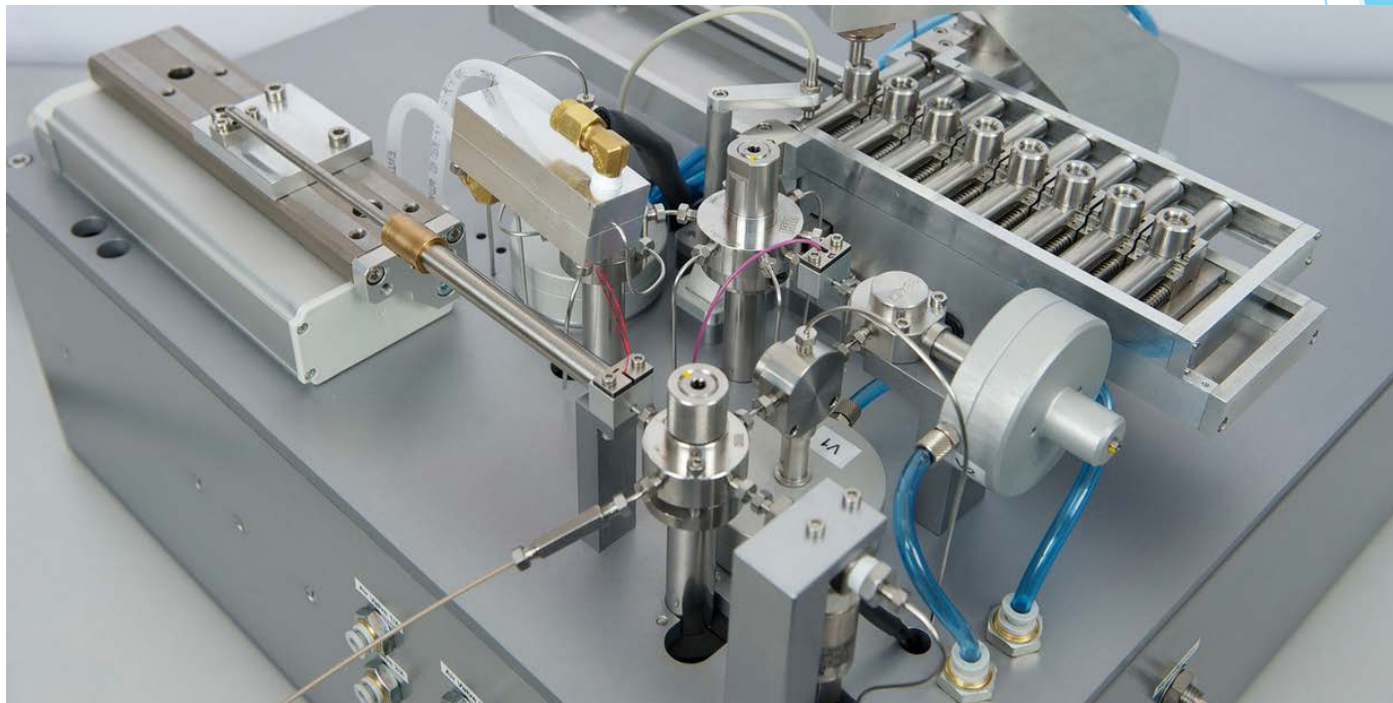
Ion source potentials connected



Capillary blocked in ion source

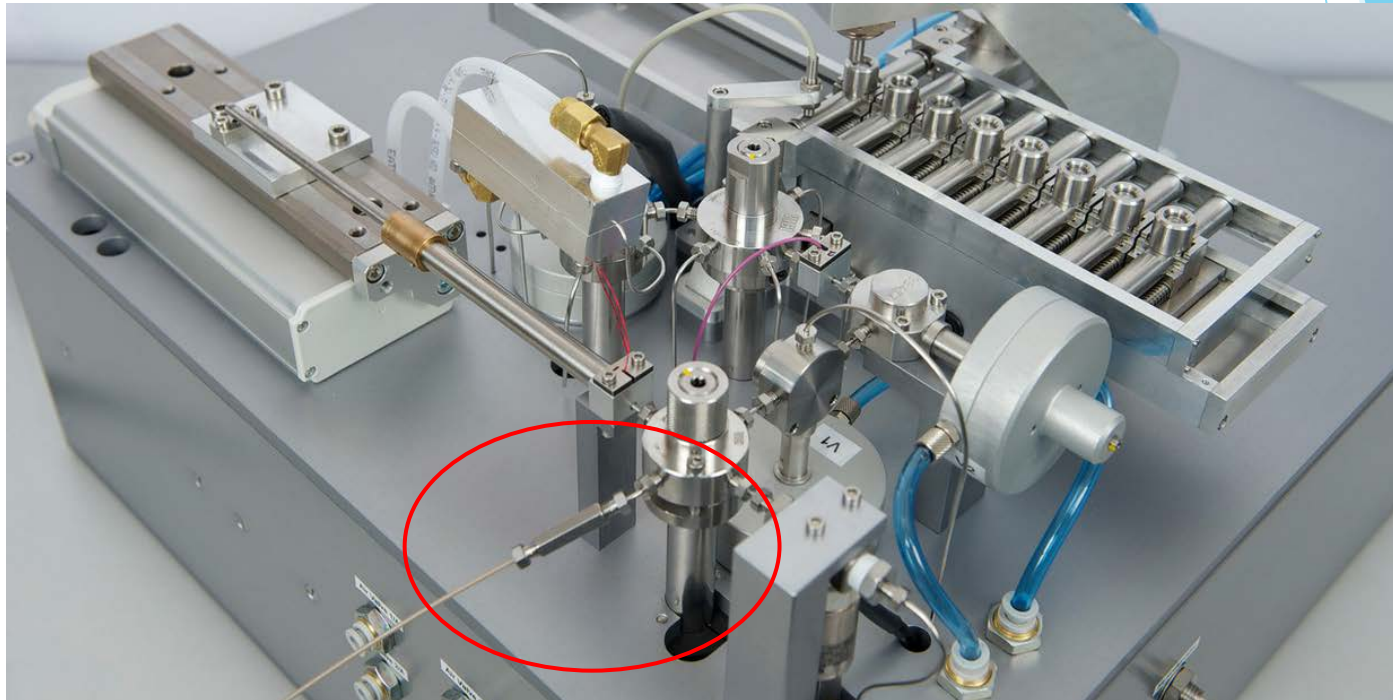


Capillary GIS to Micadas blocked



Picture by Ionplus

Capillary GIS to Micadas blocked



Picture by Ionplus

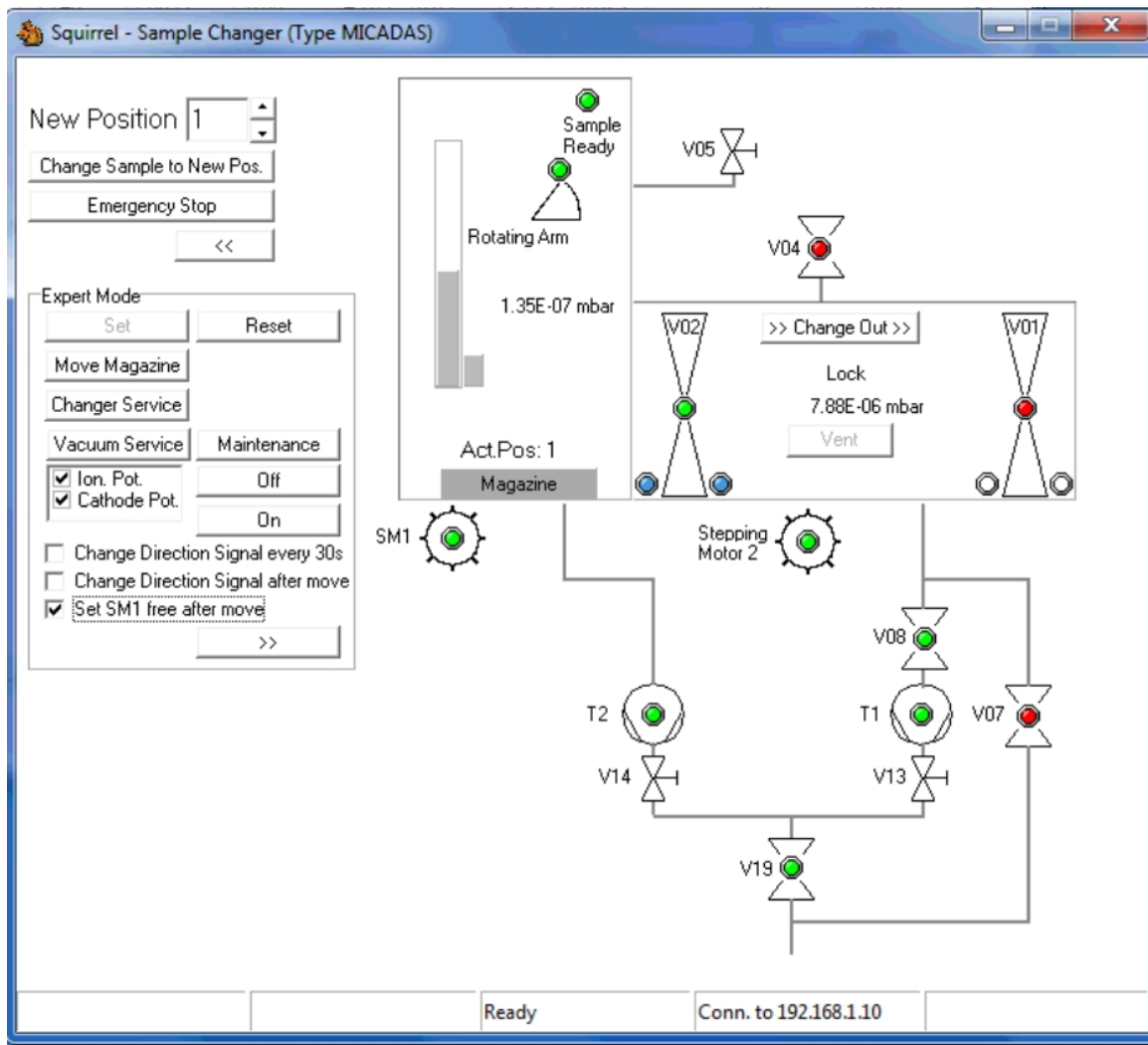
Capillary GIS to Micadas



Grease in the VICI valve

Sample changer stopped working:

- Not properly aligned
- Software crashed



Routine operation started January 2018

Most of the problems solved.

Maintenance of the source depending on the sample type.

Until now 865 measurements for scientific use.

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Thanks for your attention

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More from AWI MICADAS during the conference:

2A-05 First year of routine measurements at the AWI MICADAS ¹⁴C dating facility.

3A-09 Compound specific radiocarbon analysis at the AWI-MICADAS facility

A3 Climate studies: No evidence for 20th century acceleration in mobilization of fossil carbon from thawing permafrost in the Lena River catchment