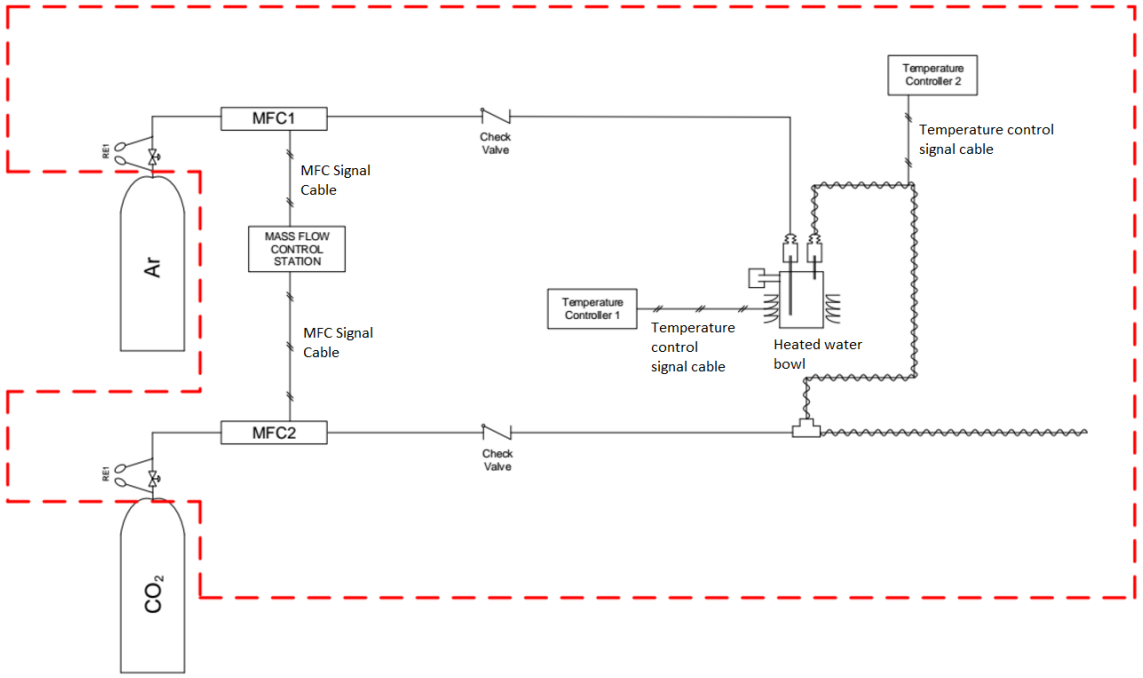
BURSA GAS LABORATORY

Yalçın Kalkan

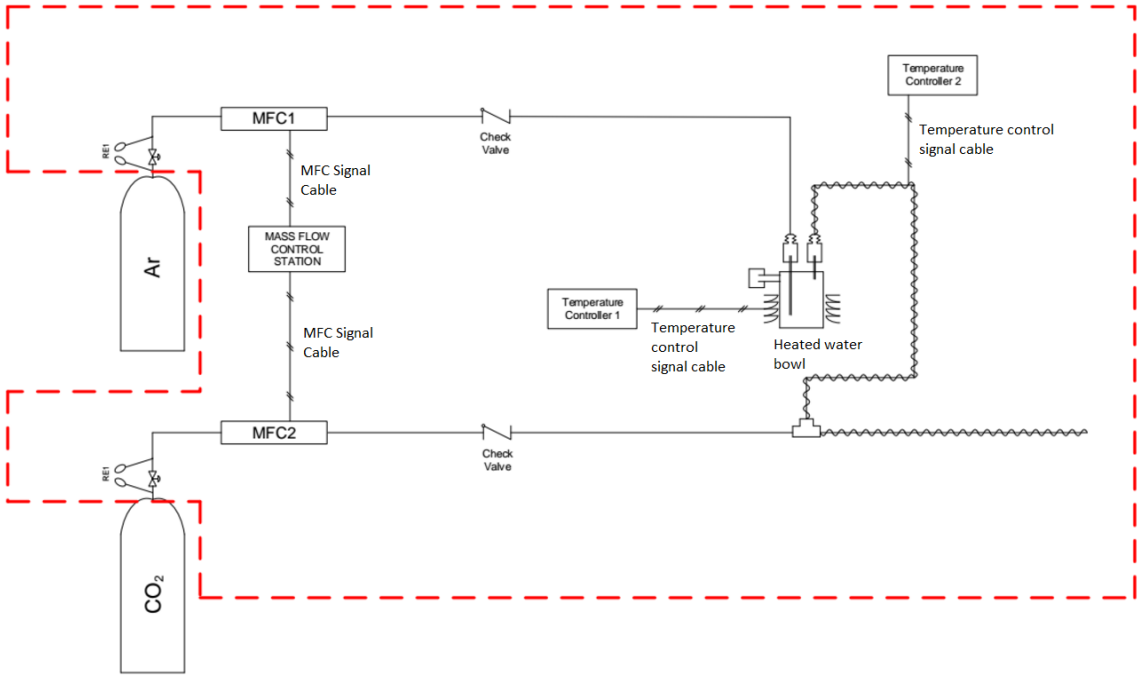
GAS SYSTEM

- Two separate mass flow controller for Ar and CO_2
- Computer controlled TrIInstruments mass flow control station
- Programmable gas flow
- Check valves
- Adjustable humidity by heated water bowl for Ar gas
- PTC thermocouple
- Digital temperature controller



GAS SYSTEM

- Heated gas pipes after water bowl
- Temperature range in the bowl is 80 °C
- Temperature range in the heated pipes is 150 °C



GAS

- Nitrogen %99,999 max 1ppm O_2
- Argon %99,999 max 2 ppm O_2
- CO_2 %99,995

ELECTRONICS

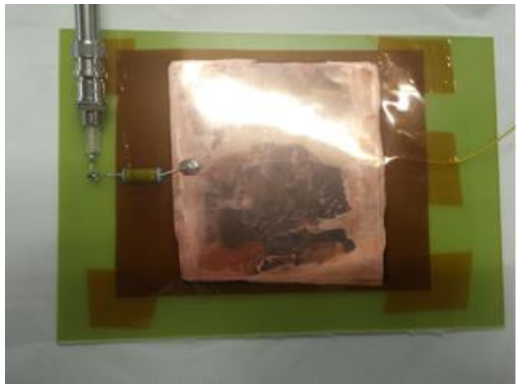
- NIM8302/15, NIM 5U Compact crate, 10 slot, 150W (±6V 5A, ±12V 3A, ±24V 1,5A)
- N1470, 4 Channel NIM Programmable High Voltage Power Supply (±8kV, 3mA, 50nA res.)
- N1145, Quad Scaler and Preset Counter-Time
- N625, Quad Linear Fan-In Fan-Out

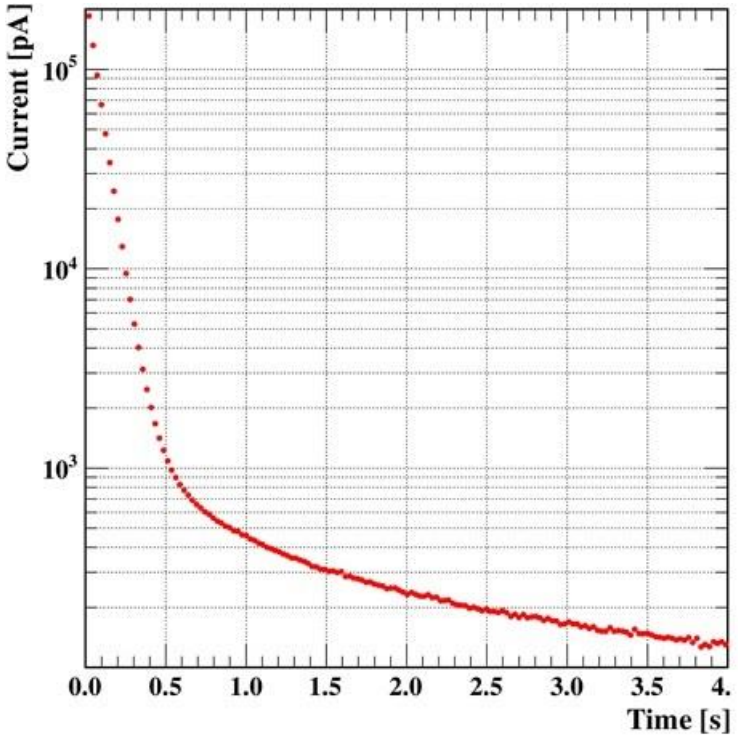
ELECTRONICS

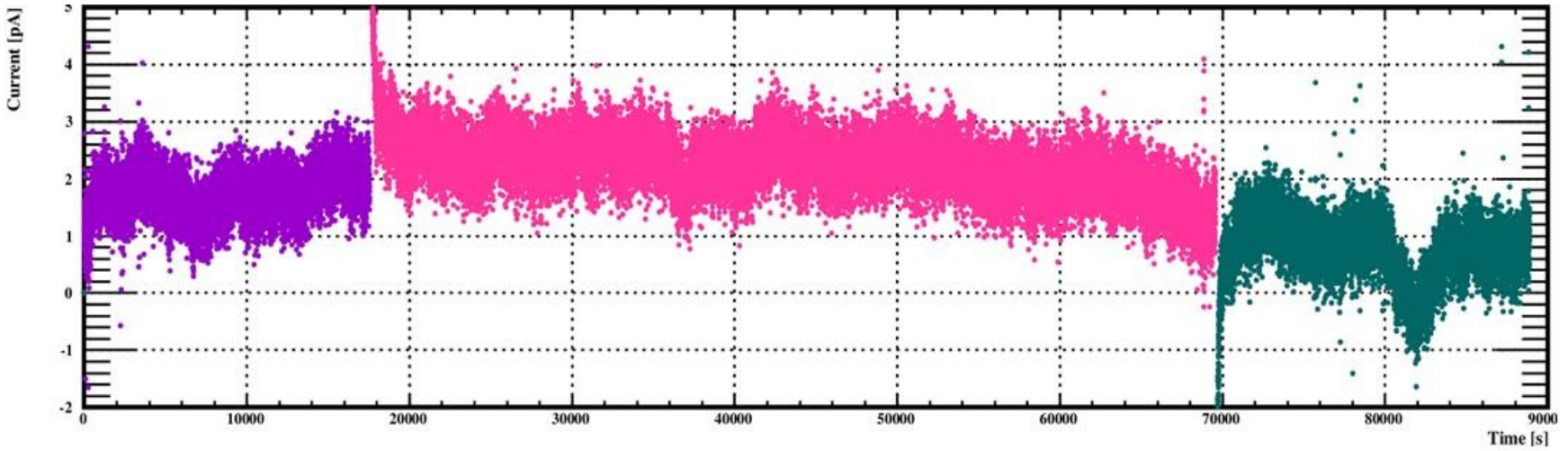
- N455, Quad Coincidence Logic Unit
- N93B, Dual Timer
- N14XX Customization - Imon Zoom
- SW1470 - N14XX Control Software
- T&D TR-77Ui Temperature and Humidity data logger.

PLANS

- Resistivity of polyimide
  - in gas
  - in moisture at different rates
  - at different temperatures
- Gain
  - certain amount of moist gas
  - at different temperatures







EXPECTATİONS

- Questions
- Suggestions
- Collaborations