Expertises on - SiPM - wafer testing - ... electronics design at Rome INFN and University "La Sapienza"

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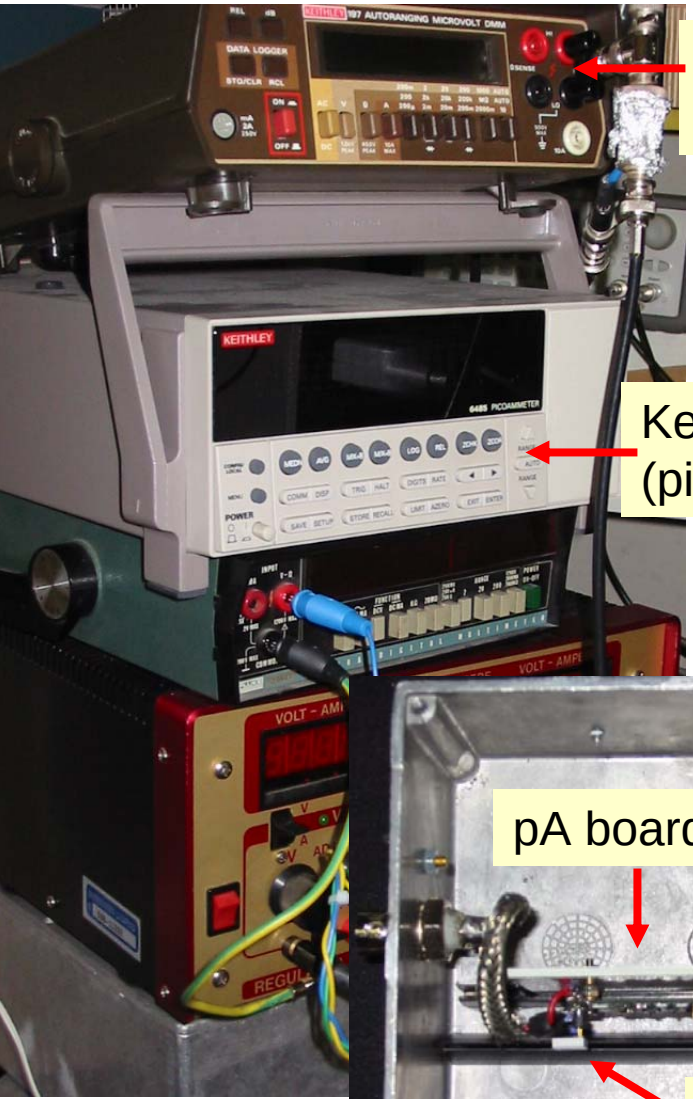
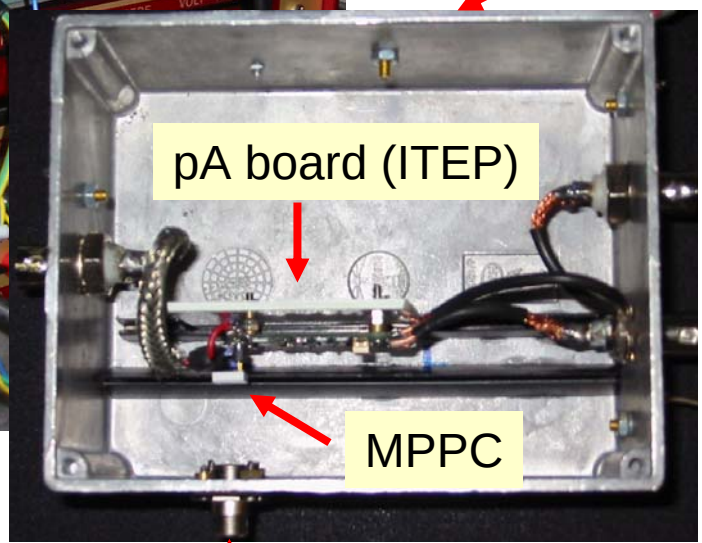
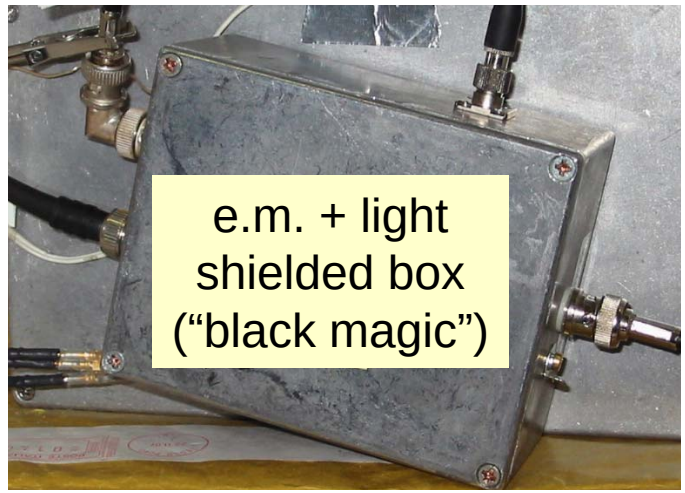
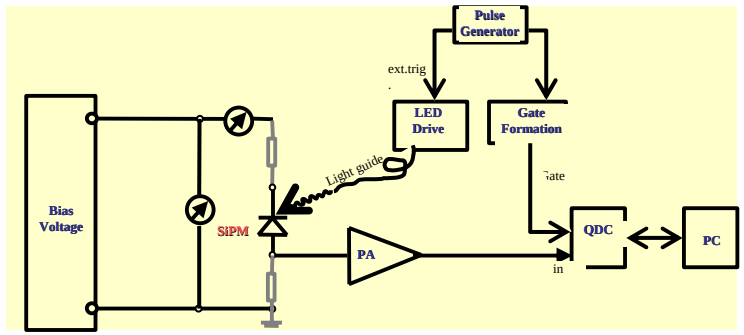


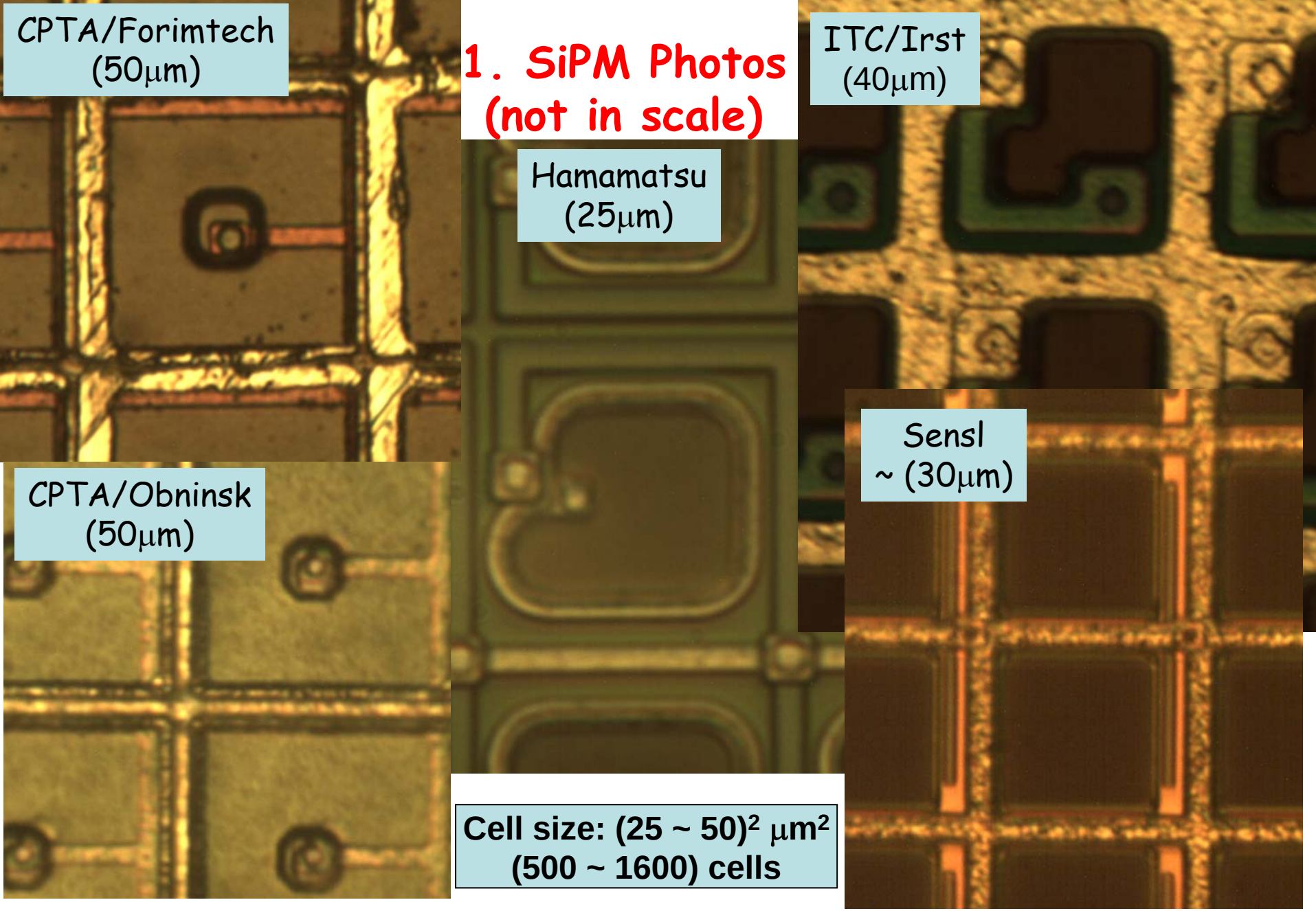
LM35 (T- sensor)







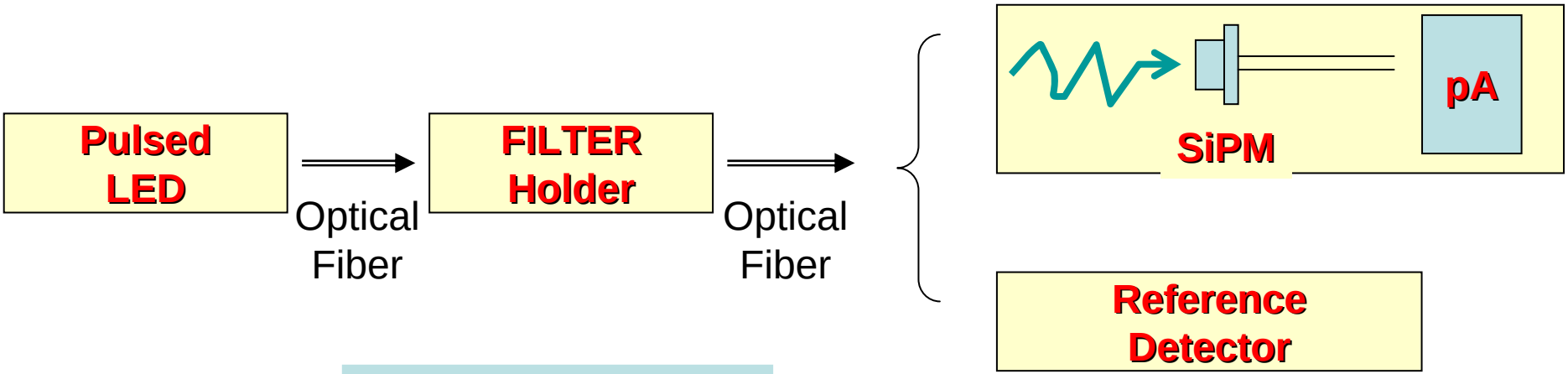
Optical Fiber connector


CPTA/Forimtech
(50μm)
1. SiPM Photos
(not in scale)
Hamamatsu
(25μm)
ITC/Irst
(40μm)
Sensl
~ (30μm)
CPTA/Obninsk
(50μm)
Cell size: (25 ~ 50)² μm²
(500 ~ 1600) cells

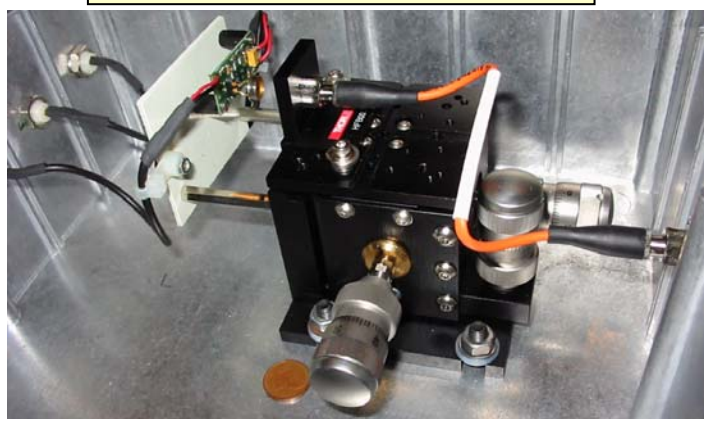
PDE:

- set-up modified in the optical part
- mechanics for fine XYZ adjustment

➔ A new dark and electrically shielded box for SiPM and for reference Photo-detector

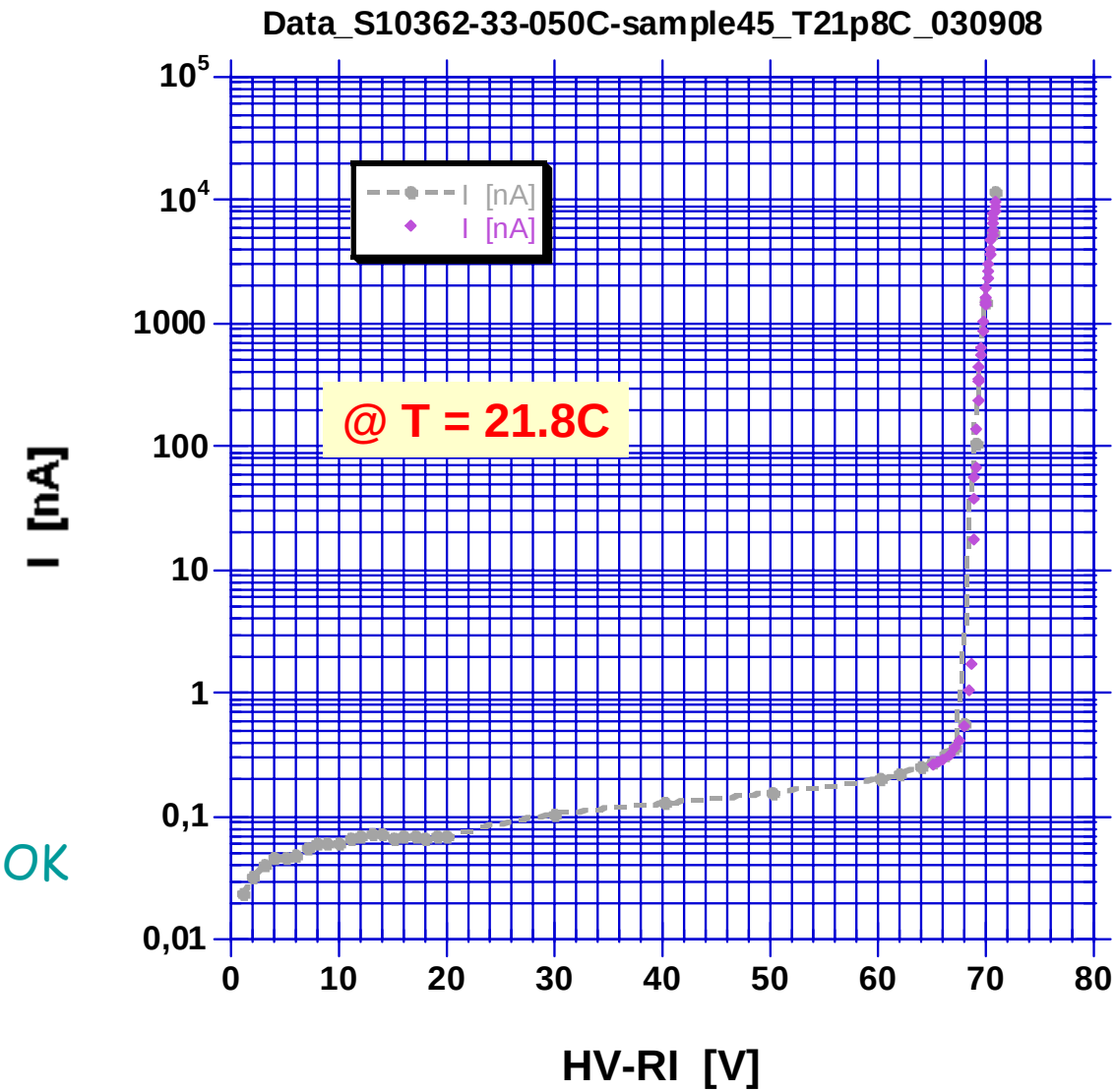


#18 filters
λ ~ 250nm - 1050nm
Δλ ~ 3nm – 10nm
Step ~ 25nm - 50nm



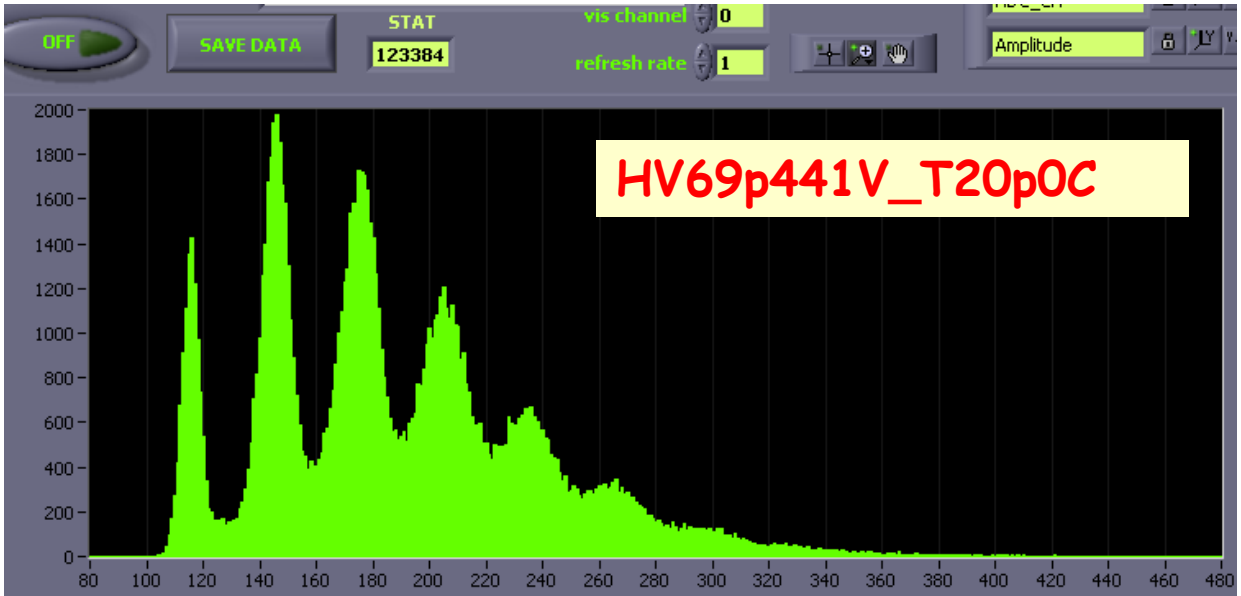
I-V measurements of 3x3 mm2 MPPC

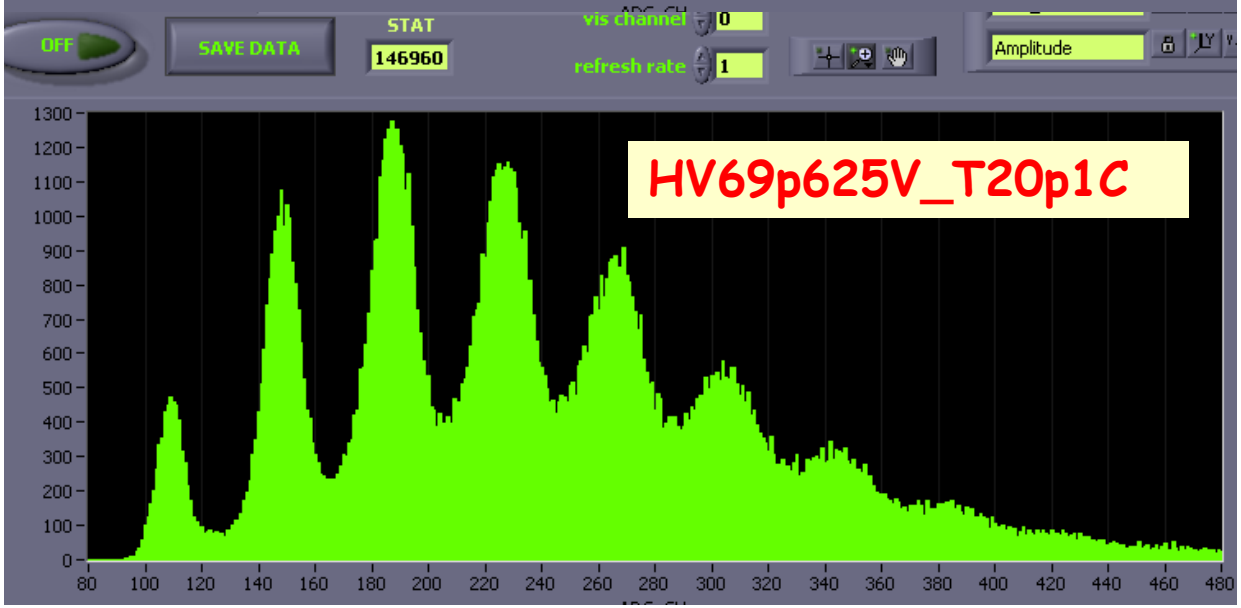
S10362-33-050C
Sample No. 44
Vop=69.81V



- Temp. stability < 0.1C
- Vbias correction applied
  (~ 100mV @ 1μA)
- Measure reproducibility: OK

S10362-33-050C
Sample No. 44
Vop=69.81V

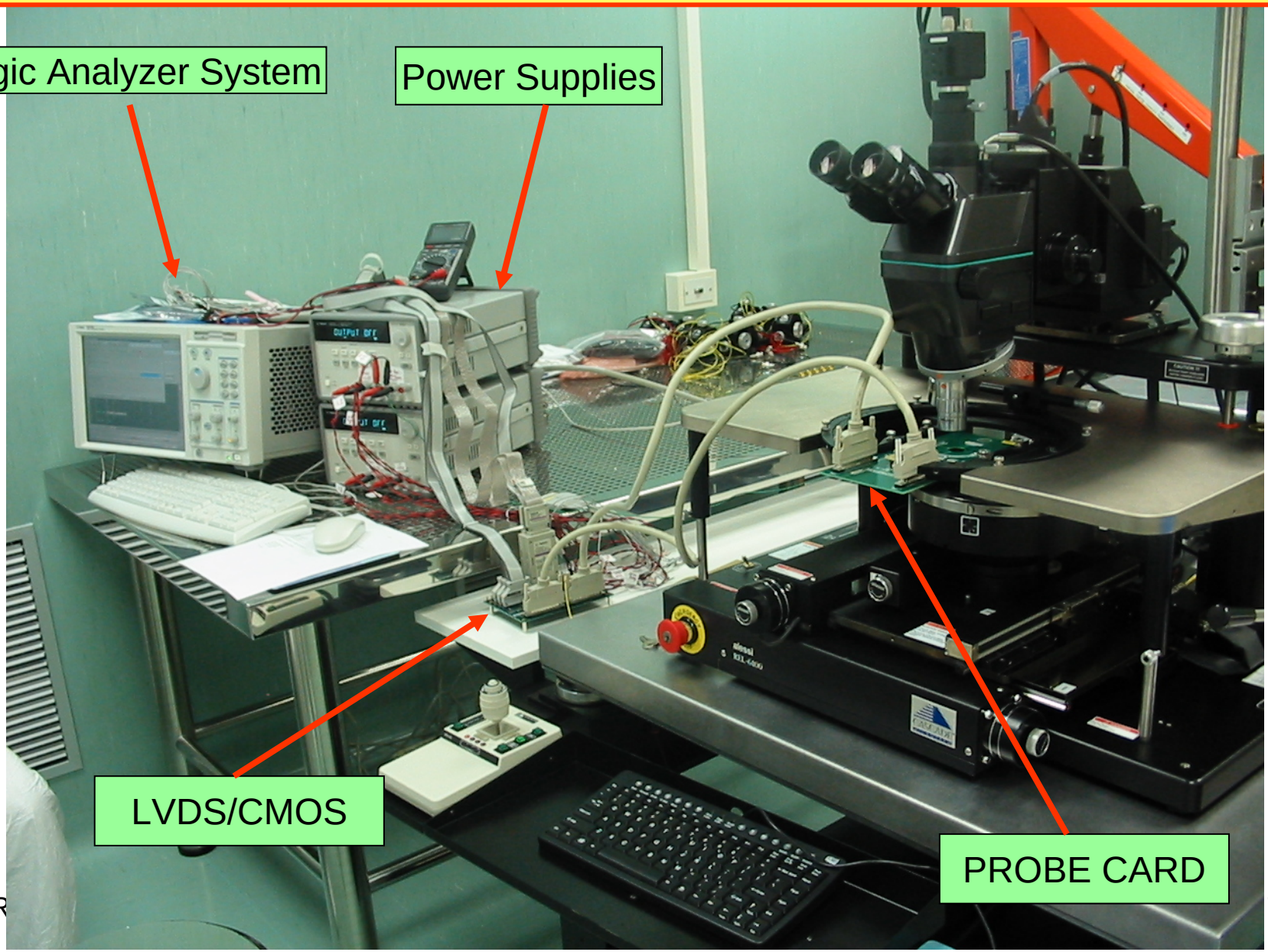




LED: λ=600nm

➔ Δ(HV-RI)=+160mV

The Probe Station CASCADE MICROTECH REL-6100 in the CL100 Room equipped with Logic Analyzer AGILENT 16702B and S/W LABVIEW



LHC-ALICE → S.D.D. - F.E.E. :

PASCAL and AMBRA ASICs validation.

PasAm wafer