

Nal-034(R&D)

2019/11/15
Jae Jin Choi



NaI-034(CUP grown crystal)



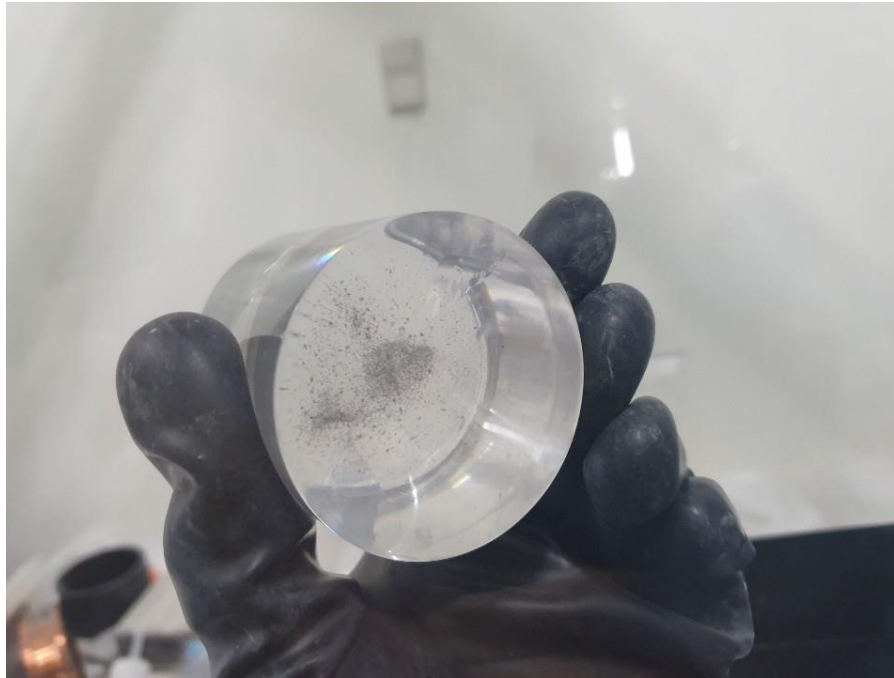
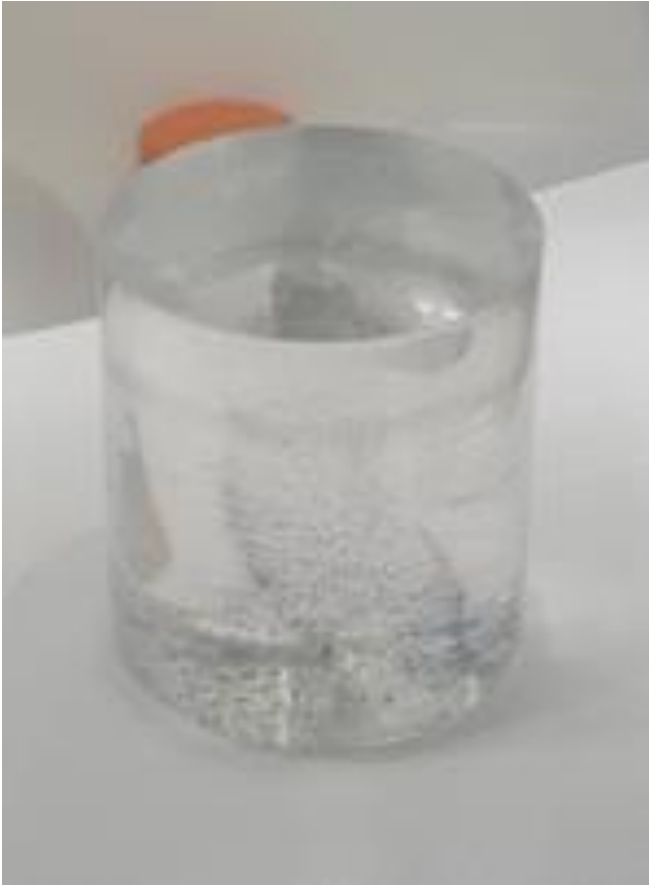
- Had surface contamination(hard to polishing) • After encapsulation(moisture from tetratex)

NaI-034(CUP grown crystal)



- Machining using lathe

NaI-034(CUP grown crystal)

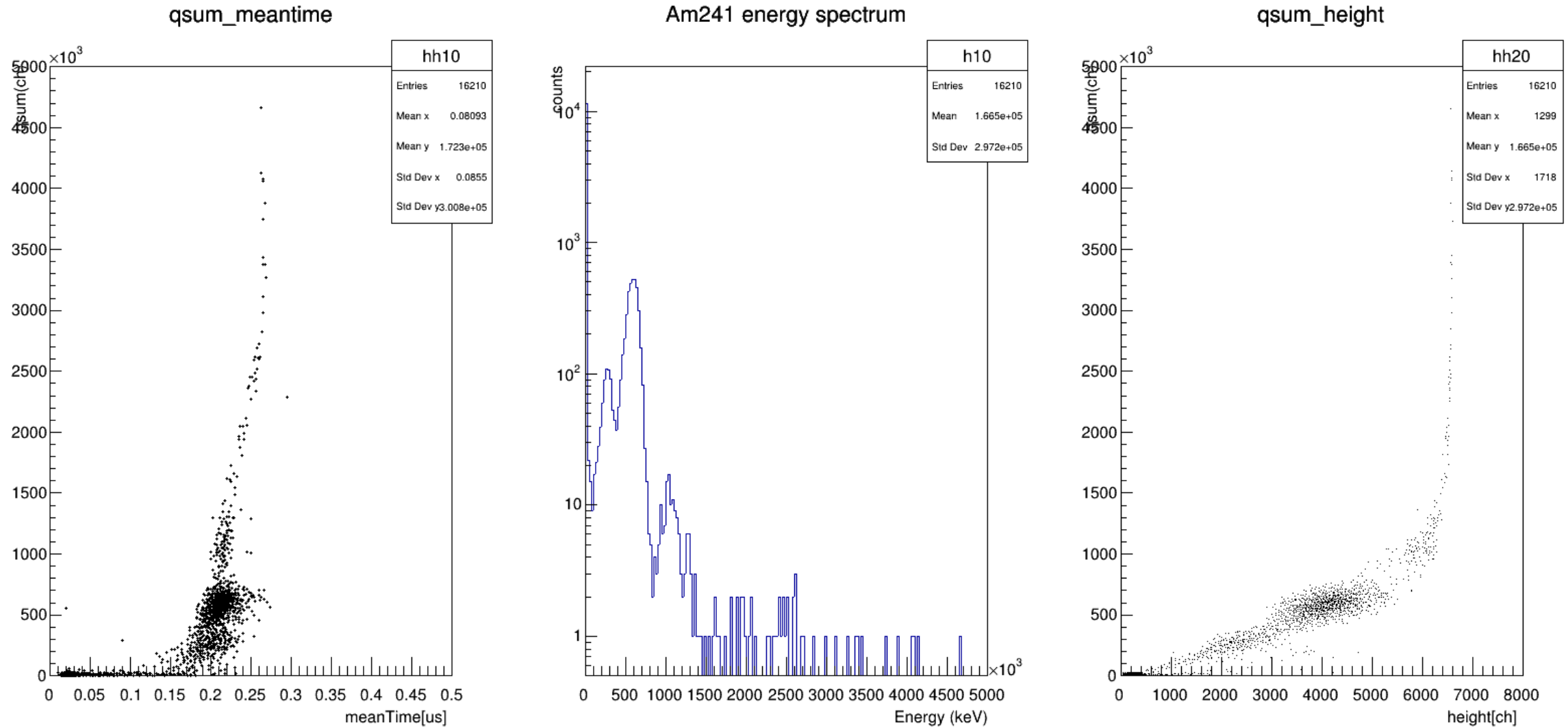


- Machining using lathe
- Black dust from TI
- Tetratex and Cu(encap) were baked in vacuum oven

- reencapsulation

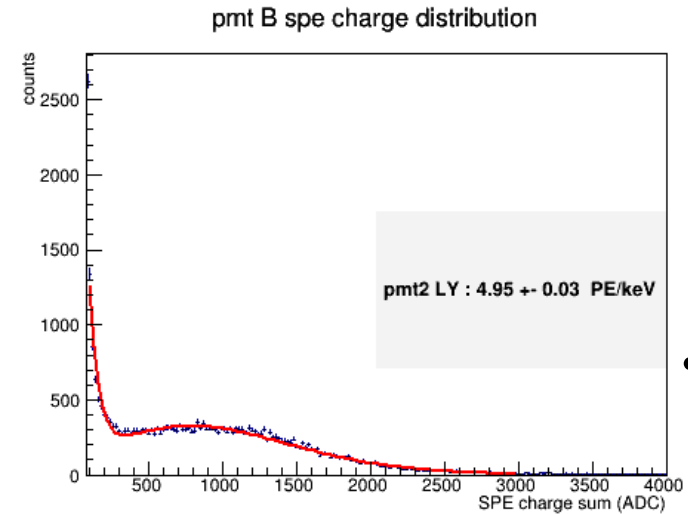
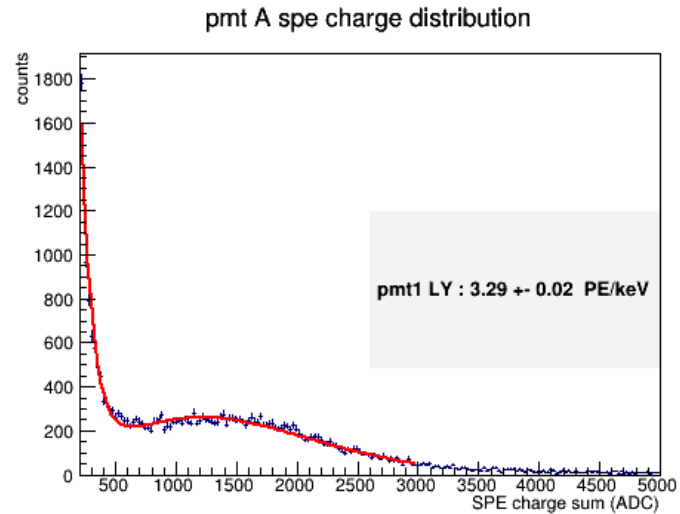
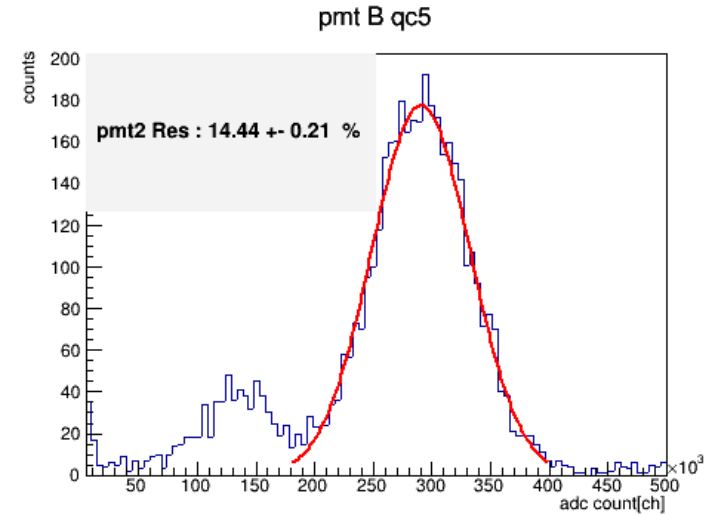
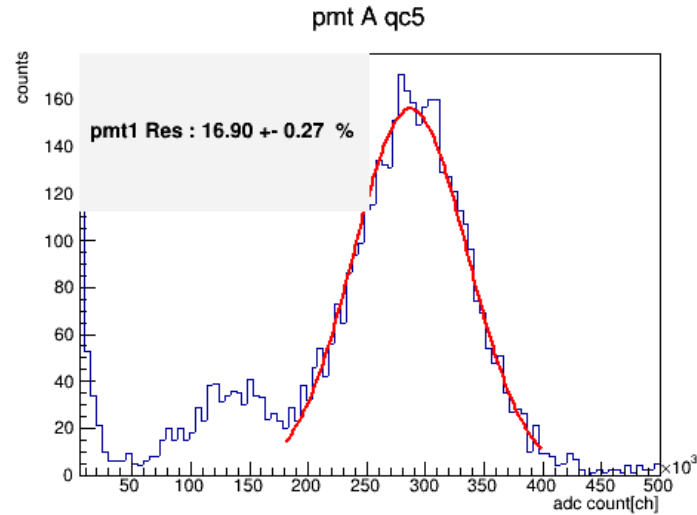
Backup

Am241 calibration



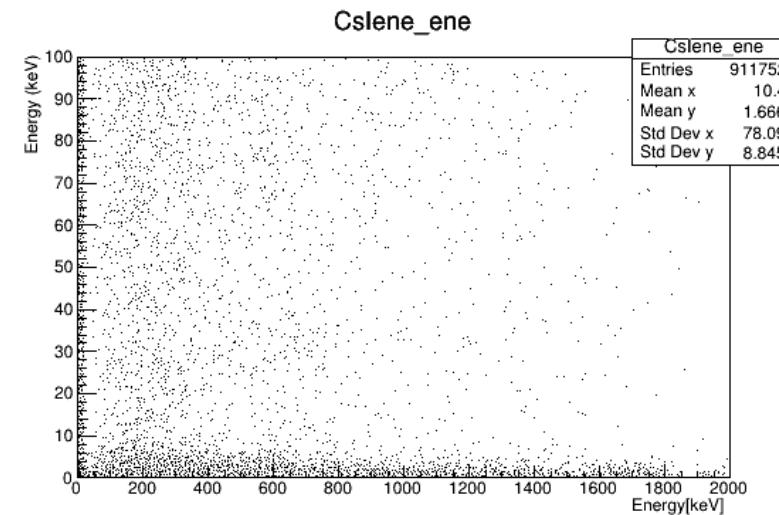
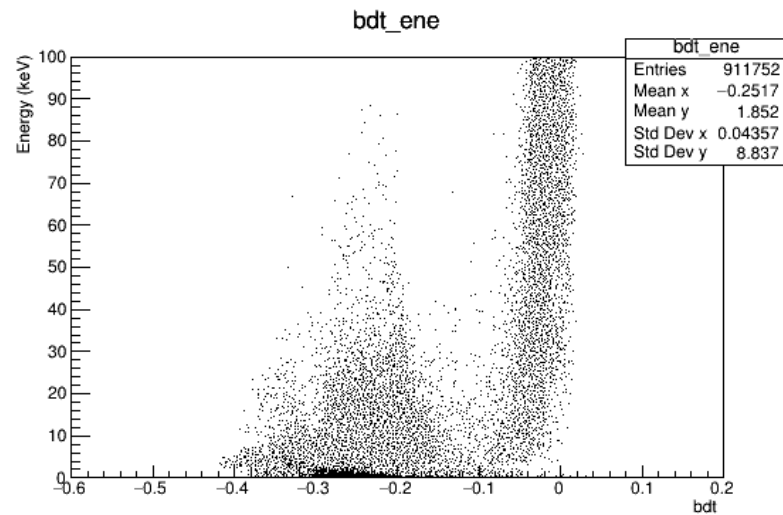
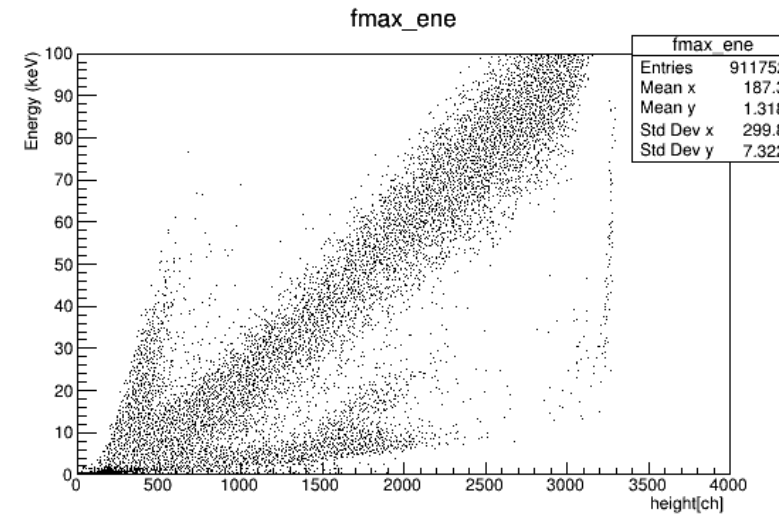
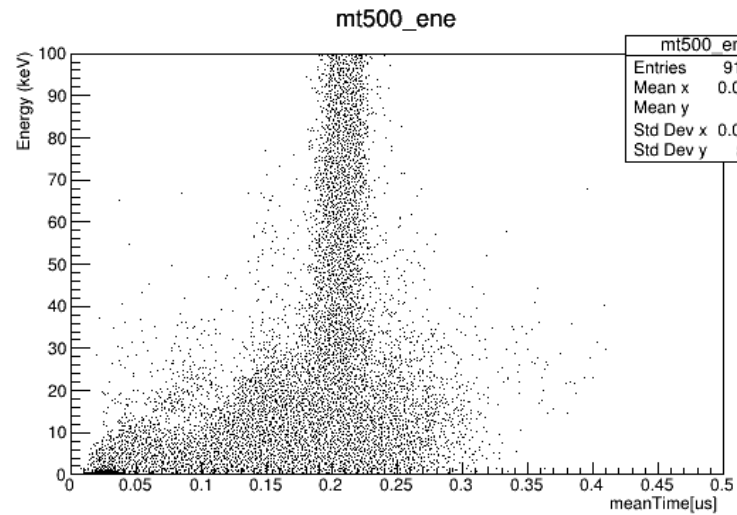
- Am241(60 keV) resolution ~ 12%

Light yield



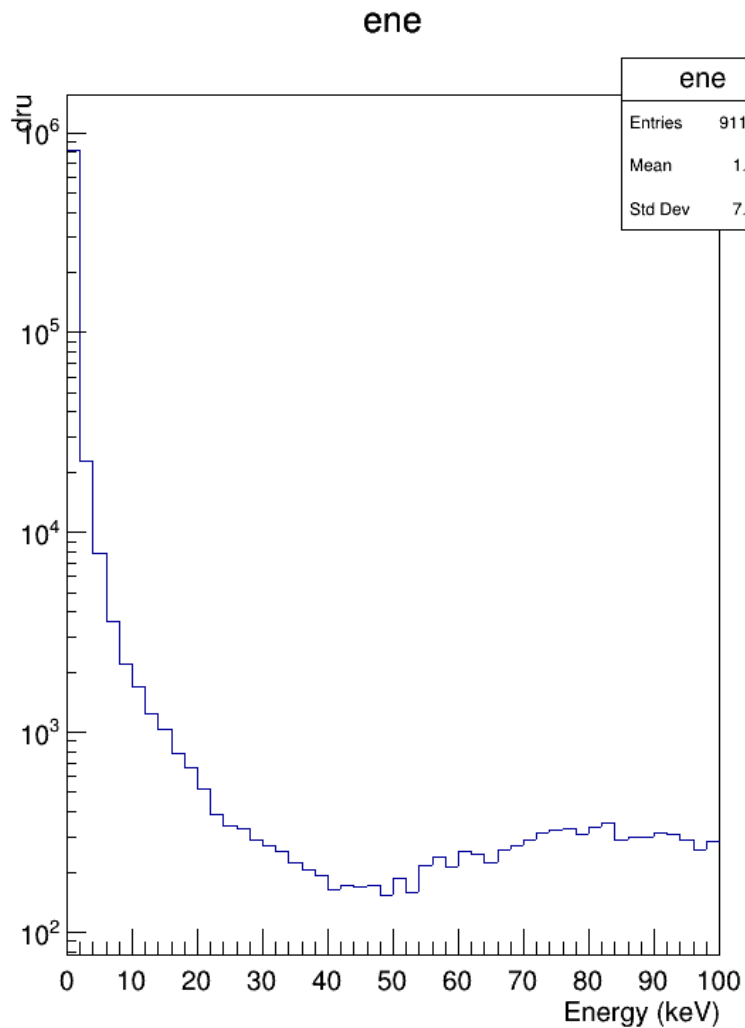
- Around 8.2 PE/ keV

Low spectrum

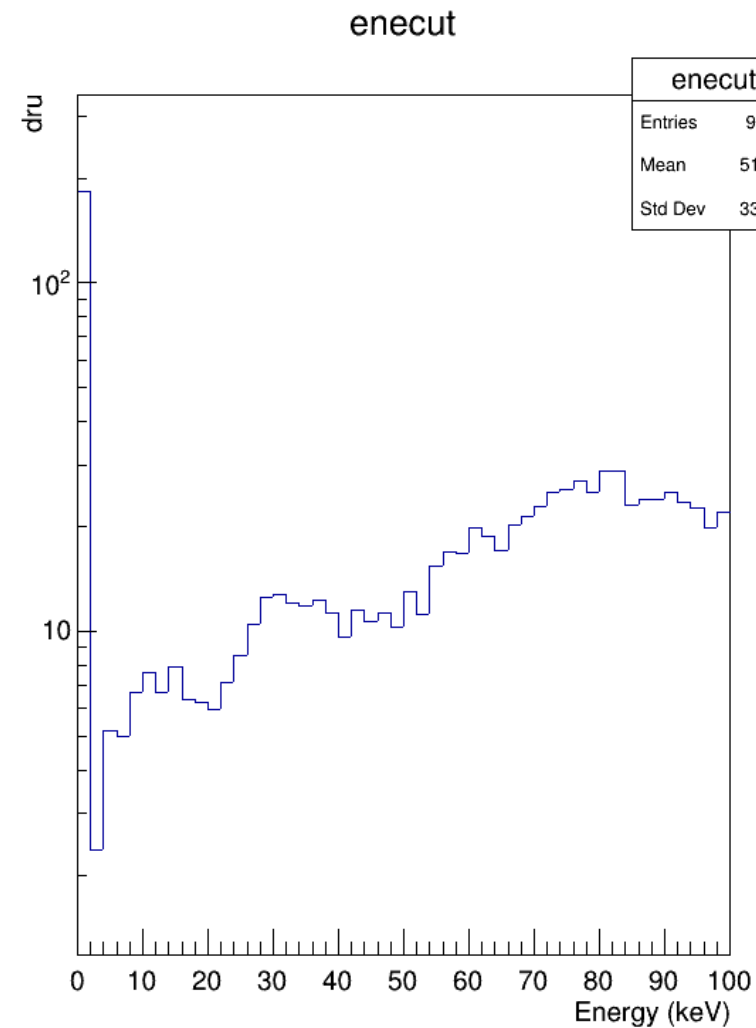


- COSINE crystal 4 bdt

Low spectrum



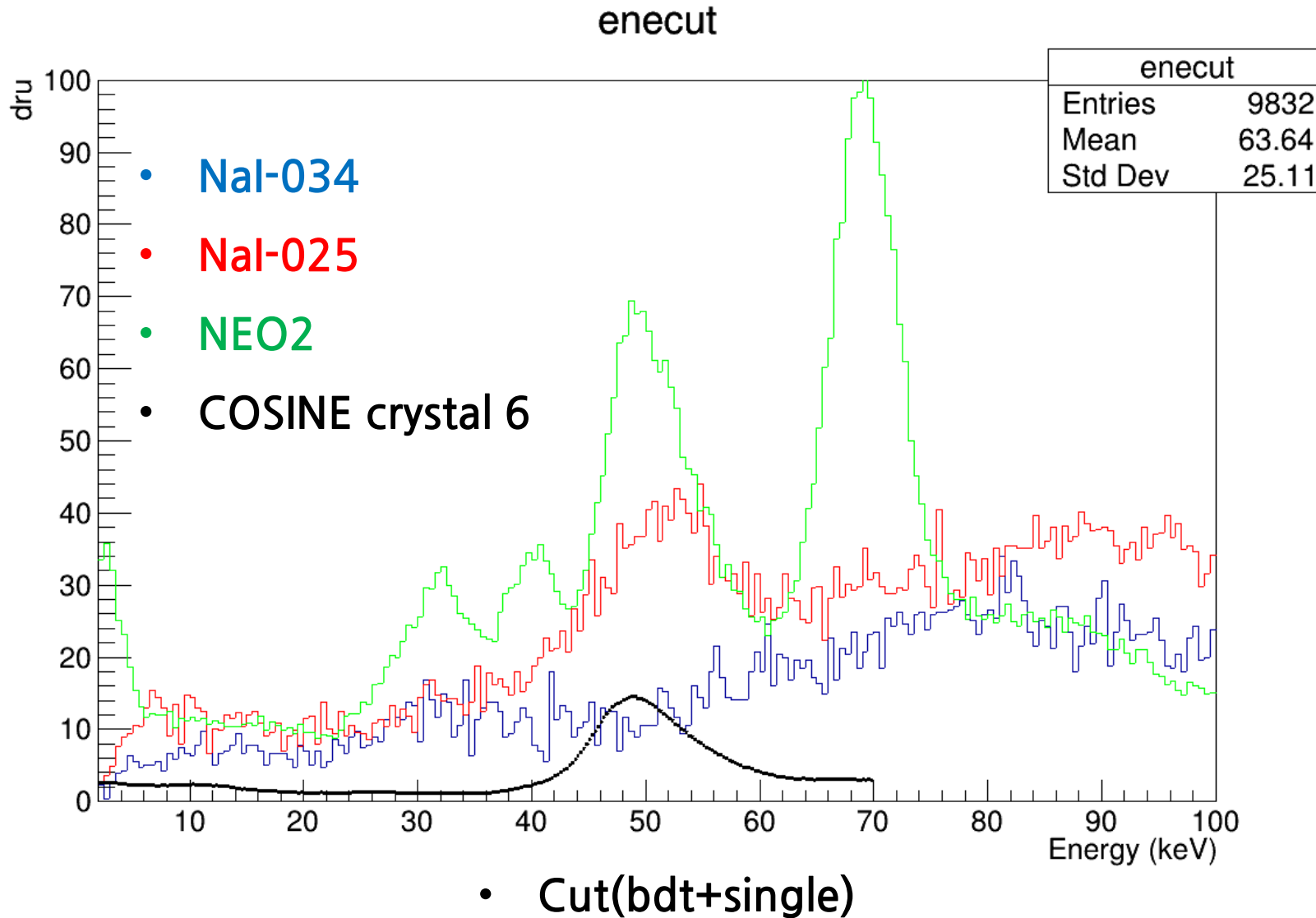
- uncut



- Cut(bdt+single)

- Bdt > -0.1
- Csl energy < 50
- 133 hours data

Low spectrum



Low spectrum

