

Production of NaI high purity powder

- We have been informed that Merck is no longer producing Astrograde
- With the crucial support of RMD we have started discussions with APL Engineered Materials, Inc.
 - The company is interested to start production of a high purity NaI powder following previous works at Merck
- So far they have shipped to us 5 samples for screening
 - as purchased NaI powder used at APL for internal production. The K was tested to be between 0-1 ppm. APL limit of detection is 1 ppm
 - NaI powder was recrystallized 3 times in DI water. 1 sample after each recrystallization.
 - 1 samples of the DI water we use at APL.

Future steps

- This work is crucial for a future massive production of NaI crystals
- The work requires a number of radio-purity assay measurement which can be shared between Seastar, LNGS, and LSC
 - Seastar has so far obtained the best sensitivity in K39 so we want to use it to test other measurements done at LNGS and LSC
- Some costs will be involved in this activity which at present we are not able to quantify