

# PLPAC meeting 2024-1

Contribution ID : 12

## Measurement of short-lived fission products in $6\text{Li}+^{232}\text{Th}$ reaction to investigate the role of neutron and proton shells

Monday 22 Apr 2024 at 10:20 (00h15')

**PI info :**

Satyam Kumar

**local collaborator info :**

NA

**Collaborators Name :**

Rahul Tripathi, Amol Mhatre, Sabyasachi Patra, Ashwani Kumar, Radiochemistry Division, BARC

Harphool Kumawat, K. Ramachandran, S. Santra, Nuclear Physics Division, BARC

**Motivation :**

Separate file attached

**Beam time requirement in shifts :**

9

**Beam :**

$6\text{Li}$

**Beam Energy :**

39.9-39.9

**Beam Current :**

5-8

**Beam Port :**

LINAC Hall-1 30D

**Buncher Required :**

No

**Target / Sample Details :**

Self-supporting  $^{232}\text{Th}$  target sandwiched between two aluminium catcher foils

**Whether the experiment is part of PhD work ? :**

No

**Whether the experiment is part of Post-Doc work ? :**

No

**information on the past beamtime at PLF :**

NA

**Publication information related to prior work at the PLF :**

1. Satyam kumar et al., Eur. Phys. J A (under review); S. Kumar et al., in Proceedings of DAE Symposium on Nuclear Physics, 67, 401 (2023).
2. Satyam Kumar et al., Phys. Rev. C (under review); S. Kumar et al., in Proceedings of DAE Symposium on Nuclear Physics, 67, 573 (2023).

**Primary authors :** Dr. TRIPATHI, Rahul (Radiochemistry Division, BARC) ; Mr. KUMAR, Satyam (Radiochemistry Division, BARC)

**Co-authors :** Dr. PATRA, Sabyasachi (Radiochemistry Division, BARC) ; Dr. MHATRE, Amol (Radiochemistry Division, BARC) ; Dr. KUMAR, Ashwani (Radiochemistry Division, BARC) ; Dr. KUMAWAT, Harphool (Nuclear Physics Division, BARC) ; Dr. RAMACHANDRAN, K. (Nuclear Physics Division, BARC) ; Dr. SANTRA, Satyaranjan (Nuclear Physics Division, BARC)

**Presenter :** Mr. KUMAR, Satyam (Radiochemistry Division, BARC)

**Session classification :** --not yet classified--

**Track classification :** --not yet classified--

**Type :** --not specified--