

# PLPAC meeting 2024-1

Contribution ID : 10

## Study of neutron induced reaction cross section of different structural materials with covariance analysis

Tuesday 23 Apr 2024 at 11:30 (00h15')

**PI info :**

Vandana

**local collaborator info :**

Prof. Vandana Nanal, Mr. M S Pose, Dr. Sanjoy pal

**Collaborators Name :**

Dr. Pargin Bangotra (Research supervisor, Netaji Subhas University of Technology, Delhi)

Prof. N.L. Singh (Co-supervisor, NSUT, Delhi)

Dr. Rajnikant Makwana , Dr. Ratan k. Singh (MSU, Baroda)

Mr. Mayur Mehta(IPR, Gandhinagar)

Ms. Shivani Sharma(NSUT, Delhi)

**Motivation :**

The current motivation of the experiment is to quantify the significant discrepancies between the experimental and theoretical data of nuclear reaction cross section and thereby, increase the productive power of theoretical models.

**Beam time requirement in shifts :**

3-6 shifts

**Beam :**

${}^7\text{Li}(p,n){}^7\text{Be}$

**Beam Energy :**

10-22 MeV

**Beam Current :**

300nA

**Beam Port :**

6M

**Buncher Required :**

NO

**Target / Sample Details :**

as per annexure attached

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

YES

**Name of the PhD student and year of registration :**

Vandana , 2023

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

no

**Name of the Post Doc fellow :**

NA

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

NA

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

NA

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**Co-authors :**

**Presenter :** Ms. ., Vandana (Netaji Subhas University of technology)

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

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

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