

# Sputter Orion: Target change policy, request form, response sheet

## How to place request for targets in Orion:

- 1) There is an online request form which users have to fill:  
<https://docs.google.com/forms/>
- 2) Users can send ONLY ONE request per week.
- 3) Users should not send multiple requests for same targets till those are loaded.
- 4) Mentors of INUP students should fill the form (not INUP students themselves)

## Violation:

Any violation of target-requesting policy is a punishable offence and will be called for DAC.

## Policy for selecting targets:

There are multiple factors (equally important) based on which targets will be selected

Preferences will be given on basis of:

- 1) Date of request
- 2) Similar no. of requests
- 3) Targets which can be deposited ONLY in Orion.
- 4) If stacks are there with more than two materials.
- 5) If thickness of depositing material is critically low (<10nm).
- 6) Some targets will be loaded most of the times since those are heavily used:
  - i. Sticking layer (Ti/Cr/ Ta)
  - ii. Precious metals (Au, Pt)
  - iii. One magnetic material (Ni, Co, CoFeB..) (Gun-2 is dedicated for it. It requires ferromagnetic conversion kit. In that gun other metals cannot be deposited)
- 7) Typically targets will be loaded inside the chamber for one week if system works fine. (There could be relaxation based on urgent cases).
- 8) All such requests with less no. of runs (2-3) will be clubbed together and loaded. When those processes will be over targets can be changed.
- 9) Same student's request cannot be put in consecutive weeks.
- 10) Similar kind of requests from same group cannot be entertained.
- 11) Too many urgent and special requests from same person/ same group will not be entertained.

## Others:

- 1) If system's health is good multiple students can be given authorization otherwise authorized users will be limited to 1 or 2 per group based on system's condition.
- 2) Selected targets will be informed one or two days prior to the target change. If user doesn't require that target anymore he/she has to inform SO before selected target change. Otherwise it will count as violation of policy.
- 3) In case of user specific targets, either the owner should do the deposition process or he/she should share the recipe with the operator.
- 4) While loading and unloading user specific targets, the owner should be present at the sight or he/she may send someone from his/group