

## NCPRE Labs: Covid-19 Safety Protocol 2020

The rules, regulations, policies that have been followed so far continue to be valid.

### Preamble:

The Covid-19 is possibly an ongoing threat - which we will have to work through to ***maintain productivity while operating safely***. This is not a new philosophy. It has existed in any lab for the longest time.

These are based on the following assumptions of **risk and related mitigation**.

### Assumption

***Everyone in the lab or office is potentially infected and a carrier.*** Hence, please maintain safety protocols.

### **Assessment of Risk vs. Response**

#### ❖ Work & living Spaces

- **Cleanroom:** Infection cannot spread in cleanrooms as everyone is wearing PPE.
- **Non cleanroom Labs:** Infection can spread in labs but not if wearing PPE (Labcoat, gloves & face mask, goggles/face-shield) After every single use the coats needs to be washed. **Office Spaces:** Infection in office spaces can spread if not wearing masks and coats. Wearing of masks and lab coats will be mandatory in office areas.
- For **Restrooms**, infection can spread if one does not clean hands with soap and use sanitizer, disinfectant sprays (on toilet seats) before and after restroom use.
- For **Dining Spaces & Water Fountains**, infection can spread if one does not clean hands with soap and use sanitizer before and after eating/drinking use. Stricter **social distancing (2x)** must be maintained as masks cannot be used in these spaces.
- **Closed public spaces (meeting rooms, lifts)** must be avoided or minimized. Meetings maybe moved to open air spaces if necessary with social distancing.
- For **open public spaces (corridors, stairs) & outdoors**, where population in transient and occupancy is low, infection cannot spread unless through **touch with doorknobs & keypads etc.** Spread of infection through this medium should be minimized with hand sanitizer use before and after touch or use tissues.

#### ❖ Office documents:

- No office documents. Everything is online.
- If office documents must be used, it will need to be sanitized or kept in hold for 24 hours.

❖ **Materials management**

- A 24 hour wait is required to assume that the package is covid free.
- A place has to be dedicated for temporary storage of these items outside the lab and this has to be notified to all the lab members. Same should be followed for office supplies as well.
- Those personnel accepting packages must be in face-shields, masks and gloves.

If these protocols are maintained, then we will ensure a safe working environment.

**In case of infection of working lab member**

**In case of an infection of lab member despite safety protocol, we will perform the following**

- Contact tracing as per BMC rules.
- Sanitization of office spaces is necessary only if PPE is not worn.
  - ❑ To avoid sanitization of labs by BMC, we must always wear PPE (lab-coats, gloves, face shields/goggles, masks etc.) in non-clean room labs as well.
  - ❑ In the place of full sanitization, we will initiate a protocol of
    - Alcohol (IPA) wipe-down of labs which is consistent with lab contamination.
    - Colins or other Lizol based wipe-down of office which is consistent with lab contamination.
    - There will be no complete lab shutdown. But lab access will not be allowed till complete cleaning procedure is done.

## GUIDELINES

**Due to the COVID 19 Pandemic, additional protocols have been laid for the safety of all lab members.**

1. For accessing NCPRE Fabrication, Characterization & Hybrid Solar Cells Lab; everyone must use the EE Annexe, corridor side entrance only. The Nano-electronics building side entry is closed temporarily.
2. Lab facility will be open 24X7. However, if one needs to use toxic and special gases after office hours, permission needs to be taken from the Facility Team.
3. It is mandatory for every person to get their temperature checked before entering respective premises.

For Fab, Char, HSC & Power Electronics Lab and NCPRE EE Office the IR thermometer will be used to check the temperature of all Lab members at the entrance of EE Annexe Bldg. Entries of names of members who get tested will be made with a timestamp in a register maintained by IITBNF staff member

For other labs, we have another IR gun placed in the Module lab where users for NCPRE Transit Office, Module, Metalization, Battery, FESEM, Students', N5 bay lab can get the temperature check over there. Entries of names of members who get tested will be made with a timestamp in a register maintained by Nilesh Pawar. Time slot will be from 10:00am to 12:00noon. Those who are coming after 12:00noon shall contact Ritesh Ingle (# 8286440545) from Module lab & get themselves tested and make the necessary entry in the register.

4. On weekends:

For Fab, Char & HSC Lab - The IR gun will be kept inside the IITBNF lab (On top of the shoe rack in front of lab entrance door from Annexe side) Users need to do self-testing and mention the details in the register kept alongside.

For NCPRE Transit Office, Module, Metalization, Battery, FESEM, Students', N5 bay lab - The IR gun will be kept inside the Module lab (On top of the shoe rack in front of lab entrance door) Users need to do self-testing and mention the details in the register kept alongside.

5. It is advisable to use the lifts minimally. As the lift size is small, in order to maintain social distance, only one person should travel at a time in the lift.

6. Hand sanitizer of foot-press type is placed at all individual lab entrances. After using the biometric access, one should use this hand sanitizer.

**Inside the labs:**

7. Users should wear their own face masks (cloth-based or any other type). The usual disposable face masks will be provided in the lab to all lab members, if one wishes to use them.

8. Usage of goggles, hairnet and gloves is mandatory (to minimize risk due to surface contact based transmission).

9. Cleanroom gowns will be washed after every single use. After using the cleanroom gowns, the user should directly put it into the dedicated bin kept in the gowning area, Fab Lab.

10. Booking of slots on tools will be controlled by the IT module to take care of social distancing. So when a particular tool is already booked by someone, slot booking module may not allow you to book a tool in its close proximity. Number of members allowed in each lab will be reduced to almost half the number that was allowed earlier, to maintain social distancing.

11. Cleaning of tools will be done as and when a slot is used. All lab members will be allocated duties for cleaning of labs, taking into account the labs they will be using frequently. All lab members will also be assigned certain monitoring duties, like, clearing water from dehumidifiers, AC checking, AHU monitoring, etc. based on requirements.

12. Safety orientation will be given to all lab members by the IITBNF/ NCPRE safety team. All lab members will have to do the safety checks for the labs they have been assigned.

13. Using the tool for the first time after lab-reopening should be done strictly in the presence of Pradeep (EMT) following proper SOP of the respective tool, even though one is an AU of the particular tool. Only after that one can be reauthorized on the tool. (This implies only to Fab, char and HSC labs)

14. All the users need to get reauthorized on the tools either from Pradeep or from someone who has already been reauthorized on that tool by Pradeep after lab reopening.

15. Regarding vendors coming to the lab from outside: Lifts must not be used. Gloves and face shields are mandatory. One of the lab members has to be a buddy with the external vendor.

#### **Personal hygiene & safety outside the lab:**

16. Hand sanitizer must be used before and after drinking water from the water coolers.

17. Washing hands with soap water is mandatory before and after using washrooms. After exiting the washroom, please use a hand sanitizer to clean up after any door knob touch.

18. Same is true before and after eating any food.