- Internal users who have shown interest in getting trained in TCSPC and or in Micro Time 200 instruments, for this purpose, three-day training sessions are conducted to become an authorized users.
- Users can choose to get trained in any one or both the instruments according to the requirement of their lab.
- Users will be shared some YouTube online lecture series / videos of TCSPC Techniques and Microtime 200 manual that they must go through before coming for training or may also visit the website <u>www.tcspc.com</u> for further knowledge or users may also go through chapter 4 of "Principles of Fluorescence Spectroscopy" a Book by Joseph R. Lakowicz.
- We give three days of training, out of which two days students are trained well.
- For TCSPC Training: On the first day, we will discuss the excitation source (MaiTai Laser, generation of second and third harmonic output), and understand the Eztime software. On the second day, we will record some data and learn how to fit the decays. On the third day, you can bring your samples to have a hands-on session.
- For FLIM Training: It is a two hours session on each day. Instrumentation, data acquisition and data analysis will be primary focus of the training. On the third day, students can bring their own samples to have a hands-on session as they are encouraged to perform experiments under the guidance of staff operator, to become more familiar with the instrument.
- After this process, one exam will be conducted by the in-charge of the TRFSM facility (Prof. Arindam Chowdhury) for the operatorship so as to assess the preparedness of the student in handling the facility on his/her own. Users need to pass this exam to become an authorized user of this instrument. Eligible students would be required to handle samples from their own lab.
- The FLIM test will comprise of two parts:

1) Hands-on operations: The students are requested to bring one sample of their own and they need to optimize the instrument and acquire FLIM images of their sample.

2) Viva-Voce: Questions will cover basic of fluorescence, fluorescence microscopy, instrument components and basic knowledge of optics and their functionality.

- Users have to pass the exam to become an independent and authorized operator for the instrument. After becoming an independent operator, user shall also need to perform internal/external samples of other user requests or his/her group members of their lab/ Department. This will be a maximum of 4 hours per week (or even less) depending on the sample load.
- TA has to be careful while running the instrument and follow the instructions provided for the maintenance and operation of the facility.