## Indian Institute of Technology (IIT) Bombay, Powai Mumbai-400076

## Department of Biosciences & Bioengineering Phone: 022-25764757

Registration form for Surface Plasmon Resonance Facility (<u>spr.bios@iitb.ac.in</u>)

Date:\_\_\_\_\_

**External Registration Number (Office use only):** 

Name of User:

Name of
Institution/Organization:\_\_\_\_\_\_

Name of the Dept/Div/Sec:\_\_\_\_\_\_ Email and Tel.No.:

Nature of samples involved:\_\_\_\_\_

Number of Samples to be tested:\_\_\_\_\_

Type of Analysis required: \_\_\_\_\_\_

Molecular weight of ligand and analytes involved:\_\_\_\_\_\_

Isoelectric	point (pI)	of the	ligand
involved:_			

Available	concentration	of	ligand	and
analytes:_				

In case of small molecule analyte: Is the molecule dissolved in organic solvent? Is yes, please specify:\_\_\_\_\_

Does your analyte tend to aggregate? :\_\_\_\_\_

Any earlier experimental indications of the ligand-analyte interaction:

Conformational changes on ligand-analyte interaction:

Any specific temperature requirement: \_\_\_\_\_\_

Any other details to be shared: \_\_\_\_\_

Kindly mention details (and bring along for discussion) from literature search performed on similar studies:

\*Ligand: The ligand is the interaction partner attached to the surface.

\*Analyte: The analyte is the interaction partner that passes in solution over the surface.

## **INSTRUCTIONS FOR SAMPLE PREPARATION**

- Experiments should be discussed with the facility in-charge before appointment.
- Purity of samples is extremely important for generating good data.
- Protein concentrations should be measured accurately before starting the experiment.
- The molecular weight as well as the pI of the proteins should be known before immobilization.
- All buffers should be filtered through 0.22 micron filters and degassed.
- Do not degas buffers containing detergent. Add detergent after degassing.
- For organic solvent containing buffer, filter using organic solvent resistant membrane.
- Cell extracts and nanoparticles can block integrated micro fluidic cartridges and syringes.
- Any query regarding your SPR experiment can be emailed on spr.bios@iitb.ac.in
- Appointments will be provided as per que and the user will be informed about the same.
- Kindly perform literature review on similar work and accumulate as much information as possible for good quality data.

Whenever the prepared samples are used in the publications appropriate acknowledgement of usage of IIT Bombay SPR facility must be mentioned. The details should be forwarded to <u>spr.bios@iitb.ac.in</u>

## GIVEN MATERIAL IS NOT POISONOUS OR TOXIC IN ANY WAY: \_\_\_\_\_

We agree to acknowledge the Surface Plasmon Resonance (SPR) Central Facility of IIT BOMBAY in our Publications/Reports/Thesis in which the data is used with due feedback through email.

Signature of User:

Sample received (date):

Sample analysis completion (date): \_\_\_\_\_

Signature of concerned Staff-in-charge/TA: \_\_\_\_\_