



## Structure of Proteins and Peptides

### Name of the PMRF student

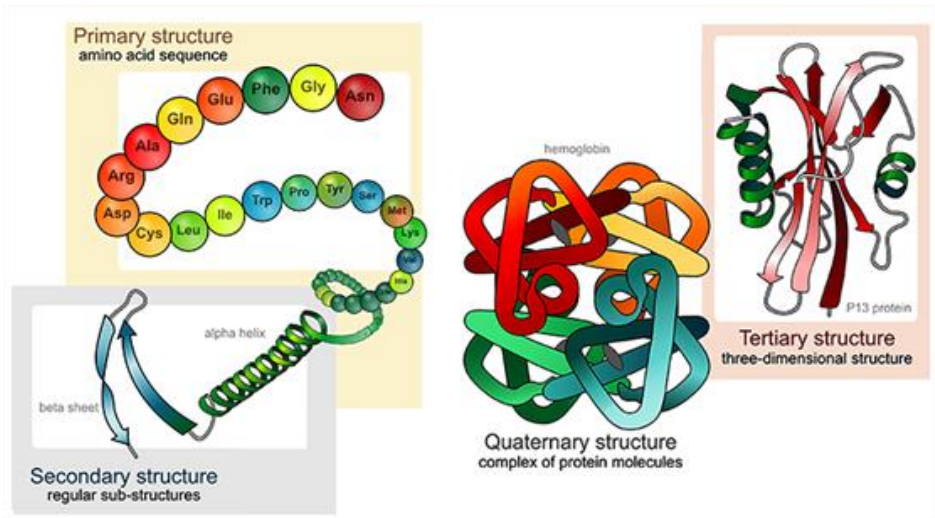
Shreya Banerjee

### Required background of the students taught

Chemistry, Biochemistry, Chemical Biology

### Online session coordinator

Will be chosen from the list of registrants



### Details of the content of the module

- Amino acids as the basic building blocks of proteins.
- Peptide bond, synthesis, structure, planarity, cis/trans isomerism, steric effects, isosteres, stabilizing s-cis conformations.
- Peptide backbone and side chain conformations, allowed and disallowed conformations, Ramachandran plot.
- Repetitive and nonrepetitive backbone dihedrals, secondary structures (helices, sheets, twists and turns).
- Protein structural hierarchy – tertiary and quaternary structures.
- Measuring the conformational stability of a protein.

I will upload detailed lectures covering these topics. The doubts/queries on each lecture will be addressed in the subsequent lecture.

### Schedule of the module

Lectures will be uploaded on:

Friday 18:30 – 19:30 (IST)

Saturday 16:00 – 17:00 (IST)

Classes start from 13<sup>th</sup> January, 2023 (tentative)

Classes end on 1<sup>st</sup> April, 2023 (tentative)

Meeting link : Will be shared later

[Link](#)

Contact email ID: [issf.forum@gmail.com](mailto:issf.forum@gmail.com)

Registration link:

<https://forms.gle/iexKUDgUmQ53k25u6>