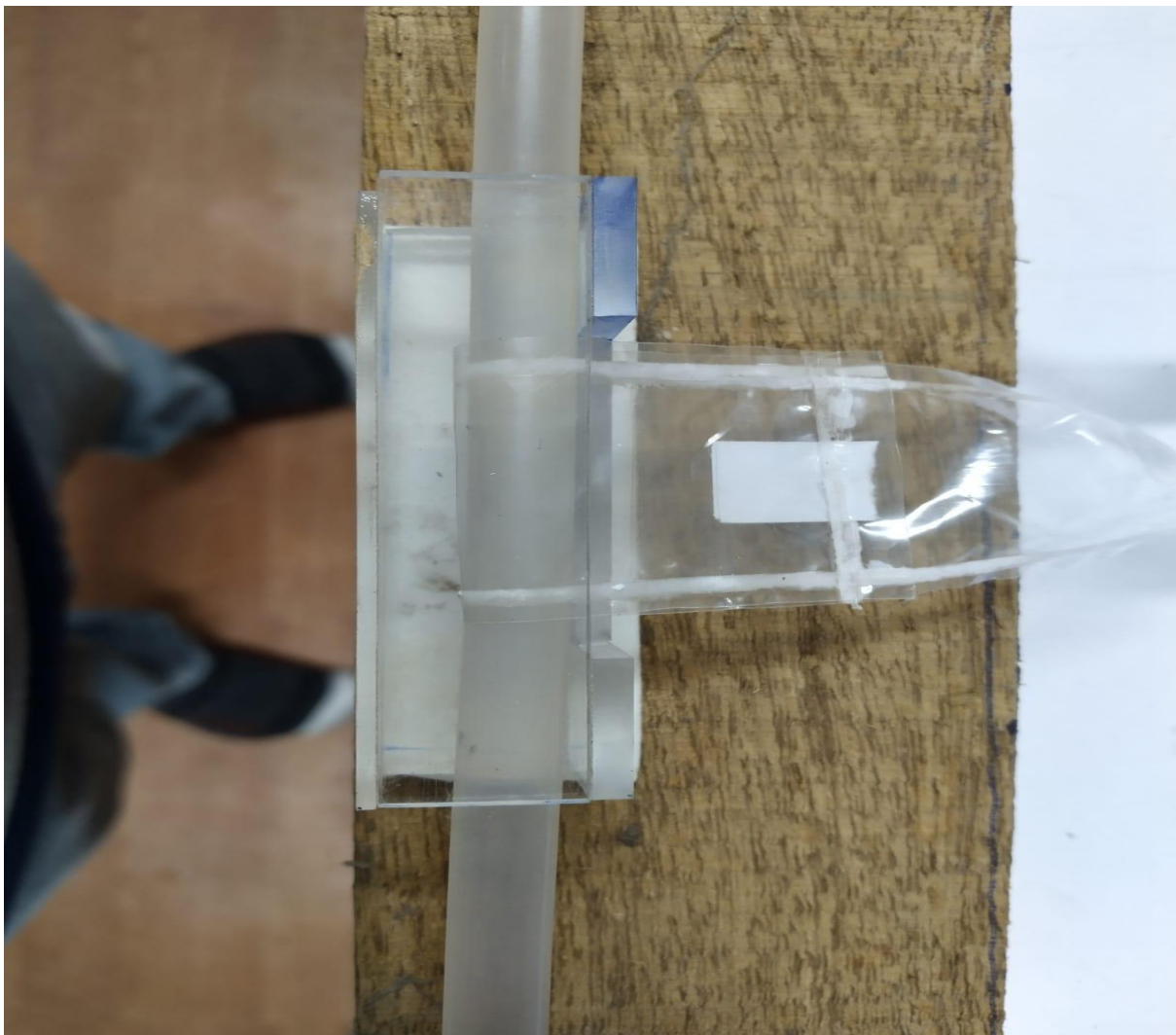


Pulsatile flow

As Nadi pariksa is an essential part of Ayurveda, we are trying to understand the pulse response by studying pulsatile flow with respect to fluid properties. I started the project under my mentors (Priyanshu and Yash) when they were preparing for 3D-DIC. They had made the complete setup required for doing the experiments; now, we were needed to do the 3D-DIC to take the inputs from it.

Acrylic box making:-

We have taken the sheet of a thickness of 3mm for making the acrylic box. The dimensions of the box are 70x15x15. For making it we have done grinding and cutting by both hands and by machine in the lab. Chloroform is used to make the final box by joining several pieces of the sheet. The final box looks like as:-



Airbag making:-

The sheet thickness here used is 50 micrometers. First, we are using a sheet of 23 micrometers but it was not able to hold the pressure and was again and again breaking. So we choose 50 micrometers. There are still issues with it so we are trying to fix them.



Picture of the airbag.

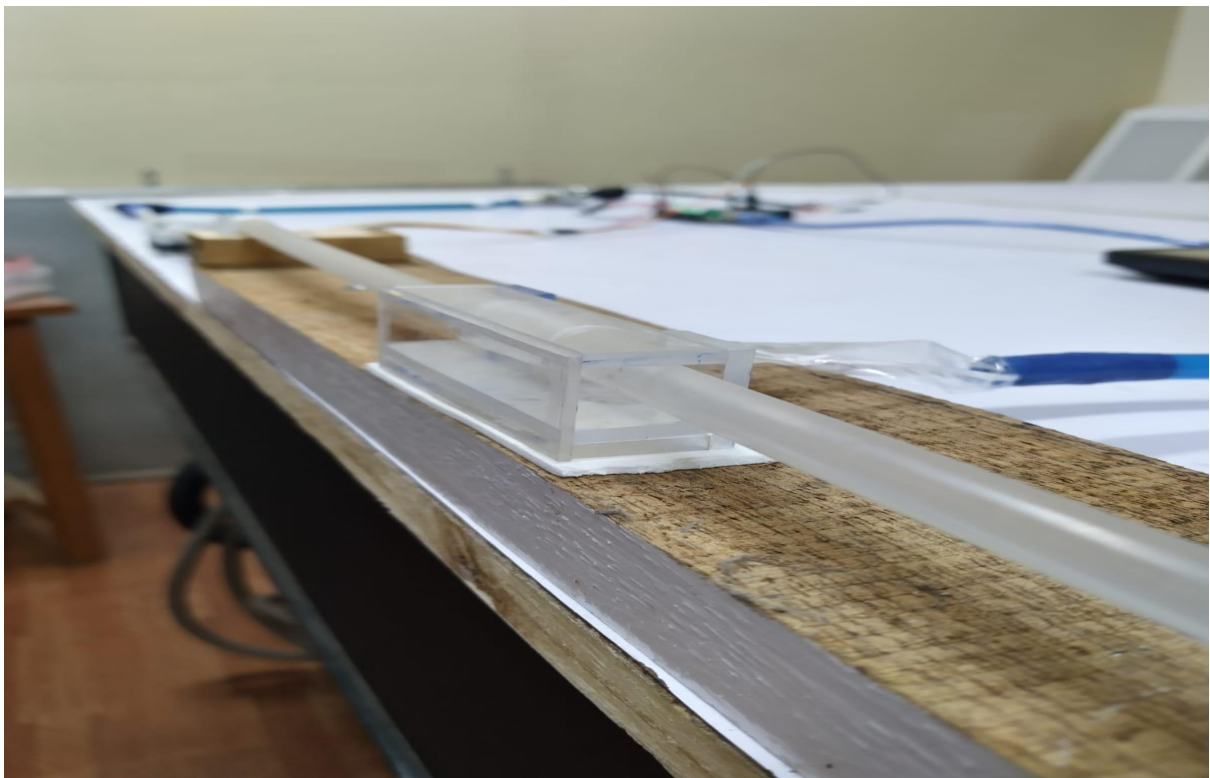
We have used a plastic bag sealing machine to make airbags from the sheet.

To make our system stable while doing experiments we have fixed acrylic box with pipe and airbag on the wooden box. The whole setup has now been fixed on the table.

Airbag and pipe both will look like as:-



Airbag, pipe, and acrylic box together are combined like as:-



The whole setup is as:-

