



Module PMRF-ISSS007/2022

# Compliant Mechanisms

## Name of the PMRF student

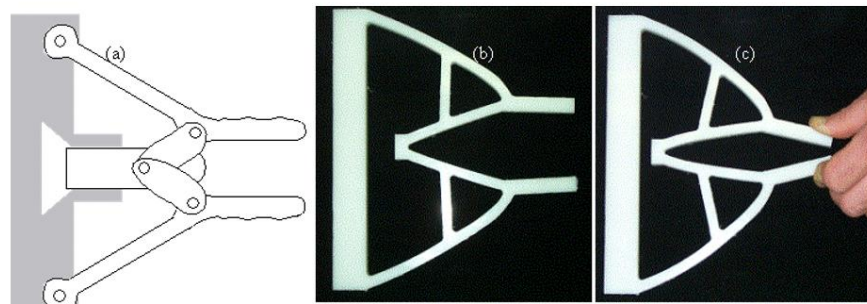
Sudhanva Bhat

## Required background of the students taught

Any UG/PG student interested in exploring the applications of compliant mechanisms

## Faculty coordinator

## Online session coordinator



Replace many parts with one part.

## Details of the content of the module

1 credit course. 1 lecture per week. 1 hour lecture.  
Total 15 sessions. **Title:** Compliant Mechanism

### Content:

1. Introduction, Mobility analysis
2. Modelling of flexures
3. Compliant nature of a Cantilever beam, pseudo rigid-body modelling
4. Design using structural optimization
5. Distributed compliance and topology optimization
6. Instant centre, building-blocks methods
7. Bi-stability and static balancing
8. Microsystems using CM
9. Case studies, HW discussion, interactive sessions

## Schedule of the module

Fridays 5 pm to 6.15 pm

Start date 17<sup>th</sup> June 2022

End date 23<sup>TH</sup> September 2022

15+1 sessions (1 extra if required)

Meeting link will be shared later

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

Registration link:

<https://forms.gle/e3bpC7E8RAWQt1wW7>

