

## **Examples of Modern Topics in Polymer Science:**

### Novel polymeric materials

1. Nanocomposite polymeric materials.
2. Polymers from sustainable sources.
3. Multiblock copolymers, unique properties and morphology.
4. Self assembly in polymeric systems.
5. Stimuli-responsive polymers.
6. Polymer recycling and upcycling

### Polymers for energy applications

7. Solid polymer electrolytes.
8. Organic photovoltaics.
9. Polymers for fuel cells.
10. Lightweight materials with unique mechanical properties.

### Polymers for biomedical applications

11. Polymers for drug delivery, gene therapy
12. Biodegradable polymers for tissue engineering

### Biological polymers

13. Spider silk
14. Cellulose for biofuels