

## **Bioinorganic Chemistry Winter Internships**

Participate in Bioinorganic Chemistry winter internships to study the role of metals in cold environments, focusing on metal ions in cold-tolerant organisms, metalloproteins, and metalbased enzymes.

## Focussed Areas under Bioinorganic Chemistry Winter Internship

- 1. Metalloproteins in cold-adapted organisms
- 2. Metal-based enzymes under cold stress
- 3. Role of metal ions in frost resistance
- 4. Iron-sulfur proteins in cold-tolerant plants
- 5. Heavy metal detoxification in winter environments
- 6. Bioinorganic chemistry of metal ion transport in cold climates
- 7. Zinc and copper metabolism in cold-stressed plants
- 8. Environmental bioinorganic chemistry in winter
- 9. Cold-induced oxidative stress and metal ions
- 10. Metal bioavailability in frozen soils
- 11. Metals in cryoprotection and antifreeze proteins
- 12. Catalytic roles of metals in cold-adapted enzymes
- 13. Metal complexes as cold-weather therapeutics
- 14. Metal-ion binding proteins in cold environments
- 15. Metalloenzymes and their roles in cold stress
- 16. Metal-based catalysts for cold-weather bioremediation
- 17. Metal-binding proteins in winter microbial communities
- 18. Inorganic cofactors in frost resistance enzymes
- 19. Metal-based drugs for cold-induced diseases
- 20. Metal transport mechanisms in winter ecosystems

## Protocols Covered across various focussed areas under Bioinorganic Chemistry Winter Internship

- 1. Metal ion detection in cold-tolerant organisms
- 2. Metalloprotein purification from cold-adapted species
- 3. Enzyme assays for metal-based catalysis in cold environments
- 4. Metal bioavailability testing in frozen soils
- 5. Oxidative stress assays with metal ions under cold stress
- 6. Heavy metal accumulation analysis in winter plants

- 7. Metal complex synthesis for cold-weather therapeutics
- 8. Catalytic activity assays for cold-adapted metalloenzymes
- 9. Metal ion transport assays in cold conditions
- 10. Biomineralization measurement in cold-stressed organisms

## Duration: 5, 10, 15, 20, and 30 Days

Note: Please cross confirm whether internship slots for this field are available before joining.

Click Here for Bioinorganic Chemistry Winter Internship Fees

Application Process and Other info