

## **Archaea Microbiology Summer Internships**

Join Archaea Microbiology summer internships to study extremophilic archaea in hot environments, focusing on their roles in biogeochemical cycles, biotechnology, and environmental sustainability.

## Focussed Areas under Archaea Microbiology Summer Internship

- 1. Thermophilic archaea in hot springs
- 2. Archaea in geothermal environments
- 3. Archaea in desert ecosystems
- 4. Methanogenic archaea and biogas production
- 5. Role of archaea in carbon cycling
- 6. Halophilic archaea in saline environments
- 7. Archaea in oil and gas reservoirs
- 8. Archaea in wastewater treatment
- 9. Archaeal extremozymes for industrial applications
- 10. Sulfur-metabolizing archaea in extreme environments
- 11. Archaea in hot and acidic environments
- 12. Genomics of extremophilic archaea
- 13. Metagenomics of archaeal communities
- 14. Archaeal adaptations to high temperatures
- 15. Archaea in deep-sea hydrothermal vents
- 16. Environmental biotechnology using archaea
- 17. Archaea as bioindicators in extreme environments
- 18. Bioremediation using extremophilic archaea
- 19. Functional genomics of archaeal extremophiles
- 20. Archaeal lipid biosynthesis in extreme conditions

## Protocols Covered across various focussed areas under Archaea Microbiology Summer Internship

- 1. Sampling of thermophilic archaea from hot springs
- 2. DNA extraction and PCR amplification from archaeal communities
- 3. Methanogenic activity assays
- 4. Enzyme activity assays from extremophilic archaea
- 5. Metagenomic analysis of archaeal populations
- 6. Culture methods for extremophilic archaea

- 7. Biogas production assays with methanogenic archaea
- 8. Lipid analysis of archaeal cell membranes
- 9. Protein extraction and purification from archaea
- 10. Archaeal genetic modification techniques

## 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 Archaea Microbiology Summer Internship Fees

Application Process and Other info