

Cryotechniques in Biological Electron Microscopy

This book is intended as a versatile handbook with comprehensive articles on cryotechniques in biological electron microscopy. Each chapter provides a selective and critical review on a topic of major interest, written by a well-known expert. Three fundamental articles treat the physics of water and ice, the physics of specimen preparation, and the effects of radiation damage. The main part of the book is devoted to cryopreparation techniques for cells, tissues, and macromolecules. Aspects of the cryofixation of dynamic events and of defined physiological states are also considered. Finally, a recapitulation of safety rules is included. This handbook provides a good overview on the state-of-the-art for the newcomer and the old hand as well.