This volume is all about the regulation of ions in the brain including changing ion levels and roles in seizures. Ions, their movements across membranes, and their flow through specialized ion channels are central to the understanding of brain function, normal and pathological. This book deals with the regulation of ions in brain, and the effects of changing ion levels on the excitability of neurons and on synaptic transmission. The roles of ions in generating epileptic seizures are considered, as well as in the devastation caused by hypoxia and stroke in brain tissue.

Features:
* Up to date review of cerebral ion regulation and pathophysiology of seizures and cerebral hypoxia
* Emphasis is on recent developments, without neglecting the evolution of contemporary ideas
* For clinicians, it provides explanations of the mechanisms of clinical conditions; for scientists, it reviews the literature and it points out the clinical implications of basic science research
* Comprehensive bibliography