The books in this series present revision in a straightforward and user-friendly way. The authors give tips on common pitfalls and each guide contains help with the best ways to tackle different types of exam questions. Part of the series of AS and A2 revision guides, this title gives students what they need to know for the AQA exams. It includes material organised into bite-sized chunks of information. This comprehensive collection of top-level contributions provides a thorough review of the vibrant field of chemistry education. Highly-experienced chemistry professors and chemistry education experts at universities all over the world cover the latest developments in chemistry learning and teaching, as well as the pivotal role of chemistry for shaping the future world. Adopting a practice-oriented approach, they offer a critical view of the current challenges and opportunities of chemistry education, highlighting the pitfalls that can occur, sometimes unconsciously, in teaching chemistry and how to circumvent them. The main topics discussed include the role of technology, best practices, science visualization, and project-based education. Hands-on tips on how to optimally implement novel methods of teaching chemistry at university and high-school level make this a useful resource for professors with no formal training in didactics as well as for secondary school teachers. "This Study Guide and Solutions Manual contains complete and detailed explanations of the solutions to the problems in the text."--TEXTBOOK PREFACE.