1. Record Nr. UNINA9910786462703321 Autore Chowdhury Zaid K Titolo Activated carbon [[electronic resource]]: solutions for improving water quality / / Zaid K. Chowdhury ...[et. al.] Denver, : American Water Works Association, 2013 Pubbl/distr/stampa **ISBN** 1-5231-1923-3 1-61300-202-5 Descrizione fisica 1 online resource (353 p.) Classificazione TEC010030SCI081000 Disciplina 628.1/66 Water - Purification - Adsorption Soggetti Water - Purification - Organic compounds removal Carbon, Activated Water quality Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia ""Contents""; ""List of Figures""; ""List of Tables""; ""Authors and Nota di contenuto Editor"": ""Acknowledgments""; ""Preface""; ""Introduction""; ""List of Abbreviations and Acronyms""; ""Part 1 Activated Carbon Adsorption Technologies "": ""Fundamentals of Adsorption"": ""Powdered Activated Carbon Systems""; ""Granular Activated Carbon Systems""; ""Part 2 Adsorption Applications ""; ""Activated Carbon Application Approaches""; ""Dissolved Organic Matter Control""; ""Taste-and-Odor Control""; ""Activated Carbon for Organic Contaminant Control""; ""Part 3 Design and Procurement of Activated Carbon Systems "" ""Gravity GAC Treatment System Design"""Pressure GAC Treatment System Design""; ""Vapor-Phase GAC Treatment Design""; ""On-Site GAC Reactivation Design""; ""PAC Feed System Design""; ""Activated Carbon System Implementation and Economic Considerations"; ""Appendix A""; ""Appendix B""; ""Index"" "Many books have been written about granular activated carbon. Some Sommario/riassunto focus on the theory of performance and removal mechanisms while others focus on design features. This book focuses on solutions. It

> describes the challenges facing water providers to provide safe water that is acceptable to their customers, utility experiences using activated

carbon, activated carbon applications, and design and procurement approaches. The appendices include detailed case studies and a lifecycle assessment demonstrating favorable sustainability considerations for activated carbon when compared to other treatment technologies. Never before has all of this information been together in one location. The what, why, and how of activated carbon are connected in this book and demonstrate why this treatment technology has maintained its status as an integral treatment technology in the quest for pure water over millennia"--