Contents

	1
Introduction	1
Part I Research on and Deployment of Chemical Weapons in World War I	
The Scientist as Expert: Fritz Haber and German Chemical Warfare During the First World War and Beyond	11
From Berlin-Dahlem to the Fronts of World War I: The Role of Fritz Haber and His Kaiser Wilhelm Institute in German Chemical	25
Warfare	25
Clara Immerwahr: A Life in the Shadow of Fritz Haber	45
France's Political and Military Reaction in the Aftermath of the First German Chemical Offensive in April 1915: The Road to Retaliation in Kind	69
Olivier Lepick	U9
Preparing for Poison Warfare: The Ethics and Politics of Britain's Chemical Weapons Program, 1915–1945	77
Challenging the Laws of War by Technology, Blazing Nationalism and Militarism: Debating Chemical Warfare Before and After Ypres, 1899–1925	05

x Contents

Military-Industrial Interactions in the Development of Chemical Warfare, 1914–1918: Comparing National Cases Within the Technological System of the Great War	135
Part II Contexts and Consequences of Chemical Weapons	
The Gas War, 1915–1918: If not a War Winner, Hardly a Failure Edward M. Spiers	153
"Gas, Gas, Gaas!" The Poison Gas War in the Literature and Visual Arts of Interwar Europe Doris Kaufmann	169
The Genie and the Bottle: Reflections on the Fate of the Geneva Protocol in the United States, 1918–1928	189
The Soldier's Body in Gas Warfare: Trauma, Illness, Rentennot, 1915–1933	213
Chemical Weapons Research on Soldiers and Concentration Camp Inmates in Nazi Germany	229
No Retaliation in Kind: Japanese Chemical Warfare Policy in World War II	259
The 1925 Geneva Protocol: China's CBW Charges Against Japan at the Tokyo War Crimes Tribunal	273
Part III Dual Use, Storage and Disposal of Chemical Weapons Today	
The Reconstruction of Production and Storage Sites for Chemical Warfare Agents and Weapons from Both World Wars in the Context of Assessing Former Munitions Sites	289
From Charles and Francis Darwin to Richard Nixon: The Origin and Termination of Anti-plant Chemical Warfare in Vietnam	335
The Indelible Smell of Apples: Poison Gas Survivors in Halabja, Kurdistan-Iraq, and Their Struggle for Recognition Karin Mlodoch	349

Contents xi

The Use of Chemical Weapons in Syria: Implications and Consequences	363
Part IV Commemoration Ceremony	
A Century of Chemical Warfare: Building a World Free of Chemical Weapons	379
Statement by HE Ghislain D'hoop, Ambassador of the Kingdom of Belgium	401
Fritz Haber and His Institute	405