

1. Record Nr.	UNINA9910450285903321
Autore	Watkins Glenn <1927->
Titolo	Proof through the night [[electronic resource]] : music and the great war / / Glenn Watkins
Pubbl/distr/stampa	Berkeley, : University of California Press, c2003
ISBN	9786612356506 0-520-92789-3 1-282-35650-X 1-59734-835-X
Descrizione fisica	1 online resource
Disciplina	780/.9/04
Soggetti	World War, 1914-1918 - Music and the war Music - 20th century - History and criticism Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (p. 541-573) and index.
Nota di contenuto	Front matter -- Contents -- List of Illustrations -- Acknowledgments -- Introduction -- Part 1. Prologue -- Part 2. Great Britain -- Part 3. France -- Part 4. Italy -- Part 5. Germany-Austria -- Part 6. The United States of America -- Part 7. Post-Armistice -- Part 8. Epilogue -- Notes -- Selected Bibliography -- Index -- List of CD Contents
Sommario/riassunto	Carols floating across no-man's-land on Christmas Eve 1914; solemn choruses, marches, and popular songs responding to the call of propaganda ministries and war charities; opera, keyboard suites, ragtime, and concertos for the left hand-all provided testimony to the unique power of music to chronicle the Great War and to memorialize its battles and fallen heroes in the first post-Armistice decade. In this striking book, Glenn Watkins investigates these variable roles of music primarily from the angle of the Entente nations' perceived threat of German hegemony in matters of intellectual and artistic accomplishment-a principal concern not only for Europe but also for the United States, whose late entrance into the fray prompted a renewed interest in defining America as an emergent world power as well as a fledgling musical culture. He shows that each nation gave

"proof through the night"-ringing evidence during the dark hours of the war-not only of its nationalist resolve in the singing of national airs but also of its power to recall home and hearth on distant battlefields and to reflect upon loss long after the guns had been silenced.

Watkins's eloquent narrative argues that twentieth-century Modernism was not launched full force with the advent of the Great War but rather was challenged by a new set of alternatives to the prewar avant-garde. His central focus on music as a cultural marker during the First World War of necessity exposes its relationship to the other arts, national institutions, and international politics. From wartime scores by Debussy and Stravinsky to telling retrospective works by Berg, Ravel, and Britten; from "La Marseillaise" to "The Star-Spangled Banner," from "It's a Long Way to Tipperary" to "Over There," music reflected society's profoundest doubts and aspirations. By turns it challenged or supported the legitimacy of war, chronicled misgivings in miniature and grandiose formats alike, and inevitably expressed its sorrow at the final price exacted by the Great War. Proof through the Night concludes with a consideration of the post-Armistice period when, on the classical music front, memory and distance forged a musical response that was frequently more powerful than in wartime.

2. Record Nr.	UNINA9911019396103321
Autore	Luyben William L
Titolo	Reactive distillation design and control // William L. Luyben, Cheng-Ching Yu
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley, c2008
ISBN	9786612112652 9781282112650 1282112651 9780470377741 0470377747 9780470377796 0470377798
Descrizione fisica	1 online resource (598 p.)
Altri autori (Persone)	YuCheng-Ching <1956->
Disciplina	660 660.28425 660/.28425
Soggetti	Distillation apparatus - Design and construction Chemical process control Distillation Reactivity (Chemistry)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	REACTIVE DISTILLATION DESIGN AND CONTROL; CONTENTS; PREFACE; 1 INTRODUCTION; 1.1 History; 1.2 Basics of Reactive Distillation; 1.3 Neat Operation Versus Excess Reactant; 1.4 Limitations; 1.4.1 Temperature Mismatch; 1.4.2 Unfavorable Volatilities; 1.4.3 Slow Reaction Rates; 1.4.4 Other Restrictions; 1.5 Scope; 1.6 Computational Methods; 1.6.1 Matlab Programs for Steady-State Design; 1.6.2 Aspen Simulations; 1.7 Reference Materials; PART I STEADY-STATE DESIGN OF IDEAL QUATERNARY SYSTEM; 2 PARAMETER EFFECTS; 2.1 Effect of Holdup on Reactive Trays; 2.2 Effect of Number of Reactive Trays 2.3 Effect of Pressure 2.4 Effect of Chemical Equilibrium Constant; 2.5 Effect of Relative Volatilities; 2.5.1 Constant Relative Volatilities; 2.5.2

Temperature-Dependent Relative Volatilities; 2.6 Effect of Number of Stripping and Rectifying Trays; 2.7 Effect of Reactant Feed Location; 2.7.1 Reactant A Feed Location (N(FA)); 2.7.2 Reactant B Feed Location (N(FB)); 2.8 Conclusion; 3 ECONOMIC COMPARISON OF REACTIVE DISTILLATION WITH A CONVENTIONAL PROCESS; 3.1 Conventional Multiunit Process; 3.1.1 Assumptions and Specifications; 3.1.2 Steady-State Design Procedure
3.1.3 Sizing and Economic Equations 3.2 Reactive Distillation Design; 3.2.1 Assumptions and Specifications; 3.2.2 Steady-State Design Procedure; 3.3 Results for Different Chemical Equilibrium Constants; 3.3.1 Conventional Process; 3.3.2 Reactive Distillation Process; 3.3.3 Comparisons; 3.4 Results for Temperature-Dependent Relative Volatilities; 3.4.1 Relative Volatilities; 3.4.2 Optimum Steady-State Designs; 3.4.3 Real Chemical Systems; 3.5 Conclusion; 4 NEAT OPERATION VERSUS USING EXCESS REACTANT; 4.1 Introduction; 4.2 Neat Reactive Column; 4.3 Two-Column System with Excess B
4.3.1 20% Excess B Case 4.3.2 10% Excess B Case; 4.4 Two-Column System with 20% Excess of A; 4.5 Economic Comparison; 4.6 Conclusion; PART II STEADY-STATE DESIGN OF OTHER IDEAL SYSTEMS; 5 TERNARY REACTIVE DISTILLATION SYSTEMS; 5.1 Ternary System Without Inerts; 5.1.1 Column Configuration; 5.1.2 Chemistry and Phase Equilibrium Parameters; 5.1.3 Design Parameters and Procedure; 5.1.4 Effect of Pressure; 5.1.5 Holdup on Reactive Trays; 5.1.6 Number of Reactive Trays; 5.1.7 Number of Stripping Trays; 5.2 Ternary System With Inerts; 5.2.1 Column Configuration
5.2.2 Chemistry and Phase Equilibrium Parameters 5.2.3 Design Parameters and Procedure; 5.2.4 Effect of Pressure; 5.2.5 Control Tray Composition; 5.2.6 Reactive Tray Holdup; 5.2.7 Effect of Reflux; 5.2.8 Chemical Equilibrium Constant; 5.2.9 Feed Composition; 5.2.10 Number of Reactive Trays; 5.2.11 Number of Rectifying and Stripping Trays; 5.3 Conclusion; 6 TERNARY DECOMPOSITION REACTION; 6.1 Ternary Decomposition Reaction: Intermediate-Boiling Reactant; 6.1.1 Column Configuration; 6.1.2 Chemistry and Phase Equilibrium Parameters; 6.1.3 Design Parameters and Procedure
6.1.4 Holdup on Reactive Trays

Sommario/riassunto

After an overview of the fundamentals, limitations, and scope of reactive distillation, this book uses rigorous models for steady-state design and dynamic analysis of different types of reactive distillation columns and quantitatively compares the economics of reactive distillation columns with conventional multi-unit processes. It goes beyond traditional steady-state design that primarily considers the capital investment and energy costs when analyzing the control structure and the dynamic robustness of disturbances, and discusses how to maximize the economic and environmental benefits of rea
