CONTENTS

Preface                                                                 i
Acknowledgements                                                        v

Chapter 0  
Introduction

1. Preliminaries                                                        1
2. Historical Developments and Overview                                8

Chapter 1  
Removable Cycles in Connected Graphs

1. Introduction                                                        13
2. Existence of Removable Cycles                                      15
3. Removable Cycles Through Given Edge                                19
4. Removable Even and Odd Cycles                                      24
5. Cycles Avoiding Connected Subgraphs                                35

Chapter 2  
Nonseparating Cycles

1. Introduction                                                        46
2. Vertex Disjoint Cycles                                              47
3. Nonseparating Even and Odd Cycles                                  58
4. Nonseparating Removable Cycles                                     62
Chapter 3

Removable Cycles in 2-Connected Graphs

1. Introduction 68
2. Even Removable Cycles 71
3. Nonseparating Removable Even Cycles 83
4. Removable Cycles in Multigraphs 95
5. Removable 1-Factor of Even Cycles 104

Chapter 4

Determination and Construction of Critically 2-Connected Graphs

1. Introduction 114
2. Removable Ears 116
3. A Special Class 125

Chapter 5

Removable Series Classes in Connected Matroids

1. Introduction 136
2. A Lower Bound 138
3. Series Classes and Circuits 145

References 149