Contents

Tables ix
Charts xi
Figures and Maps xiii
Abbreviations xv

Introduction 1

Nicolas Coupain

1 First Steps: When Vision and Reality Meet 9
  1.1 Inspiration and Implementation 10
  1.2 A Difficult Start for the Couillet Plant 24

2 A Multinational Pioneer 33
  2.1 Experimenting with Three Strategies of Internationalization (1870s) 34
  2.2 Emergence of a Transatlantic Group of Solvay Companies (1880s) 42
  2.3 A Company of Engineers 55

3 Reaching a Dominant Position 65
  3.1 War and Peace in Soda Ash International Trade 66
  3.2 Evolution of Management Structures 85

4 Labor Organization, Social Policy, and Societal Vision 97
  4.1 Elaboration of an Industrial Relations Strategy 97
  4.2 The Multiple Facets of Solvay’s Social Relations 101

5 The Consolidation of Power 119
  5.1 Opportunistic Diversifications: Potash and Coke Oven By-Products 119
  5.2 Being a Part of the Electrochemical Revolution 123
  5.3 A New Round of Geographical Expansion 127
  5.4 Ensuring Continuity: The Rise of the Second Generation 131
Contents

5.5 The Nonindustrial Life of Ernest Solvay: Scientia Vincere Tenebras 135

6 Conclusion of Part 1 143
6.1 Capitalizing on a Technological Breakthrough 143
6.2 A Hybrid Multinational Organization 144
6.3 An Unshakable Leadership 145
6.4 The Life of a Family Business 146

Kenneth Bertrams

7 The Multiple Fronts of World War I 151
7.1 Facing the Occupation, Organizing the Relief Effort 152
7.2 The Conduct of Business in Occupied Territory 155
7.3 Europe at War: The Western Side 159
7.4 Europe at War: The Eastern Side 164
7.5 The Declaration of Independence of Solvay Process Company 169

8 From the Ashes, 1918–1922 175
8.1 The Reordering of Europe 176
8.2 Facing Social Upheaval 188
8.3 Death of the Founding Father 190

9 The Making of International Alliances 193
9.1 IG and Allied: Coping with Giants 194
9.2 The Twists and Turns of Industrial Diplomacy 206
9.3 Exploring Alternatives in America 219

10 Family and Finance through the Crisis 229
10.1 Managerial Legacies 230
10.2 The Collapse and Rebirth of the Mutuelle 239

11 The Electrolytic Industry 251
11.1 Missing the Electrolytic Momentum 252
11.2 The Transnational Cartelization of the Chlorine Industry 255
11.3 From Caustic Soda to Chlorine Derivatives 261
11.4 Electrolysis and Politics: The Rise of Authoritarian Regimes in Italy and Spain 267

12 Facing War Again 277
12.1 Social Policy and the New Order 278
12.2 The National-Socialist Takeover 285
12.3 Solvay at War: Within Occupied Territories 290
12.4 Solvay at War: In Great Britain and the Americas 298

13 Solvay's Second Postwar Period 305
13.1 A Difficult Transition 306
13.2 Farewell to Bernburg 309
13.3 The Liquidation of IG Farben and Its Consequences 315
Contents

13.4 Nationalizations in Eastern Europe: Long-Fought Battles, Modest Results 320

14 Conclusion of Part 2
14.1 Business and Politics in the Age of Instability 325
14.2 Recasting International Industrial Relations 327
14.3 Diversification Interrupted 328

PART 3 THE ERA OF DIVERSIFICATION AND GLOBALIZATION (1950–2012)
Ernst Homburg

15 Growth through Diversification: The Successful Entry into Plastics and Peroxides
15.1 Solvay's International Comeback 334
15.2 Research and Diversification 338
15.3 The Workhorse of the Plastics Industry: PVC 340
15.4 Broadening in Plastics: The Production of Polyethylene 349
15.5 Becoming a Key Player in Peroxides 355
15.6 Change and Continuity 357

16 Enlarging Scale and Scope: Backward and Forward Integration in the 1960s and 1970s
16.1 Solvay's Increased Dependence on Oil 363
16.2 Clean Autoclaves but an Injured Image 369
16.3 Forward Integration into Making Plastic Products 373
16.4 Growth in Plastics and Its Consequences 381

17 Solvay Goes Public: Financial and Organizational Limits of a Family Firm
17.1 Diversification and Its Financial Consequences 384
17.2 The Transformation into a Joint-Stock Company (1967) 388
17.3 Modernizing Management and Accounting 399

18 The Long and Winding Road to Deer Park: Solvay's Return to the United States
18.1 Operation Wyandotte 408
18.2 Opposing Views 411
18.3 Making a New Start 414
18.4 The Acquisition of Deer Park 416
18.5 Producing Polyolefins in America 419
18.6 Toward a Diversified Solvay America 424

19 From Bulk to Brains: Solvay's Entry into Pharmacy and the Life Sciences
19.1 The First Oil Shock and the Crisis of the 1970s 432
19.2 Kali-Chemie and Its Pharmaceutical Activities 435
19.3 The Great Leap Forward (1979–1980) 440
19.4 Consolidating New Businesses in Times of Crisis 444
19.5 Veterinary Medicines and Other Specialties 446
19.6 Growing in Pharmaceuticals 454
Contents

20 Solvay in the Age of Globalization 459
  20.1 Shaken by the Oil Shock 460
  20.2 Reducing Exposure in Plastics 465
  20.3 Solvay Goes to Asia 467
  20.4 Reorganizing Solvay Germany and Going East 479

21 Toward Sustainable Product Leadership 489
  21.1 Improving Competitiveness in Difficult Times 490
  21.2 From Matrix Organization to Business Units 494
  21.3 Chlorine Chemistry under Attack 501
  21.4 Sustaining Leadership 505

22 Chemicals and Plastics of the Future: Major Turning Points at the Start of a New Century 529
  22.1 The Role of the Founding Families 530
  22.2 From Bulk Plastics to Special Polymers 535
  22.3 Innovating in New Directions 541
  22.4 Solvay Pharma: From Priority Business to Divestment 544
  22.5 Moving Forward in Times of Crisis: The Friendly Takeover of Rhodia 551

23 Conclusion of Part 3 559
  23.1 Growing in Plastics 559
  23.2 A Period of Diversification and Transition 562
  23.3 Reaping the Fruits of Focusing on Leadership and Profitability 563

Appendix A 565
Appendix B 570
Appendix C 573
Sources and Bibliography 577
Index 601