Contents

Preface vii

1 Baker-Akhiezer Functions and Integrable Systems 1
I.M. Krichever

2 Algebraic Geometry, Integrable Systems, and Seiberg-Witten Theory 23
E. Markman

3 Seiberg-Witten Theory and Integrable Systems 43
E. D'Hoker and D.H. Phong

4 Seiberg-Witten Curves and Integrable Systems 69
A. Marshakov

5 Integrability in Seiberg-Witten Theory 93
A. Morozov

6 WDVV Equations and Seiberg-Witten Theory 103
A. Mironov

7 On Geometry of a Special Class of Solutions to Generalised WDVV Equations 125
A.P. Veselov

8 Picard-Fuchs Equations, Hauptmoduls and Integrable Systems 137
J. Harnad

9 Painlevé Type Equations and Hitchin Systems 153
M.A. Olshanetsky

10 World-sheet Instantons and Virasoro Algebra 175
T. Eguchi

11 Dispersionless Integrable Systems and their Solutions 199
Y. Kodama

12 *N*-Component Integrable Systems and Geometric Asymptotics 213
M.S. Alber

13 Systems of Hydrodynamic Type from Poisson Commuting Hamiltonians 229
A.P. Fordy

14 Integrability of Equations of Hydrodynamic Type from the End of the 19th to the End of the 20th Century 251
S.P. Tsarev

Appendix: List of Participants 267

Index 275