

Contents

Preface	ix
Acknowledgments	xv
1. The Tides in History. The Challenge of Understanding the Tides on Earth	1
2. One Moon–Two Tides	15
3. The Lunar Orbit	31
4. The Solar Influences and Solar–Lunar Interaction	45
5. Celestial Harmonics	59
6. The Coriolis Force and Oceanic Amphidromes. Coastal Kelvin Waves. Tidal Currents. Sea Level	71
7. The Seiche Effect and Basins of Oscillation. Tidal Intermixing	97
8. Coastal Geography and Near Shore Topography, Resonant Co-Oscillation, Sustained Forcing	113
9. Shallow Estuaries and Tidal Bores	145
10. Computation of the Tide-Tables and Chaos Theory	157
11. The Weather and the Tides. Atmospheric Tides	185
12. The Tides and Saltwater Fishing	197
13. The Constituents of the Tides on Earth. Synopsis of Tidal Influences	215
14. Epilogue	243
Practical Definitions	259
Bibliography	271
Index	281