## Contents

*Preface* ....................... ix

**PART I  REASONING IN A LEGAL CONTEXT**

1. Law, language and reasoning ......................................... 3
   Introduction ........................................................................ 3
   Environmental governance and legal reasoning ..................... 4
   The normative framework of a legal system ........................... 5
   The function of language ................................................... 10
   Logic as a form of reasoning .............................................. 13
   Rationality as a form of reasoning ....................................... 15
   Conclusion ........................................................................ 19

2. Forms of legal argumentation ........................................... 23
   Introduction ........................................................................ 23
   Deductive and inductive reasoning ...................................... 23
   Analogical reasoning ....................................................... 26
   Models of argumentation .................................................. 29
   Consequentialist reasoning .............................................. 30
   Interpretive reasoning ...................................................... 32
   Justificatory reasoning ..................................................... 36
   Coherence ........................................................................ 41
   Conclusion ........................................................................ 43

3. The methodology of legal decision-making ......................... 47
   Introduction ........................................................................ 47
   The variety of legal decision-making processes .................... 47
   Reasoning as an element of legal methodology .................... 49
   Rules as elements of legal methodology ............................... 52
   Principles as elements of legal methodology ....................... 55
   Environmental governance and legal methodology ................ 57
   Conclusion ........................................................................ 64
PART II  LEGAL REASONING IN INTERNATIONAL ENVIRONMENTAL LAW

4. Rules of competence and limitation: Territorial resources
   Introduction
   The characteristics of international law
   Rules of competence: Territorial resources
   Rules of limitation: Territorial resources
   Synopsis

5. Rules of limitation: Common resources
   Introduction
   Conservation as a rule of limitation
   Community of interest as a rule of limitation
   Synopsis

6. Internationally accepted rules: The normative framework
   Introduction
   Principled approaches
   Sectoral approaches
   Conclusion

7. Internationally accepted rules: Implementation measures
   Introduction
   Substantive measures to achieve global objectives
   Implementation measures of international levels
   Implementation measures at regional levels
   Conclusion

8. Judicially constructed rules: Biological resources
   Introduction
   The emerging normative framework
   Conservation of marine living resources
   Conservation and freedom of trade
   Conclusion

9. Judicially constructed rules: Common resources
   Introduction
   Marine resources
   International watercourses
   Conclusion
PART III LEGAL REASONING IN APPLYING ENVIRONMENTAL RULES

10. Rules in the form of human rights 241
    Introduction 241
    Internationally sourced human rights 242
    Regionally sourced human rights 247
    Conclusion 257

11. Rules in instrumental form 260
    Introduction 260
    Property as a regulatory instrument 260
    Property as a human right 270
    Strategy as a regulatory instrument 272
    Conclusion 278

12. Rules in the form of constitutional rights 281
    Introduction 281
    Japan 283
    The Philippines 286
    India 288
    Pakistan 295
    Nepal 297
    Conclusion 298

13. Rules in the form of environmental rights 301
    Introduction 301
    Colombia 301
    Costa Rica 307
    Chile 309
    South Africa 312
    Brazil 319
    Conclusion 323

14. The structure, form and language of statutory rules 327
    Introduction 327
    Statutory liability rules 330
    Statutory strategic rules 332
    Conclusion 348

15. Rules informing adjudication 350
    Introduction 350
<table>
<thead>
<tr>
<th>PART IV CONCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Legal reasoning in environmental law</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>The elements of a legal system</td>
</tr>
<tr>
<td>The international normative framework</td>
</tr>
<tr>
<td>Implementing environmental law nationally</td>
</tr>
<tr>
<td>Approaches to legal reasoning</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
</tbody>
</table>

Bibliography | 436
Index | 445