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Nota di contenuto	Intro -- ASPHALTENES: CHARACTERIZATION, PROPERTIES AND APPLICATIONS -- ASPHALTENES: CHARACTERIZATION, PROPERTIES AND APPLICATIONS -- CONTENTS -- PREFACE -- Chapter 1 CHARACTERIZATION OF ASPHALTENES AND CRUDE OILS BY NEAR-UV/VISIBLE ABSORPTION SPECTROSCOPY -- Abstract -- 1. Introduction -- 2. Coloration Schemes for Characterizing Continuous UVVA Spectra -- 3. Non-Coloration Single-Parameter Characterization of UVVA Spectra -- 4. Effects of Crude Oil Dilution on Characteristic Parameters of UVVA Spectra -- 5. The Use of UVVA Techniques for Revealing Multiple Aggregation Stages of Asphaltenes -- 6. Unveiling Weak Peak Structures in Predominantly Continuous UVVA Spectra -- 7. Non-Existent "Resonance UV Absorption" of Asphaltenes -- 8. On the Possible Nature of Continuum in UVVA Spectra of Asphaltenes -- 8.1. The "Urbach Interpretation" -- 8.2. A Possible Role of Molecular Diversity -- 9. The Most Recent Attempt to Explain UVVA Continuum in Asphaltenes -- Conclusion -- Acknowledgments -- References -- Chapter 2 EFFECT OF ASPHALTENE CONSTITUENTS ON REFINERY PROCESSES AND PRODUCTS -- Abstract -- 1.0. Introduction -- 2.0. Asphaltene Precipitation -- 3.0. Chemical Nature of Asphaltene Constituents -- 4.0. Asphaltene Properties -- 5.0. Sediment Formation -- 6.0. Influence of Asphaltene Constituents on Processing -- 6.1. Separation -- 6.2. Visbreaking -- 6.3. Coking -- 6.4. Catalytic Cracking -- 6.5. Hydroconversion -- 7.0. Effect of Asphaltene

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Sommario/riassunto

Asphaltenes are molecular substances that are found in crude oil, along with resins, aromatic hydrocarbons, and alkanes. This book discusses the characterization of asphaltenes and crude oils using near-UV/visible absorption spectroscopy.
