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Titolo	Behavioral Neuroscience of Alcohol Addiction : Translational Studies and Human Phenotypes / / edited by Wolfgang H. Sommer, Rainer Spanagel
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-032-01585-5
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (473 pages)
Collana	Current Topics in Behavioral Neurosciences, , 1866-3389 ; ; 72
Altri autori (Persone)	SpanagelRainer
Disciplina	612.8
Soggetti	Psychobiology Human behavior Neuropharmacology Medicine - Research Biology - Research Behavioral Neuroscience Translational Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 3 Experimental studies to human alcohol use and addiction -- Modelling Relapse Situations in the Human Laboratory -- Etiological Momentary Assessment of alcohol behaviour in humans -- The Dopamine System in Mediating Alcohol Effects in Humans -- Molecular imaging studies of alcohol use disorder -- The continuing challenges of studying parallel behaviors in humans and animal models -- MRI as an objective tool for animal human translation of alcohol effects -- Part 4 Treatment Approaches to AUD -- Approaches to AUD treatment based on Memory Retrieval and Counter Conditioning -- Approach bias retraining and other behavioral approaches in AUD -- New Approaches to Addiction Treatment based on Learning and Memory -- Brain stimulation to modulate alcohol behavior in animals and humans -- Role of the microbiome and the gut-brain axis in alcohol use disorder potential implication for treatment development.
Sommario/riassunto	Behavioral Neurobiology of Alcohol Addiction explores the forefront of addiction research, integrating fundamental neurobiological

mechanisms with translational insights into human phenotypes. Alcohol addiction remains a major public health concern with extensive medical and societal implications. Understanding its intricate interplay between neurobiology, behavior, and treatment is essential for developing effective interventions. This edition is structured into two volumes: Basic Mechanisms and Animal Studies and Translational Studies and Human Phenotypes. The first volume examines addiction conceptualization, stress and reward systems, and chronic pain. It further explores the cellular, synaptic, and circuit-level consequences of alcohol, incorporating computational and neuroimaging approaches. It also addresses the replication crisis in preclinical research and proposes guidelines to mitigate its impact. The second volume shifts the focus to human studies, covering human laboratory approaches, ecological momentary assessment, molecular imaging, and the challenges of bridging preclinical and clinical research. The book also highlights emerging treatments, including psychological interventions, neuromodulation techniques, and the role of the gut-brain axis. Alcohol use fundamentally alters mood states via brain mechanisms—an insight widely acknowledged by experts and laypeople alike. However, debates surrounding the brain disease model of addiction have intensified in recent years. This collection of articles contributes to this ongoing discussion by reinforcing the importance of a neurobiological perspective in addiction science and demonstrating how advances in neuroscience translate into more effective therapeutic approaches. Written by leading experts in the field, both volumes provide a comprehensive yet accessible resource for addiction researchers, neuroscientists, clinicians, and students. The book aims to deepen the understanding of alcohol addiction and inspire new directions in research and treatment.

2. Record Nr. UNINA9910968235203321

Titolo	Asphaltenes : characterization, properties, and applications / / Jeremy A. Duncan, editor
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2010
ISBN	1-61122-774-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (183 p.)
Collana	Chemical engineering methods and technology
Altri autori (Persone)	DuncanJeremy A
Disciplina	665.5/388
Soggetti	Asphaltene Asphalt
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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 -- Acknowlegments -- 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

Constituents on Product Quality -- 8.0. Conclusion -- References -- Chapter 3 ASPHALT SURFACES AS ECOLOGICAL TRAPS FOR WATER-SEEKING POLAROTACTIC INSECTS: HOW CAN THE POLARIZED LIGHT POLLUTION OF ASPHALT SURFACES BE REDUCED? -- Abstract/Summary -- 1. Introduction: Polarotactic Insects Attracted to Asphalt Roads and Polarized Light Pollution of Asphalt Surfaces. 1.1. Attraction of Polarotactic Aquatic Insects to Dry Asphalt Roads -- 1.2. Polarized Light Pollution and Polarized Ecological Trap -- 2. Method: Measuring the Polarization Patterns of Asphalt Surfaces by Imaging Polarimetry -- 3. Results -- 3.1. Polarotactic Aquatic Insects Observed to Land on Asphalt Roads -- 3.2. Reflection-Polarization Characteristics of Asphalt Surfaces -- 4. Discussion -- 4.1. When Do Asphalt Surfaces Reflect Highly and Horizontally Polarized Light? -- 4.2. Reducing the Polarized Light Pollution of Asphalt Surfaces -- 5. Conclusions -- Acknowledgments -- References -- Chapter 4 EFFECT OF MAGNETIC FIELD ON THE PARAMAGNETIC, ANTIOXIDANT, AND VISCOUS PROPERTIES OF OILS AND RESIN-ASPHALTENE COMPONENTS -- 1. Introduction -- 2. Experimental Methods -- 3. Results and Discussion -- 3.1. Special Features of the Rheological Behavior of Oils in the Magnetic Field -- 3.2. Influence of the Magnetic Field on the Paramagnetic and Antioxidant Oil Properties -- 3.3. Influence of the Magnetic Treatment on the Paramagnetic and Antioxidant Properties of Resin-Asphaltene oil Components -- 4. Conclusions -- References -- Chapter 5 OCCLUSION INSIDE ASPHALTENE AGGREGATES: INSIGHTS INTO THE STRUCTURAL CHARACTERISTICS OF ASPHALTENES AND ITS GEOCHEMICAL SIGNIFICANCE -- Abstract -- 1. Introduction -- 2. Occlusion Phenomenon inside Asphaltene Aggregates -- 3. Release of the Occluded Compounds from Asphaltene Aggregates -- 4. Information from the Occluded Compounds -- 4.1. Some Occluded Compounds Released from Asphaltene Aggregates -- 4.2. Insights into the Structural Characteristics of Asphaltene Aggregates -- 4.3. Geochemical Significance of the Occluded Compounds -- 5. Summary -- Acknowledgments -- References -- INDEX -- Blank Page.

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 alphaltenes and crude oils using near-UV/visible absorption spectroscopy.