1. Record Nr. UNINA9910144289903321

Autore	Hartough H. D (Howard Dale), <1913-1992.>
Titolo	Thiophene and its derivatives [[electronic resource] /] / Howard D. Hartough
Pubbl/distr/stampa	New York, : Wiley, 1952
ISBN	1-282-30137-3 9786612301377 0-470-18652-6 0-470-18802-2
Edizione	[99th ed.]
Descrizione fisica	1 online resource (554 p.)
Collana	The chemistry of heterocyclic compounds ; ; 3
Disciplina	547.594
Soggetti	Thiophenes Heterocyclic compounds
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographies and indexes.
Nota di contenuto	Thiophene and Its Derivatives; Preface; Contents; I. General Discussion; I. History of Thiophene; II. Nomenclature of Thiophene Compounds; III. Occurrence of Thiophene Compounds in Nature; IV. Color Reactions of Thiophene Compounds; V. Estimation of Thiophene; VI. Removal of Thiophene and Its Homologs from Coal Tar Aromatics and Petroleum Stocks; VII. Isomorphism and Physical Properties of Thiophene Compounds; VIII. Odor of Thiophene and Its Derivatives; II. Biological and Pharmacological Activity of Thiophene and Its Derivatives; Introduction; I. General Biological Effects II. Antihistamine CompoundsIII. Pressor Compounds; IV. Local Anesthetics; V. Hypnotics; VI. Antifebrides and Analgesics; VII. Antispasmodics; VIII. Anticonvulsants; IX. Germicides; X. Analogs of DDT; XI. Miscellaneous Compounds and Their Properties; III. Synthesis and Physical Properties of Thiophene and Its Homologs; I. Synthesis of Thiophene and Its Homologs; A. Synthesis of Thiophene and Its Homologs by Ring Closure of Hydrocarbons; 1. Socony-Vacuum Thiophene Process; (a) The Process; (b) Flow of Materials; (c) Equipment; 2. Miscellaneous Methods B. Ring Closure of -Diketones, -Diacides, or -Keto AcidsII. Physical

Properties of Thiophene and Its Homologs; III. Synthesis and Properties of the Hydrothiophenes; A. Thioplenes (Dihydrothiophenes); B. Dihydrothianaphthenes; C. Thiolanes; D. Preparation of 3-Thiolene- and Thiolanecarboxylic Acids; IV. Moloecular Structure and Spectroscopy of the Thiophene and Its Derivatives; Introduction; I. Molecular Structure and Related Properties; A . Bond Distances and Angles of Thiophene; B. Dipole Moments and Resonance in Thiophene Nucleus; C. Miscellanceous Related Properties
II. Theoretical Considerations from the Viewpoint of Spectroscopy and Summary of Published Spectral DataA. Electronic Absorption Spectra; B. Electronic Emission Spectra; C. Vibration Spectra; D. Thermodynamic Functions from Spectroscopic and Molecular Structure Data; III. Applied Spectroscopy; Introduction; A. Ultraviolet Absorption Spectra; B. Infrared Absorption Spectra; C. Mass Spectral Data; V. Factors Affecting Substitution Reactions in the Thiophene Nucleus; Introduction; I . Resonance in the Thiophene Nucleus; II. Directive Influcncc of the Sulfur Atom in Monosubstitution Reactions
III. Directive Influences of Typical Ortho-para-Directing Groups on the Thiophene NucleusIV. Directive Influences of Typical Meta-Directing Groups; V. Methods of Synthesis in the Thiophene Series Based on Directive Influences in the Thiophene Nucleus; A. Preparation of 3-Substituted Thiophenes; 3-Alkylthiophenes; 3-Nitrothiophene; 3-Chlorothiophene; 3-Bromothiophene; 3-Iodothiophene; 3,4-Diaminothiophene; 3-Thenyl Bromide and Some of Its Reactions; B. Syntheses Involving the 3-Methylthiophene Nucleus; C. Synthesis of the Six Isomeric Methylthiophenecarboxylic Acids
5-Methyl-2-thiophenecarboxylic Acid (I)

Sommario/riassunto

Chemistry of Heterocyclic Compounds publishes articles, letters to the Editor, reviews, and minireviews on the synthesis, structure, reactivity, and biological activity of heterocyclic compounds including natural products. The journal covers investigations in heterocyclic chemistry taking place in scientific centers of all over the world, including extensively the scientific institutions in Russia, Ukraine, Latvia, Lithuania and Belarus.