

1. Record Nr.	UNINA9910144282903321
Autore	Brown D. J
Titolo	Fused pyrimidines . Part three Pteridines [[electronic resource] /] / D.J. Brown
Pubbl/distr/stampa	New York, : Wiley & Sons, c1988
ISBN	1-282-30165-9 9786612301650 0-470-18689-5 0-470-18837-5
Descrizione fisica	1 online resource (762 p.)
Collana	Chemistry of heterocyclic compounds ; ; 24/3
Disciplina	547.593 547/.59/05 547/.593
Soggetti	Pteridines Pyrimidines
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliography and index.
Nota di contenuto	FUSED PYRIMIDINES; Contents; List of Tables; CHAPTER I. INTRODUCTION TO THE PTERIDINES; 1. History; 2. Nomenclature; 3. The Basis of Pteridine Chemistry; 4. A General Summary of Pteridine Chemistry; A. Electrophilic Reactions; B. Direct Nucleophilic Substitutions; C. Nucleophilic Metatheses; (1) Replacement of Halogeno Substituents; (a) By Amino or Substituted-Amino Groups; (b) By Hydroxy-Oxo Substituents; (c) By Alkoxy or Aryloxy Groups; (d) By Mercapto- Thioxo Substituents; (e) By Alkylthio or Arylthio Groups; (f) By Sulfo Groups; (g) By Other Groups; (2) Replacement of Alkoxy Groups (3) Replacement of Alkylthio Groups(4) Replacement of Sulfo Groups; (5) Replacement of Alkylsulfonyl Groups; D. Other Metatheses; (1) Pteridinones to Chloropteridines; (2) Pteridinones to Pteridinethiones; (3) Pteridinethiones to Pteridinones; (4) Pteridinones to Pteridinamines; (5) Pteridinethiones to Pteridinamines or Pteridinimines; (6) Pteridinamines or Pteridinimines to Pteridinones; E. Addition Reactions; (1) Covalent Hydration and Similar Additions; (2) Addition of

Phenyllithium; F. Oxidative Reactions; (1) Nuclear Oxidation; (2) Formation of N-Oxides
(3) Oxidative Modification of Groups(a) C- Methyl to C-Formyl; (b) C-Alkyl to C-Acyl; (c) Alkyl to Carboxy; (d) Hydroxyalkyl to Formyl; (e) Hydroxyalkyl to Carboxy; (f) C-Formyl to Carboxy; (g) C-Acyl to Carboxy; (h) Pteridinethiones to Dipteridinyl Disulfides; (i) Thioxo to Sulfeno, Sulfino, or Sulfo; (j) Alkylthio to Alkylsulfinyl or Alkylsulfonyl;
G. Reductive Reactions; (1) Nuclear Reduction; (2) Reductive Removal of Groups; (3) Reductive Modification of Groups; (a) C-Formyl to Hydroxymethyl; (b) Carboxy or Alkoxy-carbonyl to Hydroxymethyl; (c) C-Acyl to Hydroxyalkyl or Alkyl
(d) Cyano to Aminomethyl(e) Sulfo, Sulfino, or Sulfeno to Thioxo; H. Other Substituent Modifications; (1) Modification of Alkyl Groups; (2) Modification of Oxo Substituents; (3) Modification of Thioxo Substituents; (4) Modification of Amino Groups; (a) Amino to Acylamino; (b) Amino to Alkylideneamino; (c) Amino to Alkylamino; (d) Transamination; (5) Modification of Carboxy and Related Groups; (a) Carboxy to Related Groups; (b) Alkoxy-carbonyl to Related Groups; (c) Carbamoyl to Related Groups; (d) Cyano to Related Groups; (e) C-Formyl to Related Groups; (f) C-Acyl to Related Groups
I. DecarboxylationJ. Homolytic C-Acylation; K. Degradation to Pyrazines or Pyrimidines; (1) Degradation of Pteridine; (2) Degradation of Pteridinones; (3) Degradation of Pteridinamines and Pteridinimines; (4) Degradation of Pteridine N-Oxides; 5. Physical Properties of Pteridines;
CHAPTER II. PRIMARY SYNTHESSES FROM PYRIMIDINES; 1. The Gabriel and Colman Synthesis from 4,5- Pyrimidinediamines and -Dicarbonyl Compounds; A. Use of the -Dialdehyde, Glyoxal; B. Use of - Aldehydoketones; (1) Simple Cases; (2) Cases with One Functional Group; (3) Cases with Two Functional Groups
(a) The 6- or 7-Alkyl-2-amino-4(3H)-pteridinones

Sommario/riassunto

Introduction to the Pteridines. Primary Syntheses from Pyrimidines. Primary Syntheses from Pyrazines or Other Heterocycles. Pteridine and Its Alkyl and Aryl Derivatives. Halogenopteridines. Tautomeric Pteridinones and Extranuclear Hydroxypteridines. Aloxyppteridines, N-alkylpteridines, and Pteridine N-oxides. The Sulfur-containing Pteridines. Pteridine Amines and Imines. Pteridinecarboxylic Acids and Related Compounds. The Hydropteridines. Ionization and Spectra. Table of Simple Pteridines. References. Index.
