Graphical Abstracts

Heterocycl. Commun. 3 (1997) 109-113

CHEMISTRY OF THE ANIONICALLY ACTIVATED PERFLUOROALKYL GROUP IN HETEROCYCLIC SYNTHESIS

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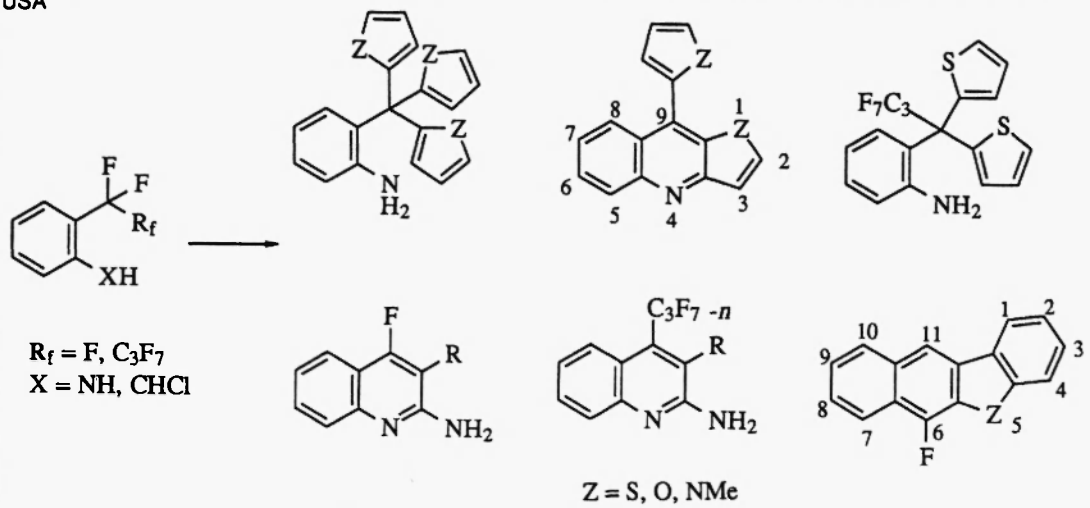

Heterocycl. Commun. 3 (1997) 115-122

Synthesis and Mass Spectral Studies of *N*-Arylphthalimides

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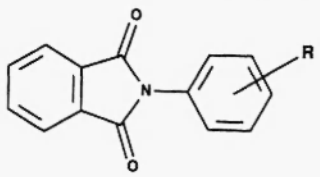

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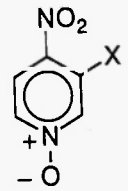
Heterocycl. Commun. 3 (1997) 123-126

AN ^{17}O NMR SPECTROSCOPY STUDY OF 3-SUBSTITUTED 4-NITROPYRIDINE N-OXIDES

[a]Alexander Perjéssy, [b]Danuta Rasala, [c]Ryszard Gawinecki and [d]David W. Boykin*
[a]Department of Organic Chemistry, Faculty of Natural Sciences, Comenius University, Bratislava, Mlynska dolina CH-2, 842 15 Bratislava, Slovak Republic, [b]Institute of Chemistry, Pedagogical University, Checinska, 25-020 Kielce, Poland, [c]Department of Chemistry, Technical and Agricultral University, Seminaryjna 3, 85-326, Bydgoszcz, Poland, [d]Department of Chemistry, Georgia State University Atlanta, GA 30303-3083, USA

Natural abundance ^{17}O NMR chemical shift data were obtained, in acetonitrile at 75°C, for twelve 3-substituted-4-nitropyridine N-oxides.



Heterocycl. Commun. 3 (1997) 127-133

FACILE ROUTE TO 1-ALKOXY-3-PYRROLIN-2-ONES BY CYCLIC SULPHINYLATION OF N-ALKOXY-2-VINYLGLYCOLAMIDES

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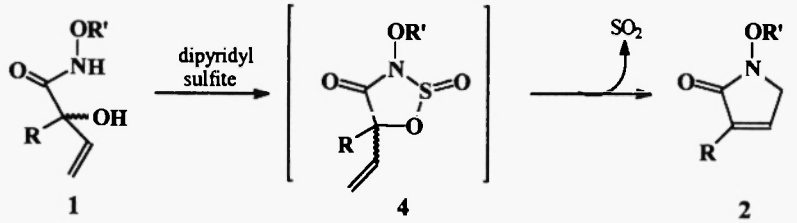
The cyclic sulphinylation of N-alkoxy-2-vinylglycolamides 1 with dipyridyl sulfite provides an easy access to 3-substituted 1-alkoxy-3-pyrrolin-2-ones 2 .



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Heterocycl. Commun. 3 (1997) 135-138

Selenium-Mediated Synthesis of Tetrahydroisoquinoline Ring Systems: Application to the Preparation of 6-Deoxy-2,3-Di-*O*-benzyl Lycoricidine

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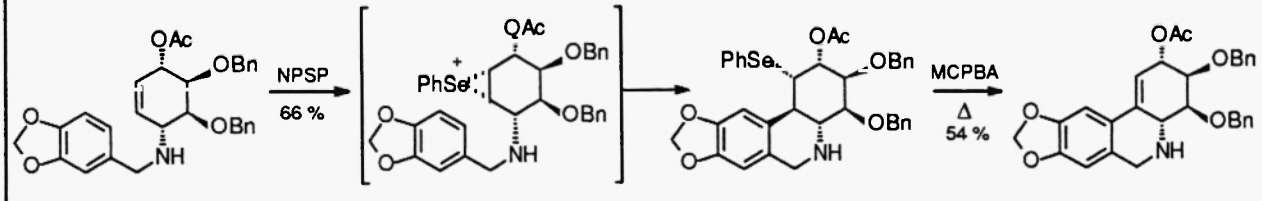
Laboratoire de Synthèse Organique et Réactivité - Faculté des Sciences, Kenitra (Morroko); Laboratoire de Méthodologie et Synthèse Enantiospécifique de Biomolécules associé au CNRS, Université Henri Poincaré-Nancy I, B.P. 239, F-54506 Vandoeuvre (France)

A new strategy for the synthesis of the tetrahydroisoquinoline skeleton based on episelenonium chemistry and its application to the synthesis of a protected derivative of 6-deoxy-lycoricidine are described.



Heterocycl. Commun. 3 (1997) 139-145

SYNTHESIS AND ANTIMICROBIAL ACTIVITY OF SULPHONAMIDE, IMIDAZOLINONE, N,N'-(DIARYL DIAMINO)PHOSPHINIC CHLORIDE DERIVATIVES HAVING "FLUCHLORALIN" MOIETY.

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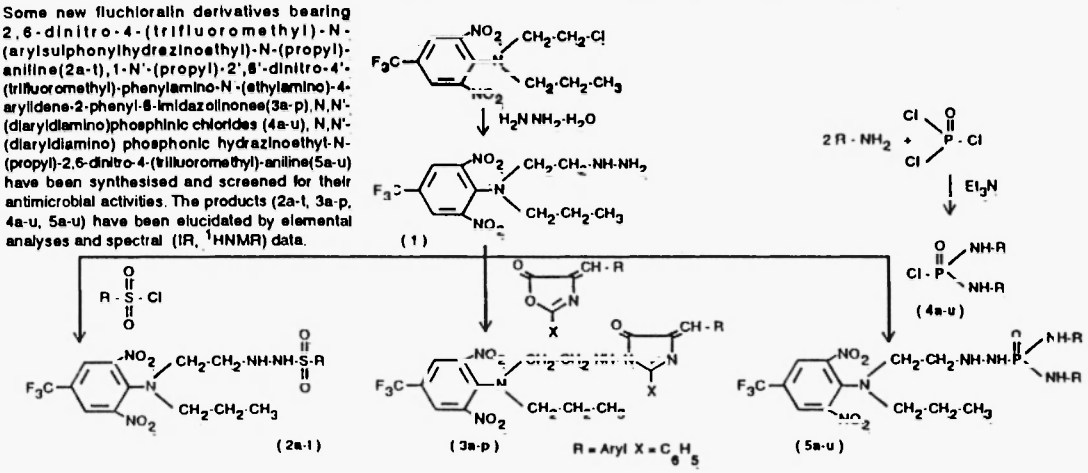
Department of Chemistry, Saurashtra University, Rajkot - 360 005. India

Some new fluchloralin derivatives bearing 2,6-dinitro-4-(trifluoromethyl)-N-(arylsulphonylhydrazinoethyl)-N-(propyl)-aniline(2a-t), 1-N'-(propyl)-2',6'-dinitro-4'-(trifluoromethyl)-phenylamino-N-(ethylamino)-4-arylidene-2-phenyl-5-imidazolinones(3a-p), N,N'-(diaryldiamino)phosphinic chlorides (4a-u), N,N'-(diaryldiamino) phosphonic hydrazinoethyl-N-(propyl)-2,6-dinitro-4-(trifluoromethyl)-aniline(5a-u) have been synthesised and screened for their antimicrobial activities. The products (2a-t, 3a-p, 4a-u, 5a-u) have been elucidated by elemental analyses and spectral (IR, ^{1}HNMR) data.



Heterocycl. Commun. 3 (1997) 147-150

A COMPARATIVE STUDY OF THE OXIDATION OF HANTZSCH ESTERS INDUCED BY TAFF-METALLIC NITRATES.

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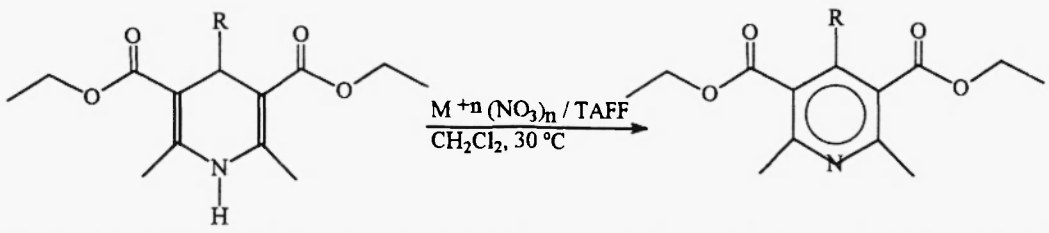
(2) Escuela Nacional de Ciencias Biológicas, Instituto Politécnico Nacional, Departamento de Química Orgánica, Prolongación Carpio y Plan de Ayala, Casco de Santo Tomás, México D. F., CP 11340.

(3) Instituto de Quimica, Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria, México D.F., CP 04510.

Several 4 - (substituted) -Hantzsch esters upon oxidation with bentonite supported metallic nitrates (Ag^+, Fe^{+3}, Cu^{+2}, Co^{+2}) under mild conditions, afforded the corresponding pyridines. As a result of a comparative study, a synergism between the nitrate and the metallic ions with the TAFF support is suggested.



Heterocycl. Commun. 3 (1997) 151-158

A Novel Route To Polyfunctionally Substituted Methylpyrimidinylcarbonitriles and A Pyridopyrimidine.

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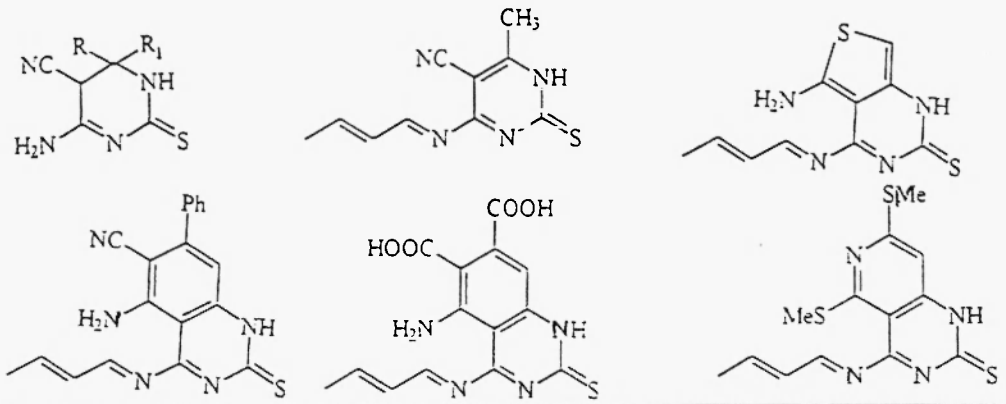
1) Chemistry Department, Faculty of Science, Helwan University, Helwan, Cairo, Egypt.

2) Chemistry Department, Faculty of Science, Kuwait University, B.O.P. 5969-Safat-13060, Kuwait.

A novel route for synthesis of pyrimidinethione, thienopyrimidine, quinoxaline and pyridopyrimidine and molecular mechanics study are reported.



Heterocycl. Commun. 3 (1997) 159-162

Anodic Oxidations of α-Santonine in Acetonitrile.

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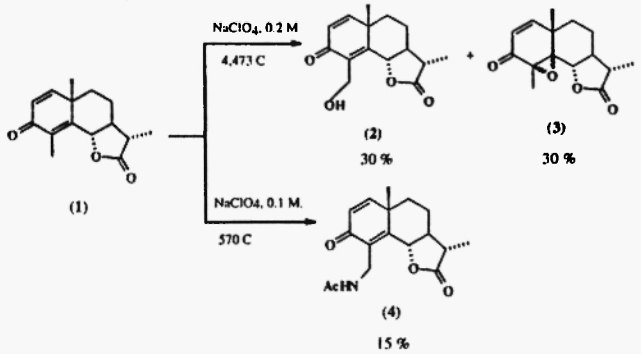
Instituto de Química de la Universidad Nacional Autónoma de México, Circuito Exterior Coyoacán, 04510 México D.F.

[1]Facultad de Química, División de Estudios de Posgrado, UNAM, Coyoacán 04510, Mexico D. F.

[2]Facultad de Estudios Superiores, UNAM, Cuautitlán Izcalli, Estado de México, México.

Electrochemical oxidations of α-Santonine (1) were performed under different experimental conditions yielding the following products: 14 hydroxy-α-santonine (2), 5-epoxy-α-santonine (3), 14-acetamide-α-santonine (4) and α-santonic acid. The mechanism of these transformations are discussed in the communication.

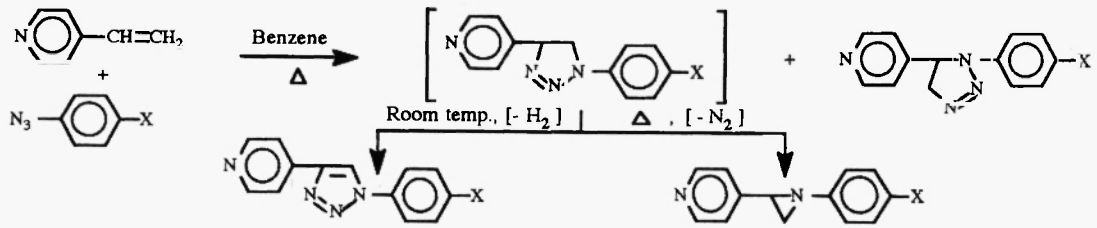


Heterocycl. Commun. 3 (1997) 163-168

TRIAZOLINES 30. NONREGIOSPECIFIC 1,3-CYCLOADDITION OF ARYL AZIDES TO VINYL-PYRIDINES: A UNIQUE ROUTE TO PYRIDYL SUBSTITUTED AZIRIDINES (1)

Pankaja K. Kadaba and Zhaiwei Lin, Division of Medicinal Chemistry and Pharmaceutics, College of Pharmacy, Chandler Medical Center, University of Kentucky, Lexington, Kentucky 40536-0082, U.S.A. and K and K Biosciences, Inc., 3411 Brookhaven Drive, Lexington, Kentucky 40502-3330, U.S.A.

The 1,3-cycloaddition of phenyl azides to vinylpyridines is nonregiospecific and leads to 1-phenyl-2-pyridylaziridines as the major product via the unstable 1-phenyl-4-pyridyltriazoline intermediate.



Heterocycl. Commun. 3 (1997) 169-174

SYNTHESIS OF SOME NOVEL 1,3,4-OXADIAZOLES AND 5-OXO-IMIDAZOLINES AS POTENT BIOLOGICALLY ACTIVE AGENTS.

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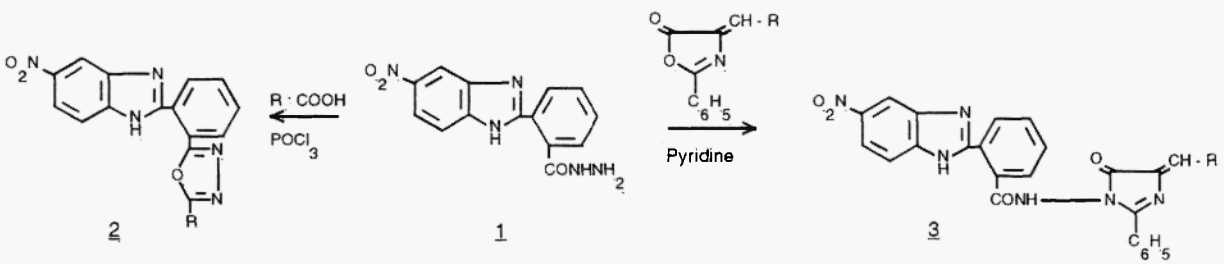
Department of Chemistry , Saurashtra University, Kalawad Road, Rajkot - 360 005. INDIA.

Formation of 1,3,4 - oxadiazoles ***2a-o*** and 5 - oxo - imidazolines ***3a-m*** are reported from ***1.*** The compounds were evaluated for their antimicrobial and antitubercular activity.



Heterocycl. Commun. 3 (1997) 175-181

REACTIONS OF PHENYLISOINDOLES WITH SOME SELECTED ORGANIC ACCEPTORS

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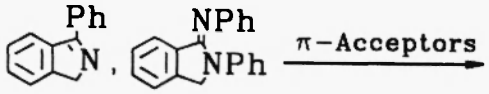
a: Chemistry Department, Faculty of Science, El-Minia University, El-Minia, Egypt.
b: Chemistry Department, Faculty of Science, Ismailia University, Ismailia, Egypt.

1-Phenylisoindole **I** and 2-phenyl-1-phenyliminо-2,3-dihydro-1H-isoindole **II** (electron donors) reacted with π-acceptors in the way that, the methylene group in the donor molecules studied is the active center responsible for all subsequent reactions.



Heterocycl. Commun. 3 (1997) 183-191

ON THE *N*-OXIDATION OF THIENO[*b*]-2,5-NAPHTHYRIDINES

Patrick Björk, Anna-Britta Hörnfeldt and Salo Gronowitz*

Organic Chemistry 1, Chemical Center, University Lund, Box 124, S-221 00, Lund, Sweden

Abstract: Thieno[*b*]-2,5-naphthyridine-*N*-oxides have been prepared both in a Pd(0)-catalysed ring-closure between *t*-butyl-*N*-(trimethylstannylthienyl)carbamates and 2-chloro-3-formylpyridine-*N*-oxide or 2-(2-bromo-3-pyridyl)-1,3-dioxolane-*N*-oxide using copper(II)oxide as co-reagent, and by oxidation of the parent compounds with *m*-chloroperbenzoic acid.