

Graphical abstracts

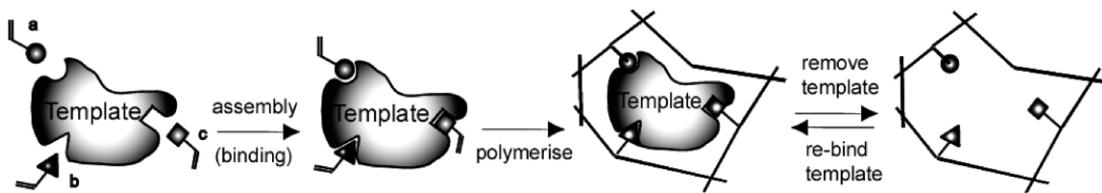
Imprinted polymers: artificial molecular recognition materials with applications in synthesis and catalysis

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^aSchool of Pharmacy and Biomedical Sciences, University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth PO1 2DT, UK

^bSchool of Chemistry, University of Reading, Whiteknights, Reading RG6 6AD, UK

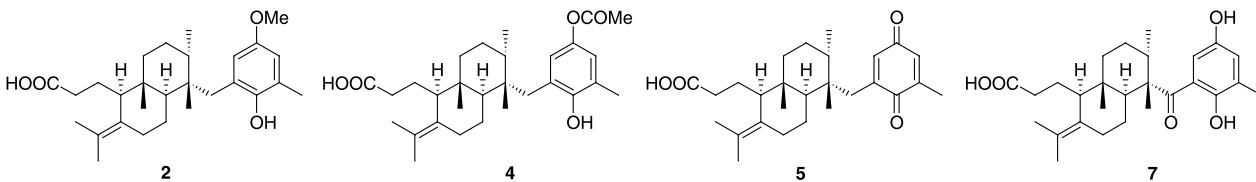
Schematic of molecular imprinting.



On the relative stereochemistry of atomeric acid and related compounds

Enrique Dorta, Ana R. Díaz-Marrero, Mercedes Cueto* and José Darias

Instituto de Productos Naturales y Agrobiología del CSIC, Avda. Astrofísico F. Sánchez, 3, Apdo. 195, 38206 La Laguna, Tenerife, Spain



A new and stereospecific synthesis of an inositol analogue: bis-homoinositol

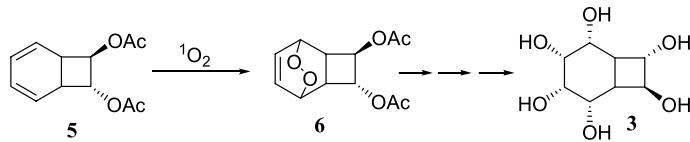
Tetrahedron 59 (2003) 2063

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The photooxygenation of diacetate **5** afforded the bicyclic endoperoxide **6**. Reduction of the endoperoxide followed by KMnO₄ oxidation gave dihydroxytetraacetate. Ammonolysis of tetraacetate afforded the bis-homoinositol **3**.



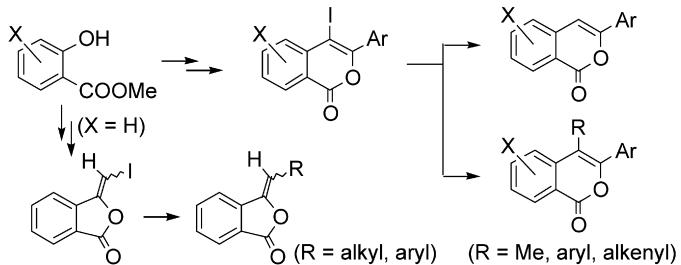
Synthesis of 3-arylisocoumarins, including thunberginols A and B, unsymmetrical 3,4-disubstituted isocoumarins, and 3-ylideneephthalides via iodolactonization of methyl 2-ynylbenzoates or the corresponding carboxylic acids

Tetrahedron 59 (2003) 2067

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^bFacoltà di Scienze M.F.N., Università del Molise, via Mazzini 8, 86170 Isernia, Italy

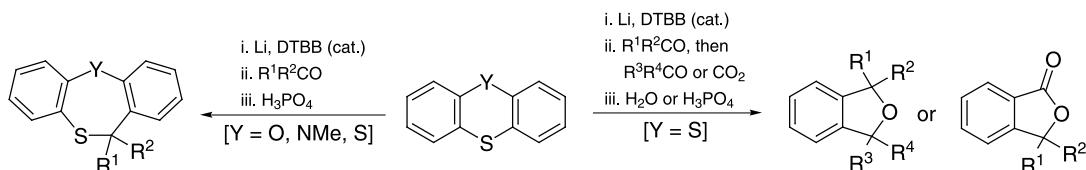


Dibenzothiepins, phthalans and phthalides from 4-heterosubstituted dibenzothiins

Tetrahedron 59 (2003) 2083

Miguel Yus, Francisco Foubelo* and José V. Ferrández

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, E-03080 Alicante, Spain

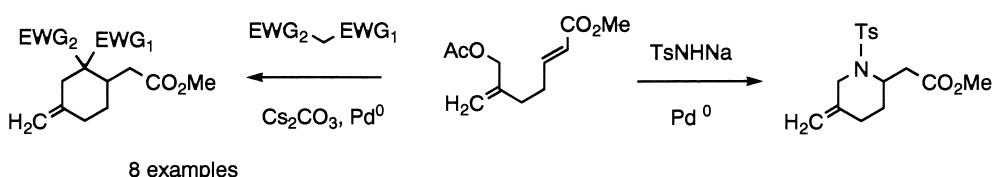


The six-membered annulation reaction involving sequential palladium-catalyzed allylic alkylation and Michael addition: scope and limitations

Tetrahedron 59 (2003) 2093

Céline Jousse-Karinthi, Fatima Zouhiri, Jacqueline Mahuteau and Didier Desmaële*

Unité de Chimie Organique Associée au CNRS, Faculté de Pharmacie, Université Paris Paris XI, 5, rue Jean-Baptiste Clément, 92296 Châtenay-Malabry, France

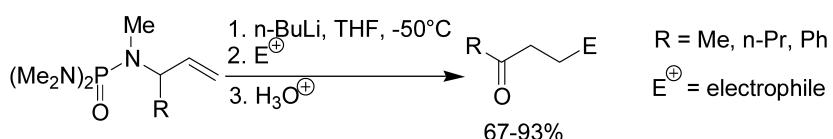


New ketone homoenolate anion equivalents derived from (alkenyl)pentamethyl phosphoric triamides

Tetrahedron 59 (2003) 2101

Claude Grison,* Antoine Thomas, Frédéric Coutrot and Philippe Coutrot*

Laboratoire de Chimie Organique Biomoléculaire, Institut Nancéien de Chimie Moléculaire, FR CNRS 1742, UMR 7565, Université Henri Poincaré, Nancy 1, BP 239, 54506 Vandoeuvre-les-Nancy cedex, France



The use of an electrophile carrier to determine the number of intermediates in the chlorination of 1-methylpyrrole

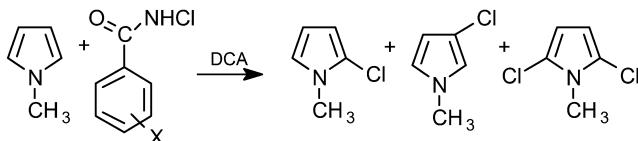
Tetrahedron 59 (2003) 2125

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Torsional angles in 6,6'-bridged atropoisomeric biphenyls control the electrophilic substitution with phthalimidesulfenyl chloride

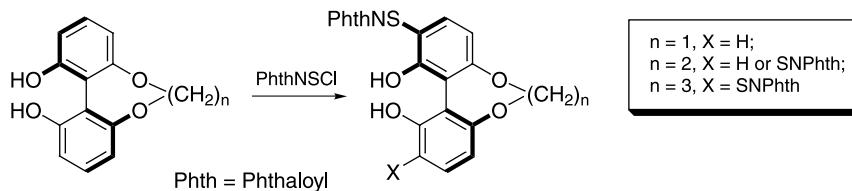
Tetrahedron 59 (2003) 2131

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Reagent concentration effects in the REM resin solid phase synthesis of tertiary amines

Tetrahedron 59 (2003) 2137

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The use of reagent concentration has resulted in increased rates for all stages of the REM resin synthesis of tertiary amines. These increases in rate translate into faster reaction times, higher yields and lower reagent consumption and were observed with a variety of resin matrices. Of the methods examined, the most successful was the use of perfluorous solvents, either alone or with a small amount of organic co-solvent.

New concept for the preparation of potassium sodides: the use of hexane as a non-polar solvent

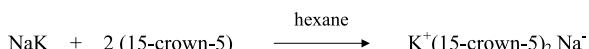
Tetrahedron 59 (2003) 2147

Zbigniew Grobelny,^a Andrzej Stolarzewicz,^{a,b,*} Barbara Morejko-Buż^{a,b} and Antoni Winiarski^c

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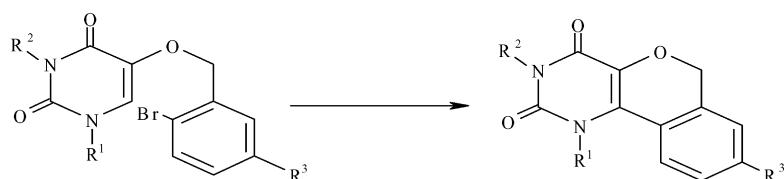


Regioselective synthesis of 1*H*,3*H*,6*H*[2]benzopyrano[4,3-*d*]-pyrimidine-2,4-diones and 12*H*-benzopyrano[3,2-*c*]-[1]benzopyran-5-ones by radical cyclization

Tetrahedron 59 (2003) 2151

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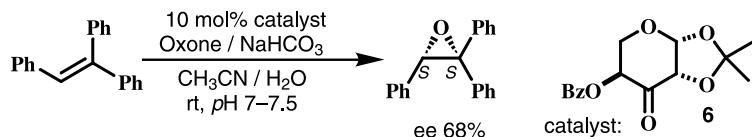


Catalytic asymmetric epoxidation of alkenes with arabinose-derived uloses

Tetrahedron 59 (2003) 2159

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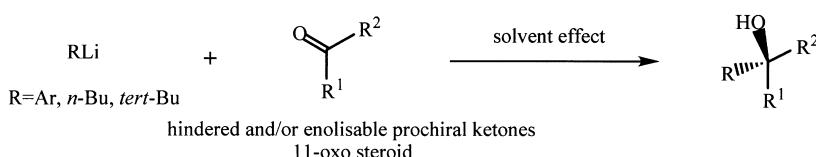


Improved addition of organolithium reagents to hindered and/or enolisable ketones

Tetrahedron 59 (2003) 2169

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Rapid access to acyclic nucleosides via conjugate addition

Tetrahedron 59 (2003) 2177

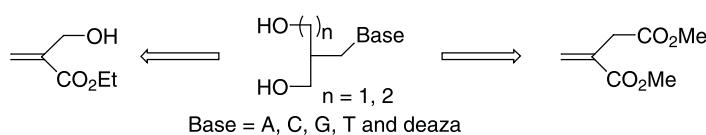
Stéphane Guillarme,^a Stéphanie Legoupy,^a Anne-Marie Aubertin,^b Cécile Olicard,^c Nathalie Bourgougnon^c and François Huet^{a,*}

^aLaboratoire de Synthèse Organique, UMR CNRS 6011, Faculté des Sciences et Techniques, Université du Maine, Avenue Olivier Messiaen, F-72085 Le Mans cedex 9, France

^bFaculté de Médecine, Institut de Virologie, INSERM U 544, Université Louis Pasteur, 3 rue Koeberlé, F-67000 Strasbourg, France

^cLaboratoire de Biologie et Chimie Moléculaires, Centre de recherche et d'enseignement Yves Coppens, Campus de Tohannic, BP 573, F-56017 Vannes, France

Michael addition proved to be efficient to introduce natural and deaza purine and pyrimidine bases.



Microwave effects in solvent-free esters aminolysis

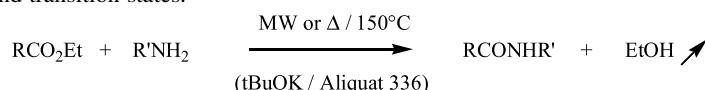
Tetrahedron 59 (2003) 2185

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^bLaboratoire de Microstructure et Mécanique des Matériaux, UPRESA 8006, ENSAM, 151, bd de l'hôpital, 75013 Paris, France

Solvent-free aminolysis was studied under microwave or conventional heating either in the absence of base or induced by KOtBu with or without phase transfer agent. The specific microwave effects were shown to be dependent on the conditions and discussed in terms of relative polarities of ground and transition states.



R = C₆H₅, C₆H₅CH₂, n-C₅H₁₁ R' = C₆H₅, C₆H₅CH₂, n-C₈H₁₇