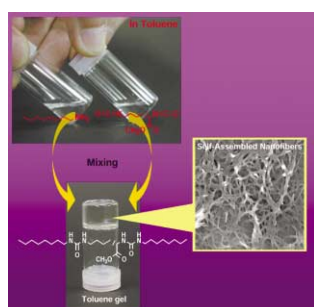


Organic & Biomolecular Chemistry

INDEXED IN MEDLINE

Incorporating Acta Chemica Scandinavica

**Cover**

See Masahiro Suzuki, Yasushi Nakajima, Mariko Yumoto, Mutsumi Kimura, Hirofusa Shirai and Kenji Hanabusa, pp. 1155–1159.

The cover shows a unique method of organogel formation, “*in situ* organogelation”.

The *in situ* organogelation has the following advantages: (i) a heating process is omitted, (ii) the organogelation is achieved at room temperature, (iii) the organogelation time is shortened, and (iv) it can gel the solvents that cannot gel through conventional organogelation.

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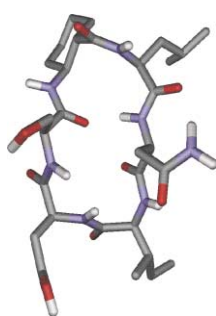
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contents

COMMUNICATIONS



1105 1109

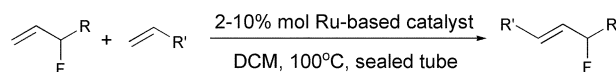


Structural properties of cyclic peptides containing *cis*- or *trans*-2-aminocyclohexane carboxylic acid

Ulf Strijowski and Norbert Sewald

Synthesis and investigation of the conformational properties of peptides containing either *cis*- or *trans*-2-aminocyclohexane carboxylic acids.

1110 1112



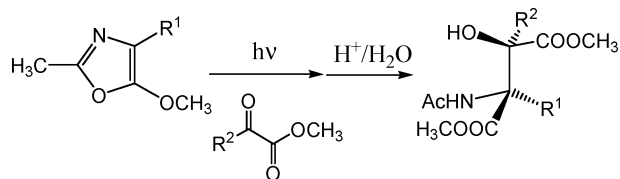
Stereoselective synthesis of internal allylic fluorides

Sébastien Thibaudeau, Robert Fuller and Véronique Gouverneur

Ru-based catalysts can be used in *E*-selective cross metathesis reactions to synthesise various functionalised internal allylic monofluorides.



1113 1115



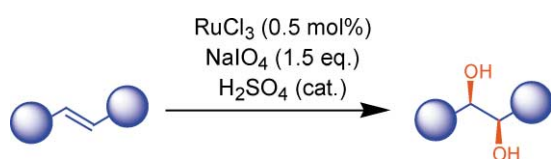
Stereoselective generation of vicinal stereogenic quaternary centers by photocycloaddition of 5-methoxy oxazoles to α -keto esters: synthesis of *erythro* β -hydroxy dimethyl aspartates

Axel G. Griesbeck, Samir Bondock and Johann Lex

The photocycloaddition of α -keto esters to 4-alkylated 5-methoxy oxazoles with subsequent hydrolytic ring-opening serves as an efficient route to vicinal quaternary aspartate derivatives.

ARTICLES

1116 1124



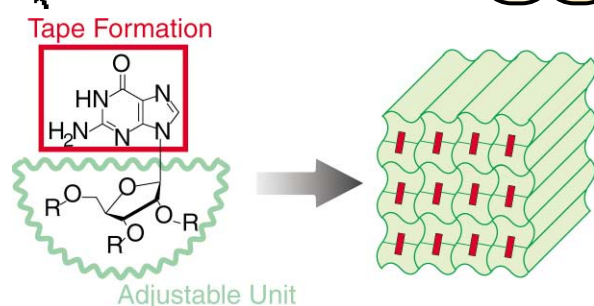
The acid accelerated ruthenium-catalysed dihydroxylation. Scope and limitations

Bernd Plietker, Meike Niggemann and Anja Pollrich

An intense investigation on the scope and limitations of the acid accelerated RuO_4 -catalysed dihydroxylation proves this transformation to be broadly applicable.



1125 1132



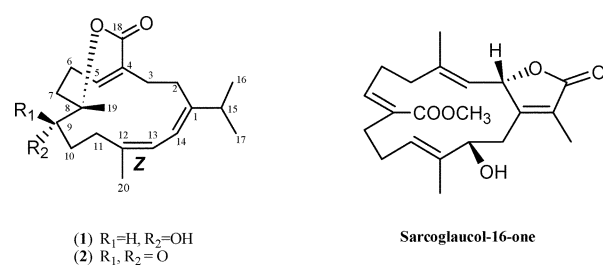
Use of an adjustable soft segment as an effective molecular design for crystal engineering of hydrogen-bonded tape motifs

Ryoichi Takasawa, Isao Yoshikawa and Koji Araki

Flexible and adjustable alkylsilylated ribose units showed a buffer or a filling effect in crystal packing of robust tape motifs.



1133 1138



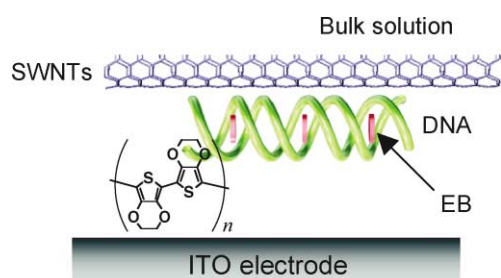
Two new bicyclic cembranolides from a new *Sarcophyton* species and determination of the absolute configuration of sarcoglaucol-16-one

Harald Gross, Anthony D. Wright, Winfried Beil and Gabriele M. König

Two novel and unusual bicyclic cembranolides containing a 12Z double bond from a new *Sarcophyton* species (**1** and **2**) are reported. The absolute stereochemistry of sarcoglaucol-16-one and sarcophine was determined.



1139 1144



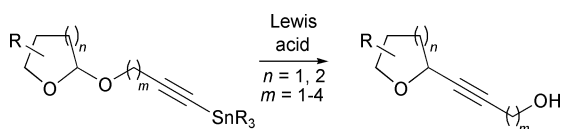
Electrochemical fabrication of single-walled carbon nanotubes–DNA complexes by poly(ethylenedioxythiophene) and photocurrent generation by excitation of an intercalated chromophore

Ah-Hyun Bae, Tsukasa Hatano, Naotoshi Nakashima, Hiroto Murakami and Seiji Shinkai

It was found that single-walled carbon nanotubes solubilized into water by complexation with salmon testes DNA can be readily deposited on the ITO electrode by electrochemical oxidative polymerization of ethylenedioxythiophene.



1145 1154

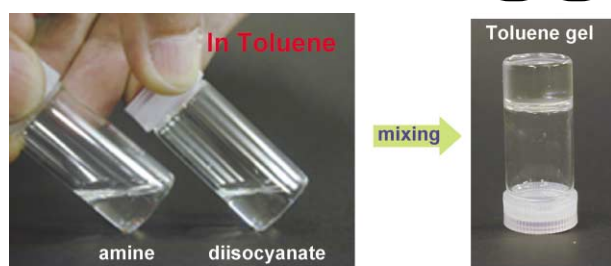


Anomeric oxygen to carbon rearrangements of alkyne tributylstannane derivatives of furanyl (γ)- and pyranyl (δ)-lactols

Marianne F. Buffet, Darren J. Dixon, Steven V. Ley, Dominic J. Reynolds and R. Ian Storer

Anomerically linked alkyne tributylstannane derivatives of furanyl and pyranyl ethers undergo an oxygen to carbon rearrangement on exposure to Lewis acid.

1155 1159



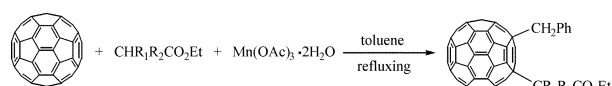
In situ organogelation

In situ organogelation at room temperature: direct synthesis of gelators in organic solvents

Masahiro Suzuki, Yasushi Nakajima, Mariko Yumoto, Mutsumi Kimura, Hirofusa Shirai and Kenji Hanabusa

The formation of organogels through *in situ* organogelation is achieved at room temperature within several seconds.

1160 1163

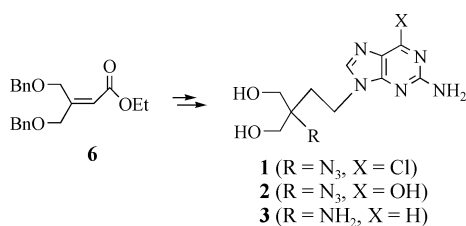


Selective addition to [60]fullerene of two different radicals generated from Mn(III)-based radical reaction

Guan-Wu Wang, Ting-Hu Zhang, Xin Cheng and Fan Wang

Reaction of [60]fullerene in toluene with diethyl methylmalonate, diethyl ethylmalonate, diethyl bromomalonate, triethyl methanetricarboxylate and ethyl cyanoacetate in the presence of manganese(III) acetate afforded benzyl-substituted unsymmetrical 1,4-adducts.

1164 1168

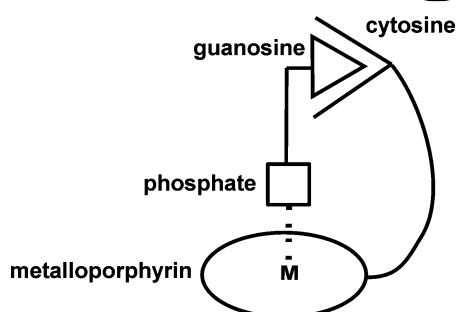


Synthesis and biological evaluation of novel *tert*-azido or *tert*-amino substituted penciclovir analogs

Hea Ok Kim, Hye Won Baek, Hyung Ryong Moon, Dae-Kee Kim, Moon Woo Chun and Lak Shin Jeong

Synthesis of *tert*-azido or amino substituted penciclovir analogs via Brønsted acid-catalysed 1,4-conjugate addition is described.

1169 1175

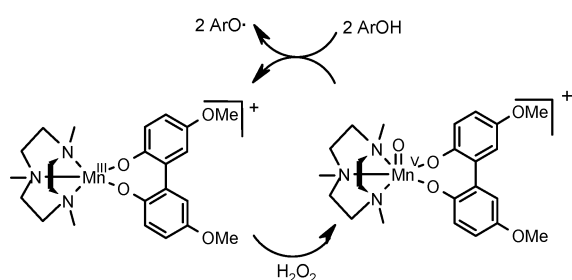


Cytosine-substituted metalloporphyrins: receptors for recognition of nucleotides in ion-selective electrodes

Vladimír Král, Tatiana V. Shishkanova, Jonathan L. Sessler and Christopher T. Brown

Specifically functionalized with a cytosine “tail”, metalloporphyrins (M = Zn and Co) can act as selective recognition elements for ion-selective electrodes providing a selective for 5'-GMP under appropriately chosen conditions.

1176 1180

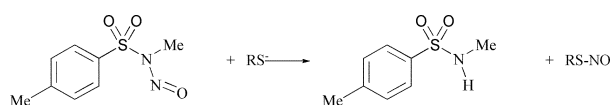


Formation and reaction of O=Mn^V species in the oxidation of phenolic substrates with H₂O₂ catalysed by the dinuclear manganese(IV) 1,4,7-trimethyl-1,4,7-triazacyclononane complex [Mn^{IV}₂(μ-O)₃(TMTACN)₂](PF₆)₂

Bruce C. Gilbert, John R. Lindsay Smith, Antoni Mairata i Payeras and John Oakes

Mn^{III} and O=Mn^V species are key intermediates in the oxidation of phenols by H₂O₂ catalysed by a dinuclear Mn^{IV}TMTACN complex.

1181 1185

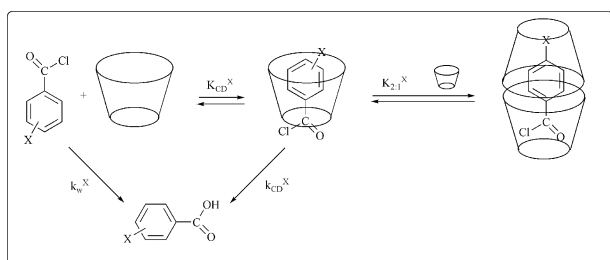


Reactivity of sulfur nucleophiles with *N*-methyl-*N*-nitroso-*p*-toluenesulfonamide

C. Adam, L. García-Río and J. R. Leis

Solvational imbalance is observed in nitrosation of cysteine by *N*-methyl-*N*-nitroso-*p*-toluenesulfonamide.

1186 1193

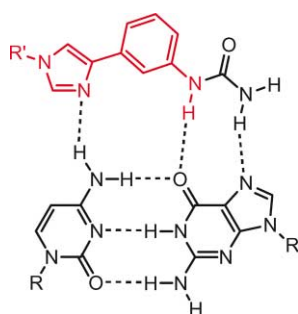


Cyclodextrin effect on solvolysis of substituted benzoyl chlorides

J. Báscuas, L. García-Río and J. R. Leis

Solvolysis of substituted benzoyl chlorides in the presence of cyclodextrins is affected by cyclodextrin and substrate nature, yielding different stoichiometries and catalytic effects.

1194 1198

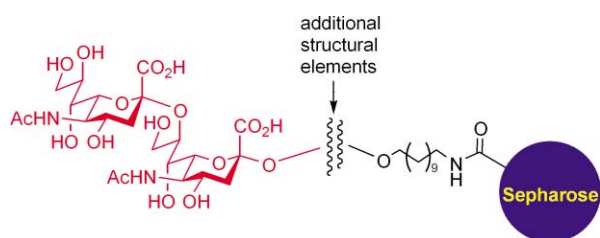


CG base pair recognition by substituted phenylimidazole nucleosides

Wei Wang, Maria G. M. Purwanto and Klaus Weisz

NMR experiments elucidate the binding and specificity of various nonnatural 4-phenylimidazole nucleosides toward a CG Watson-Crick base pair.

1199 1212



Synthesis of ganglioside epitopes for oligosaccharide specific immunoadsorption therapy of Guillain-Barré syndrome

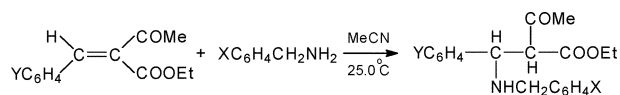
Søren M. Andersen, Chang-Chun Ling, Ping Zhang, Kate Townson, Hugh J. Willison and David R. Bundle

Immuno-affinity ligands containing the disialoside epitope function as extracorporeal immunoadsorbents for the removal of pathological auto-antibodies that cause neuromuscular paralysis.

1213 1216

Kinetics and mechanism of benzylamine additions to ethyl α -acetyl- β -phenylacrylates in acetonitrile

Hyuck Keun Oh, In Kon Kim, Dae Dong Sung and Ikchoon Lee



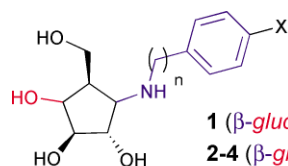
single step

The addition occurs in a single step with concurrent formation of the C $_{\alpha}$ -N and C $_{\beta}$ -H bonds through a four-center hydrogen bonded transition state.

1217 1226

Structure–activity relationships in aminocyclopentitol glycosidase inhibitors

Lucas Gartenmann Dickson, Emmanuel Leroy and Jean-Louis Reymond

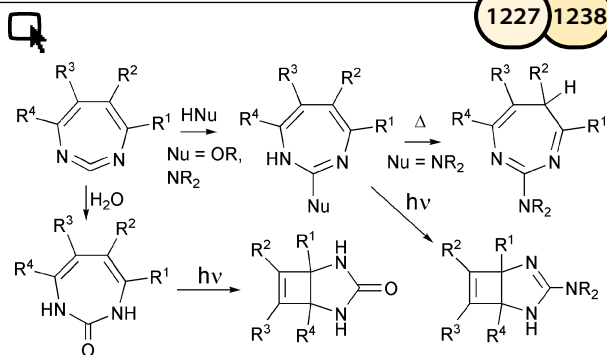
**1** (β -*gluco*, n = 1, X = COOH)**2-4** (β -*gluco*, n = 1-3, X = H)**5** (β -*galacto*, n = 1, X = H)**6** (α -*galacto*, n = 1, X = H)

Aminocyclopentitols **1–6** bearing an aglycon mimic at nitrogen were prepared and their submicromolar glycosidase inhibition was compared with that of other aminocyclopentitols.

1227 1238

1*H*-1,3-Diazepines, 5*H*-1,3-diazepines, 1,3-diazepinones, and 2,4-diazabicyclo[3.2.0]heptenes

Ales Reisinger, Rainer Koch, Paul V. Bernhardt and Curt Wentrup

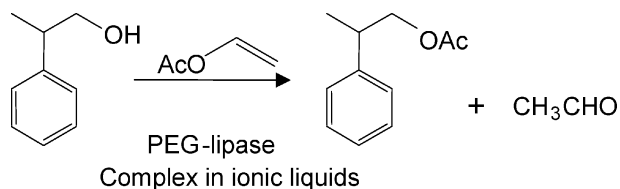


The syntheses of the title compounds by photolysis of tetrazolo[1,5-*a*]pyridines/2-azidopyridines and trapping of 1,3-diazacyclohepta-1,2,4,6-tetraenes with nucleophiles are described.

1239 1244

Poly(ethylene glycol)-lipase complexes that are highly active and enantioselective in ionic liquids

Tatsuo Maruyama, Hiroshi Yamamura, Takahiro Kotani, Noriho Kamiya and Masahiro Goto

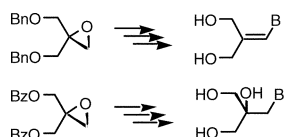


Lipases in a complex form with poly(ethylene glycol) are highly active and enantioselective in ionic liquids.

1245 1254

Preparation and antiviral properties of new acyclic, achiral nucleoside analogues: 1- or 9-[3-hydroxy-2-(hydroxymethyl)prop-1-enyl]nucleobases and 1- or 9-[2,3-dihydroxy-2-(hydroxymethyl)propyl]nucleobases

Thomas Boesen, Christian Madsen, Daniel Sejer Pedersen, Brian M. Nielsen, Asger B. Petersen, Michael Å. Petersen, Michael Munck, Ulla Henriksen, Claus Nielsen and Otto Dahl

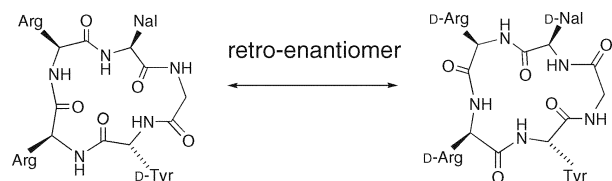


B = adenine, cytosine, 5-methylcytosine, guanine, thymine

New nucleoside analogues have been prepared and evaluated against HIV-1 and HSV-1 viruses. Some of the unsaturated pyrimidine nucleosides had a tendency to cyclize by an intramolecular Michael addition reaction.



1255 1257



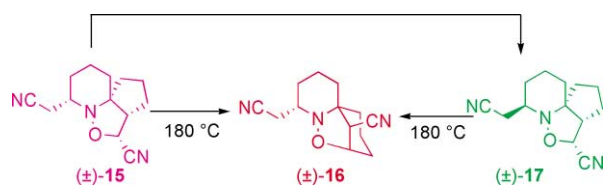
Topochemical exploration of potent compounds using retro-enantiomer libraries of cyclic pentapeptides

Hirokazu Tamamura, Makiko Mizumoto, Kenichi Hiramatsu, Shuichi Kusano, Shigemi Terakubo, Naoki Yamamoto, John O. Trent, Zixuan Wang, Stephen C. Peiper, Hideki Nakashima, Akira Otaka and Nobutaka Fujii

Utility of retro-enantiomer libraries as the third generation of cyclic pentapeptide libraries was studied.



1258 1265



Investigation of conjugate addition/intramolecular nitrone dipolar cycloadditions and their use in the synthesis of dendrobatid alkaloid precursors

Helen T. Horsley, Andrew B. Holmes, John E. Davies, Jonathan M. Goodman, María A. Silva, Sofia I. Pascu and Ian Collins

The azaspirocyclic dinitrile histrionicotoxin precursor **16** is formed in 78% yield by a cascade sequence through the isoxazolidine intermediates **15** and **17**.

CONFERENCE DIARY

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Dates, venues and contact details of forthcoming events.

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