

Tetrahedron Letters Vol. 50, No. 26, 2009

Tetrahedron Letters 50th Anniversary Special Issue

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Preface

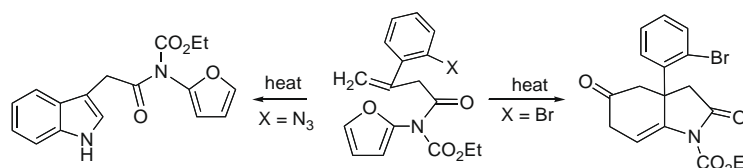
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COMMUNICATIONS

Cycloaddition studies directed toward the strychnos alkaloid minfiensine

pp 3145–3147

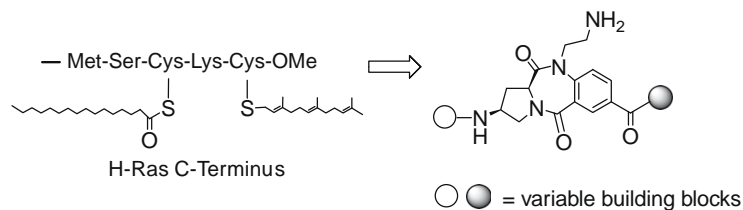
Drew R. Bobeck, Stefan France, Carolyn A. Leverett, Fernando Sánchez-Cantalejo, Albert Padwa *



Solid-phase synthesis of benzodiazepinediones mimicking the C-terminus of the H-Ras protein

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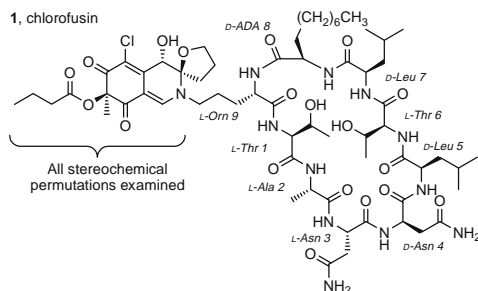
Björn Ludolph, Herbert Waldmann *



Evaluation of chlorofusin, its seven chromophore diastereomers, and key analogues

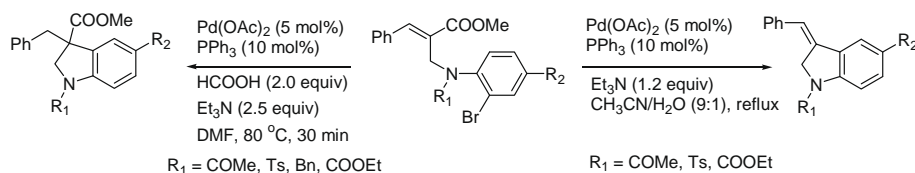
pp 3151–3153

Ryan C. Clark, Sang Yeul Lee, Inkyu Hwang, Mark Searcey, Dale L. Boger *

**Reductive Heck cyclization versus δ -carbon elimination/decarboxylation: synthesis of dihydroindole and indoles from Baylis–Hillman adducts**

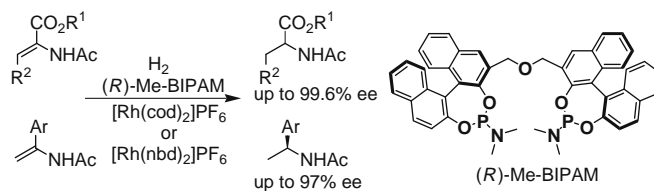
pp 3154–3157

Hoo Sook Kim, Hyun Seung Lee, Se Hee Kim, Jae Nyoun Kim *

**A chiral bidentate phosphoramidite (*Me*-BIPAM) for Rh-catalyzed asymmetric hydrogenation of α -dehydroamino esters, enamides, and dimethyl itaconate**

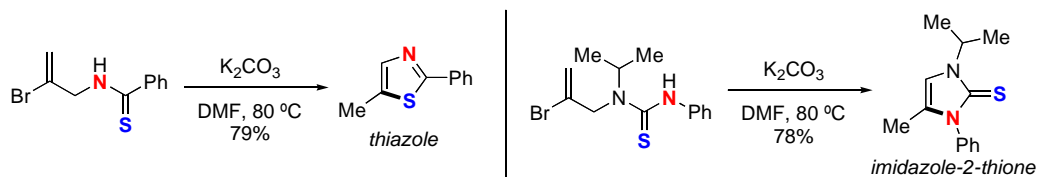
pp 3158–3160

Kazunori Kurihara, Yasunori Yamamoto *, Norio Miyaura *

**Intramolecular nucleophilic substitution at an sp^2 carbon: synthesis of substituted thiazoles and imidazole-2-thiones**

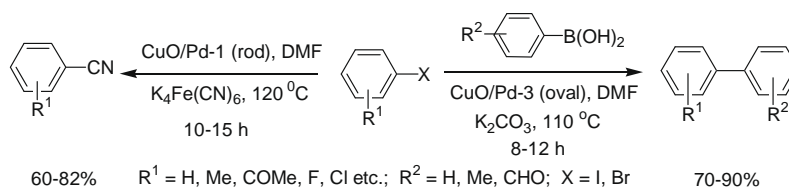
pp 3161–3163

Shu-Su Shen, Mao-Yi Lei, Yun-Xuan Wong, Mun-Ling Tong, Priscilla Lu-Yi Teo, Shunsuke Chiba, Koichi Narasaka *



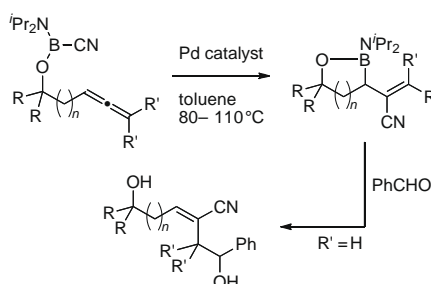
Shape-dependent catalytic activity of copper oxide-supported Pd(0) nanoparticles for Suzuki and cyanation reactions pp 3164–3167

Kalicharan Chattopadhyay, Raju Dey, Brindaban C. Ranu *

**Palladium-catalyzed intramolecular cyanoboration of allenyl boronates leading to the regioselective synthesis of β -cyanoallylboranes**

pp 3168–3170

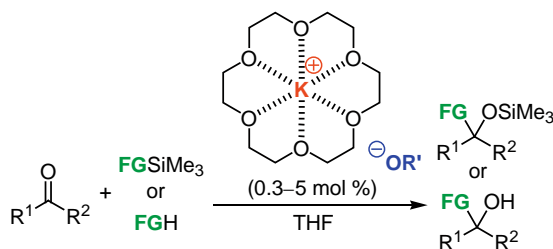
Akihiko Yamamoto, Yuto Ikeda, Michinori Suginome *



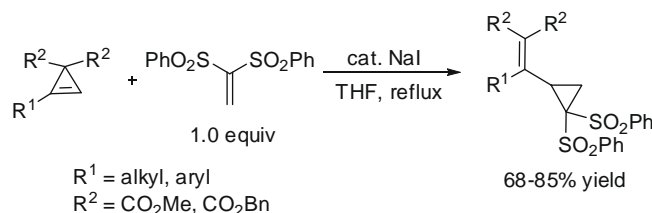
Intramolecular addition of the boron-cyanide bond of cyanoboranes across C=C bond of allenyl boronates took place in the presence of a palladium catalyst to afford β -cyanoallylboranes, which reacted with aldehydes to form allylation products.

Highly efficient synthesis of functionalized tertiary alcohols catalyzed by potassium alkoxide-crown ether complexes pp 3171–3174

Manabu Hatano, Shinji Suzuki, Eri Takagi, Kazuaki Ishihara *

**Synthesis of polyfunctionalized vinyl cyclopropanes via the NaI-catalyzed ring-opening cyclization of doubly activated cyclopropenes with 1,1-bis(phenylsulfonyl)ethylene** pp 3175–3177

Jie Chen, Ning Xin, Shengming Ma *

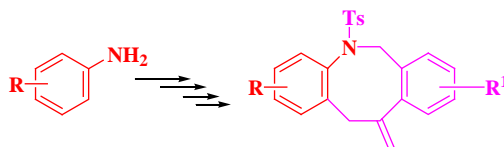


A NaI-catalyzed reaction of 3,3-bis(alkoxycarbonyl)cyclopropenes in the presence of 1,1-bis(phenylsulfonyl)ethylene providing an efficient route to a series of polyfunctionalized vinyl cyclopropanes is described. The reaction is general for a range of different 3,3-bis(alkoxycarbonyl)cyclopropenes affording the products in moderate to high yields. A plausible rationale for this transformation is discussed.



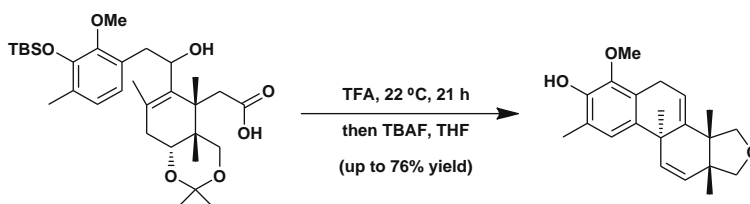
Synthesis of highly substituted dibenzoazocine derivatives by the aza-Claisen rearrangement and intramolecular Heck reaction via 8-*exo*-trig mode of cyclization pp 3178–3181

K. C. Majumdar*, Buddhadeb Chattopadhyay, Srikanta Samanta



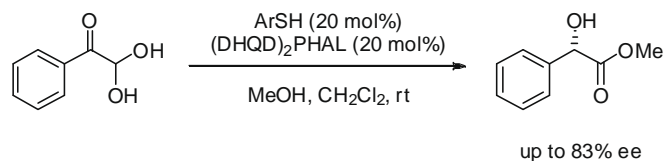
Unexpected decarbonylation during an acid-mediated cyclization to access the carbocyclic core of zoanthenol pp 3182–3184

Jennifer L. Stockdill, Douglas C. Behenna, Brian M. Stoltz*



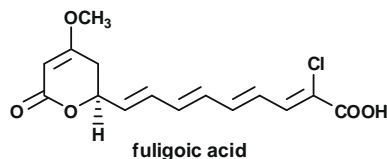
Organocatalytic conversion of arylglyoxals into optically active mandelic acid derivatives pp 3185–3188

Ellen Schmitt, Ingo Schiffrers, Carsten Bolm*



Fuligoic acid, a new yellow pigment with a chlorinated polyene-pyrone acid structure isolated from the myxomycete *Fuligo septica* f. *flava* pp 3189–3190

Akinori Shintani, Takashi Ohtsuki, Yukinori Yamamoto, Takashi Hakamatsuka, Nobuo Kawahara, Yukihiko Goda, Masami Ishibashi*

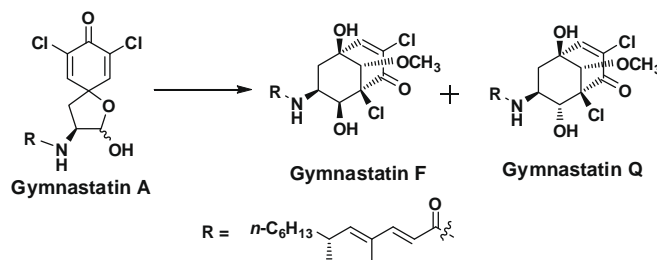


Chemical analysis of the myxomycete *Fuligo septica* f. *flava* led to the isolation of fuligoic acid, a new chlorinated polyene-pyrone acid.

A synthetic study on gymnastatins F and Q: the tandem Michael and aldol reaction approach

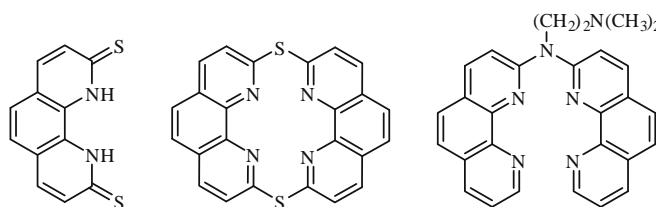
pp 3191–3194

Kyoko Murayama, Takamasa Tanabe, Yuichi Ishikawa, Kensuke Nakamura, Shigeru Nishiyama *

**Displacement reactions of 2-chloro- and 2,9-dichloro-1,10-phenanthroline: synthesis of a sulfur-bridged bis-1,10-phenanthroline macrocycle and a 2,2'-amino-substituted-bis-1,10-phenanthroline**

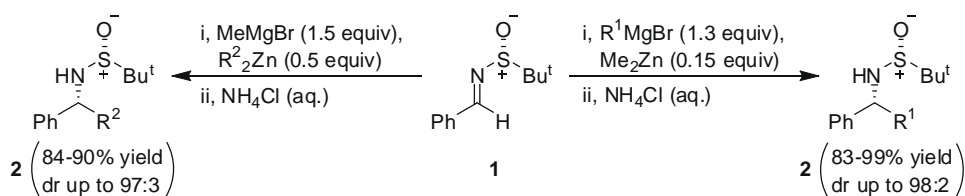
pp 3195–3197

A. Paul Krapcho *, Silvia Sparapani, Amber Leenstra, Joshua D. Seitz

**An improved procedure for the diastereoselective addition of triorganozincates to *N*-(*tert*-butanesulfinyl)imines: use of catalytic dialkylzinc**

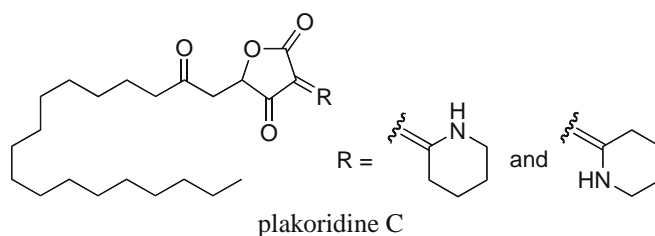
pp 3198–3201

Raquel Almansa, David Guijarro *, Miguel Yus *

**Plakoridine C, a novel piperidine alkaloid from an Okinawan marine sponge *Plakortis* sp.**

pp 3202–3204

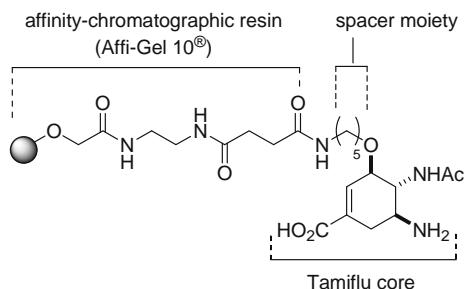
Yuichiro Ishiguro, Takaaki Kubota, Kan'ichiro Ishiuchi, Jane Fromont, Jun'ichi Kobayashi *



Design and synthesis of immobilized Tamiflu analog on resin for affinity chromatography

pp 3205–3208

Yasuaki Kimura, Kenzo Yamatsugu, Motomu Kanai*, Noriko Echigo, Takashi Kuzuhara, Masakatsu Shibasaki*

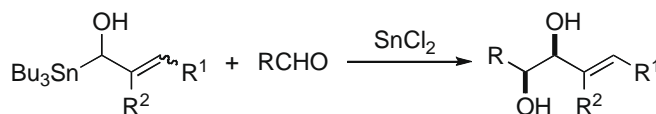


An immobilized Tamiflu analog for affinity chromatography was synthesized to identify possible endogenous target proteins in vertebrates.

Highly stereoselective synthesis of vicinal diols by stannous chloride-mediated addition of hydroxyallylic stannanes to aldehydes

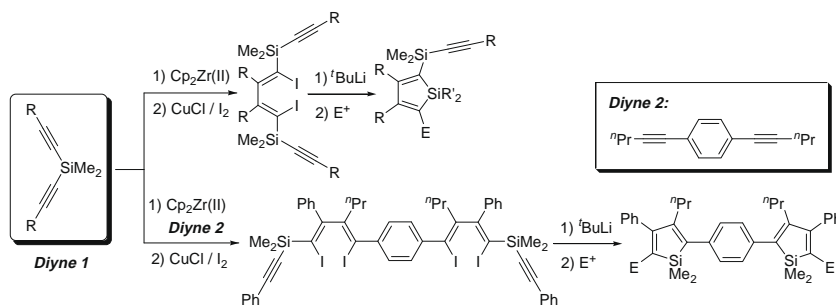
pp 3209–3212

Makoto Yasuda*, Tatsuya Azuma, Kensuke Tsuruwa, Srinivasarao Arulananda Babu, Akio Baba*

Preparation of hydroxyallylic stannanes by the reaction of an α,β -unsaturated aldehyde with Bu_3SnLi and their addition to aldehydes in the presence of SnCl_2 to give vicinal diols in a highly stereoselective manner.**Synthesis of functionalized siloles from Si-tethered diynes**

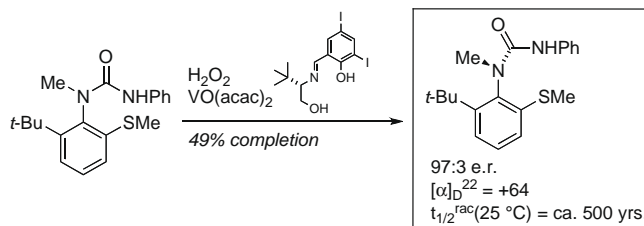
pp 3213–3215

Qian Luo, Li Gu, Chao Wang, Junhui Liu, Wenxiong Zhang, Zhenfeng Xi*

**Enantiomerically enriched atropisomeric *N,N*-diaryl ureas by oxidative kinetic resolution of their 2-sulfanyl derivatives**

pp 3216–3219

Jonathan Clayden*, Hazel Turner

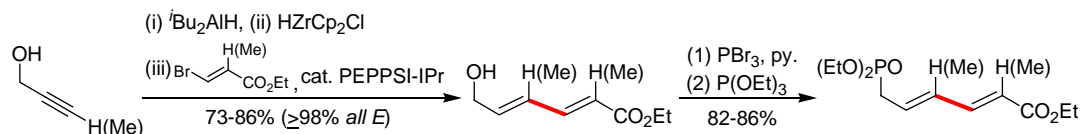


Kinetic resolution in the oxidation of sulfanylureas to sulfanylureas yields enantiomerically enriched atropisomers.

Highly stereoselective and efficient synthesis of ω -heterofunctional di- and trienoic esters for Horner–Wadsworth–Emmons reaction via alkyne hydrozirconation and Pd-catalyzed alkenylation

pp 3220–3223

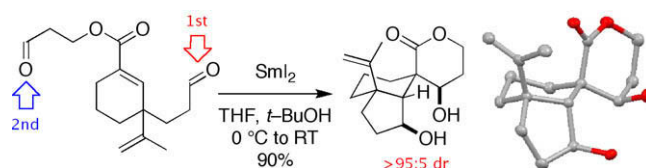
Guangwei Wang, Zhihong Huang, Ei-ichi Negishi *



Sml₂-mediated dialdehyde cyclization cascades

pp 3224–3226

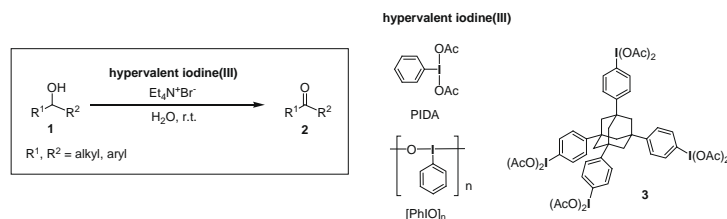
Matthew D. Helm, David Sucunza, Madeleine Da Silva, Madeleine Helliwell, David J. Procter *

Dialdehydes undergo sequenced Sml₂-mediated cyclization cascades generating four contiguous stereocenters with high diastereocontrol.

Hypervalent iodine(III)/Et₄N⁺Br⁻ combination in water for green and racemization-free aqueous oxidation of alcohols

pp 3227–3229

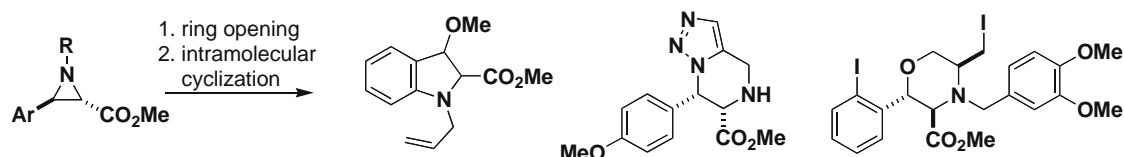
Naoko Takenaga, Akihiro Goto, Misaki Yoshimura, Hiromichi Fujioka, Toshifumi Dohi, Yasuyuki Kita *

We have found that the use of a hypervalent iodine(III)/Et₄N⁺Br⁻ combination *in water* can significantly enhance its oxidation ability and oxidize a wide range of alcohols **1** to carbonyl compounds **2** without racemization. Utilization of the recyclable reagent **3** as a more practical alternative to PhI(OAc)₂ is also successful in these reactions.

Aziridines as intermediates in diversity-oriented syntheses of alkaloids

pp 3230–3233

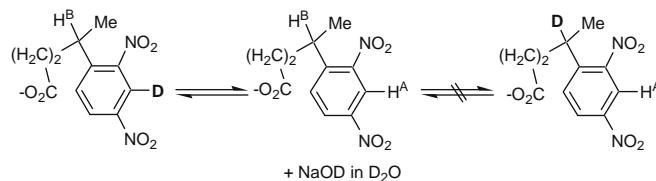
Alexander M. Taylor, Stuart L. Schreiber *

The efficient synthesis of small molecules that collectively comprise optimal small-molecule screening collections is an important goal. With this in mind, we have used *N*-alkyl aziridines in a regio- and stereochemically controlled synthesis of polycyclic heterocycles based on nucleophilic ring opening and subsequent intramolecular cyclization.

A readily observed base-catalyzed isotopic exchange in a 2,4-dinitroalkyl benzene

pp 3234–3236

Nick Backstrom, C. Ian F. Watt *

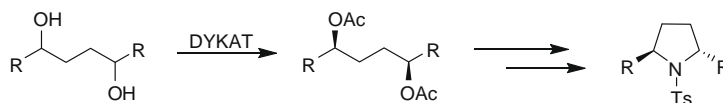


Isotopic exchange in a water-soluble 2,4-dinitroalkyl benzene occurs exclusively at the 3-position of the benzene ring and is readily observed by H NMR spectroscopy.

Dynamic kinetic asymmetric transformation of 1,4-diols and the preparation of trans-2,5-disubstituted pyrrolidines

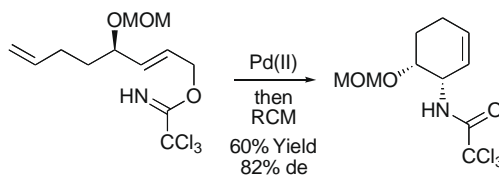
pp 3237–3240

Linnéa Borén, Karin Leijondahl, Jan-E. Bäckvall *

**Tandem aza-Claisen rearrangement and ring-closing metathesis reactions: the stereoselective synthesis of functionalised carbocyclic amides**

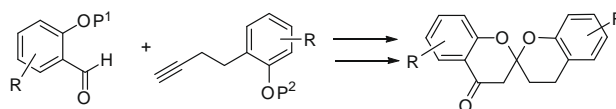
pp 3241–3244

Michael D. Swift, Adele Donaldson, Andrew Sutherland *

**Synthesis of 6,6-bisbenzannulated spiroketals related to the rubromycins using a double intramolecular hetero-Michael addition (DIHMA)**

pp 3245–3248

Peter J. Choi, Dominea C. K. Rathwell, Margaret A. Brimble *

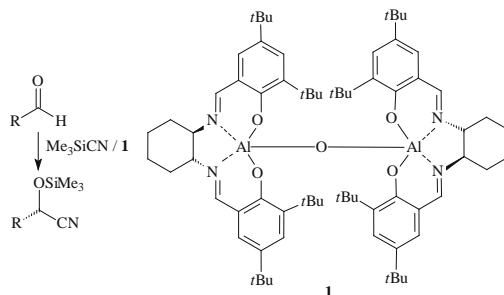


The synthesis of a series of 6,6-bisbenzannulated spiroketals using a novel microwave-assisted DIHMA approach is reported.

A bimetallic aluminium(salen) complex for asymmetric cyanohydrin synthesis

pp 3249–3252

Michael North*, Courtney Williamson

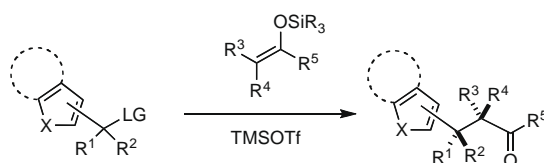


In the presence of a phosphine oxide cocatalyst, bimetallic aluminium(salen) complex **1** was found to catalyse the asymmetric addition of trimethylsilyl cyanide to aldehydes.

Synthesis of β -heteroaryl propionates via trapping of carbocations with π -nucleophiles

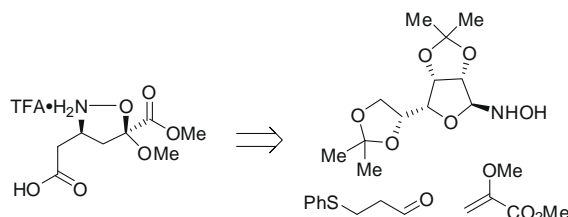
pp 3253–3257

Tsung-hao Fu, Amy Bonaparte, Stephen F. Martin*

**Synthesis of an enantiopure isoxazolidine monomer for β^3 -aspartic acid in chemoselective β^3 -oligopeptide synthesis**

pp 3258–3260

Hiroshi Ishida, Nancy Carrillo, Jeffrey W. Bode*

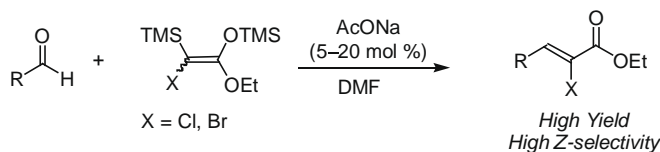


The synthesis of an enantiopure isoxazolidine monomer for the incorporation of β^3 -aspartic acid residues into β^3 -oligopeptides via chemoselective α -ketoacid-hydroxylamine amide formation.

**A convenient method for the synthesis of (Z)- α -haloacrylates: Lewis base-catalyzed carbonyl olefination using α -halo-C,O-bis(trimethylsilyl)ketene acetals**

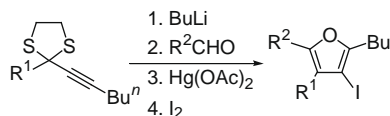
pp 3261–3262

Makoto Michida, Takako Toriumi, Teruaki Mukaiyama*



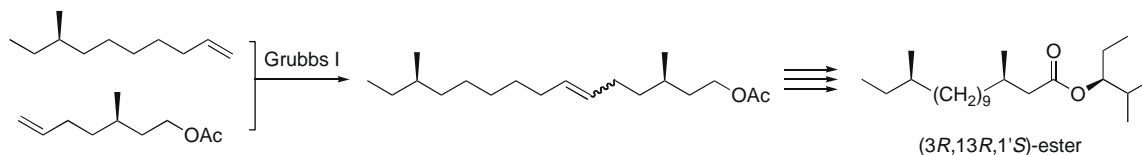
Mercuric acetate-mediated annulation of homopropargylic alcohols having thioether substituent. A general route for the synthesis of tetrasubstituted furans from propargylic dithioacetals pp 3263–3265

Chih-Wei Chen, Tien-Yau Luh *



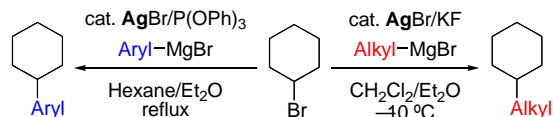
Synthesis of all the four stereoisomers of (1'S)-1-ethyl-2-methylpropyl 3,13-dimethylpentadecanoate, the major component of the sex pheromone of Paulownia bagworm, *Clania variegata* pp 3266–3269

Kenji Mori *, Takuya Tashiro



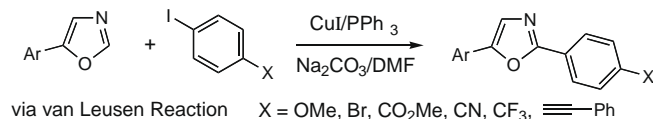
Silver-catalyzed cross-coupling reactions of alkyl bromides with alkyl or aryl Grignard reagents pp 3270–3272

Hidenori Someya, Hideki Yorimitsu *, Koichiro Oshima *



Synthesis of 2,5-diaryloxazoles through van Leusen reaction and copper-mediated direct arylation pp 3273–3276

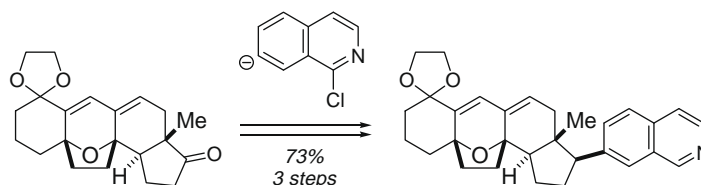
Tomoki Yoshizumi, Tetsuya Satoh, Koji Hirano, Daisuke Matsuo, Akihiro Orita, Junzo Otera *, Masahiro Miura *



Efficient and stereoselective installation of isoquinoline: formal total synthesis of cortistatin A

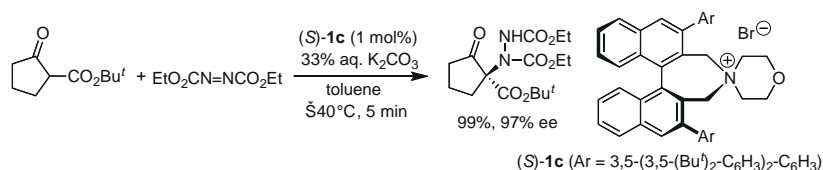
pp 3277–3279

Shuji Yamashita *, Kazuki Kitajima, Kentaro Iso, Masahiro Hirama *

**Highly efficient asymmetric amination of β -keto esters catalyzed by chiral quaternary ammonium bromides**

pp 3280–3282

Quan Lan, Xisheng Wang, Rongjun He, Changhua Ding, Keiji Maruoka *

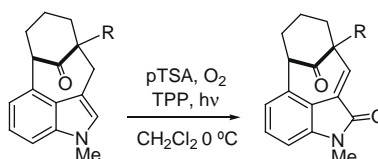


A highly efficient asymmetric amination of β -keto esters was achieved with high enantioselectivity under phase transfer conditions using chiral quaternary ammonium bromide as a catalyst.

Singlet oxygen conversion of indoles into α,β -unsaturated oxindoles in model compounds related to the welwitindolinone alkaloids

pp 3283–3286

Valerie Boissel, Nigel S. Simpkins *, Gurdip Bhalay

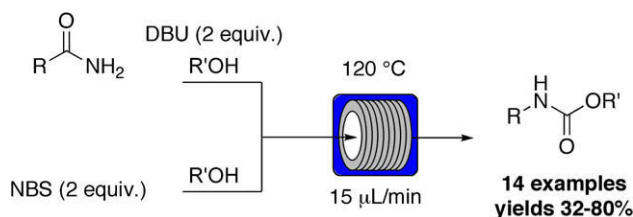


A series of conformationally restricted bridged indoles, having structures related to the natural alkaloid *N*-methylwelwitindolinone C isothiocyanate (welwistatin), are oxidised to the corresponding α,β -unsaturated oxindoles by treatment with singlet oxygen.

**A microfluidic flow chemistry platform for organic synthesis: the Hofmann rearrangement**

pp 3287–3289

Alessandro Palmieri, Steven V. Ley *, Kelvin Hammond, Anastasios Polyzos, Ian R. Baxendale

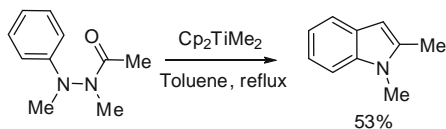


We report on the use of commercially available chemical microreactors to effect the Hofmann rearrangement of aromatic amides to the corresponding carbamates.

Synthesis of indoles via alkylidenation of acyl hydrazides

pp 3290–3293

Kevin Hisler, Aurélien G. J. Commeureuc, Sheng-ze Zhou, John A. Murphy *

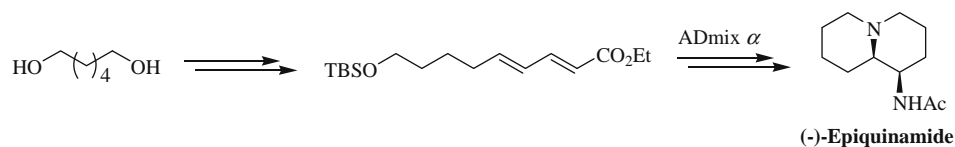


Indoles have been synthesised via alkylidenation of acyl hydrazides using (i) phosphoranes and (ii) the Petasis reagent.

**Stereoflexible total synthesis of (-)-epiquinamide**

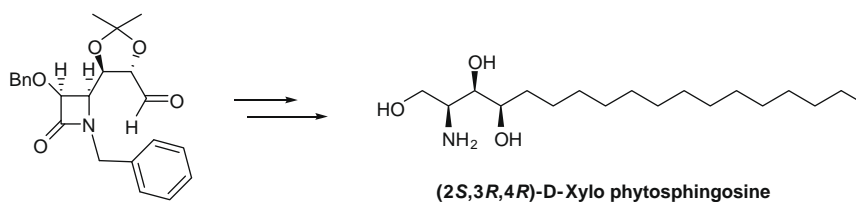
pp 3294–3295

S. Chandrasekhar *, Bibhuti Bhusan Parida, Ch. Rambabu

**Enantioselective total synthesis of (2S,3R,4R)-D-xylo-phytosphingosine from substituted azetidin-2-one**

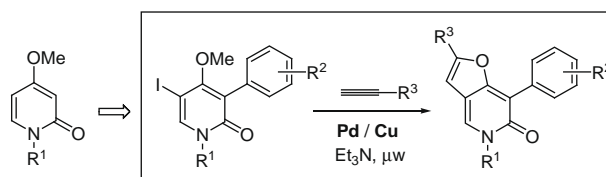
pp 3296–3298

Ganesh Pandey *, Dharmendra Kumar Tiwari

**A convenient access to furo[3,2-c]pyridin-6(5H)-ones by the reaction of 5-iodo-4-methoxy-2-pyridones with terminal alkynes under microwave-enhanced Sonogashira conditions**

pp 3299–3301

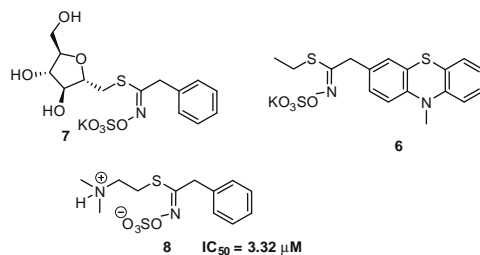
David Conreux, Thierry Delaunay, Philippe Desbordes, Nuno Monteiro *, Geneviève Balme *



A simple O-sulfated thiohydroxamate molecule to be the first micromolar range myrosinase inhibitor

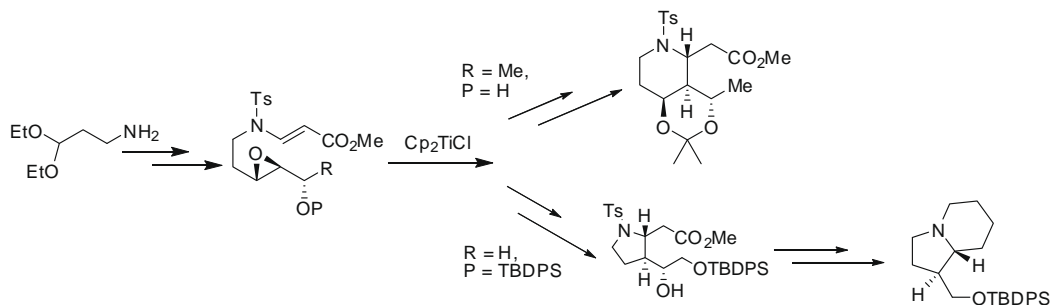
pp 3302–3305

Deimante Cerniauskaite, Estelle Gallienne, Henreta Karciauskaite, Andrea S. F. Farinha, Jolanta Rousseau, Sylvie Armand, Arnaud Tatibouët*, Algirdas Sackus, Patrick Rollin

**Ti(III)-mediated radical cyclization of β -aminoacrylate containing epoxy alcohol moieties: synthesis of highly substituted azacycles**

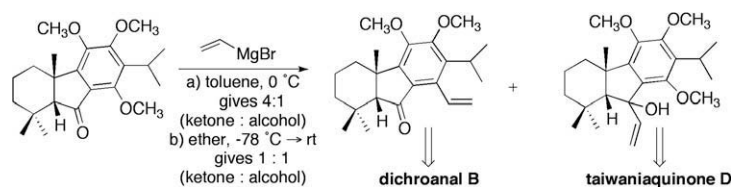
pp 3306–3310

Tushar Kanti Chakraborty*, Rajarshi Samanta, Saumya Roy, Balasubramanian Sridhar

**Concise syntheses of (\pm)-dichroanone, (\pm)-dichroanal B, (\pm)-taiwaniaquinol B, and (\pm)-taiwaniaquinone D**

pp 3311–3313

George Majetich*, Joel M. Shimkus

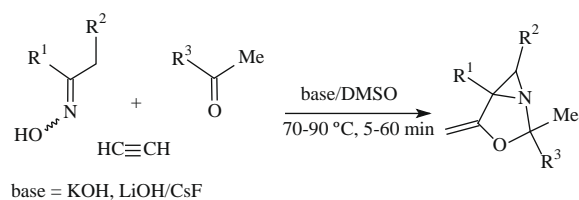


The total syntheses of dichroanone and dichroanal B, as well as the formal syntheses of taiwaniaquinol B and taiwaniaquinone D, are reported.

One-pot assembly of 4-methylene-3-oxa-1-azabicyclo[3.1.0]hexanes from alkyl aryl(hetaryl) ketoximes, acetylene, and aliphatic ketones: a new three-component reaction

pp 3314–3317

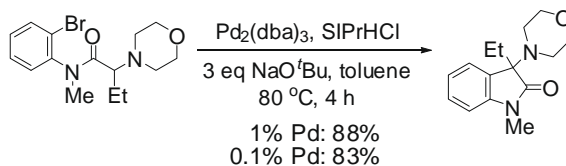
Boris A. Trofimov*, Elena Yu. Schmidt, Al'bina I. Mikhaleva, Igor A. Ushakov, Nadezhda I. Protsuk, Elena Yu. Senotrusova, Olga N. Kazheva, Grigorii G. Aleksandrov, Oleg A. Dyachenko



A robust, efficient catalyst system for enolate arylation leading to quaternary 3-aminoxindoles

pp 3318–3320

Emma L. Watson, Stephen P. Marsden*, Steven A. Raw

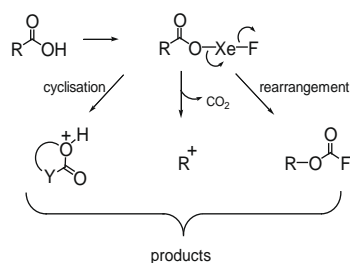


Screening identifies Pd(0)/SIPr complexes as robust and efficient catalysts for intramolecular enolate arylation reactions leading to 3-aminoxindoles.

Fluorodecarboxylation, rearrangement and cyclisation: the influence of structure and environment on the reactions of carboxylic acids with xenon difluoride

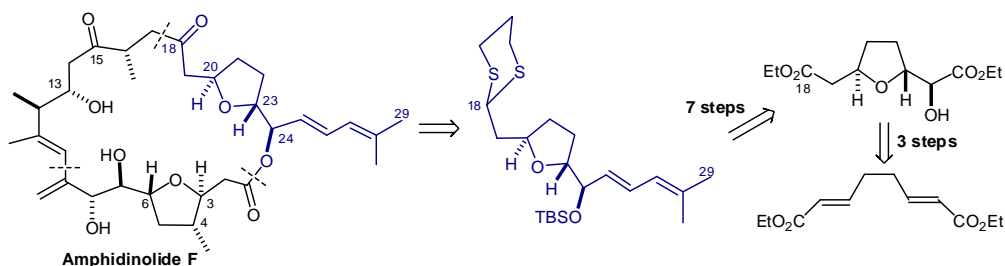
pp 3321–3324

Christopher A. Ramsden*, Maxine M. Shaw

**Synthetic studies on amphidinolides C and F: synthesis of the C18–C29 segment of amphidinolide F**

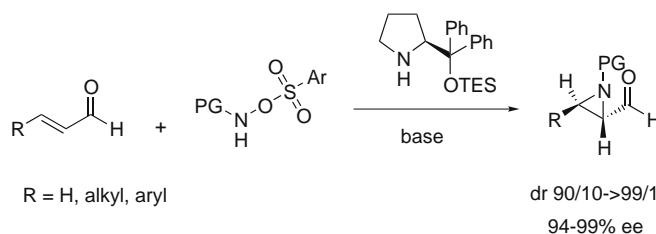
pp 3325–3328

Alan Armstrong*, Constantina Pyrkotis

**Enantioselective aziridination reaction of α,β -unsaturated aldehydes using an organocatalyst and *tert*-butyl *N*-arenesulfonyloxycarbamates**

pp 3329–3332

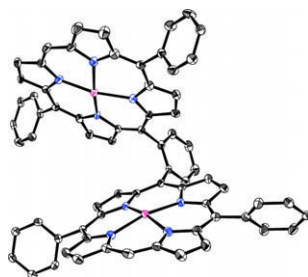
Hiromi Arai, Naomi Sugaya, Neri Sasaki, Kazuishi Makino, Sylvain Lectard, Yasumasa Hamada*



Facile synthesis and photophysical properties of 1,2-phenylene-bridged porphyrin dimers

pp 3333–3337

Kenta Osawa, Naoki Aratani *, Atsuhiko Osuka *

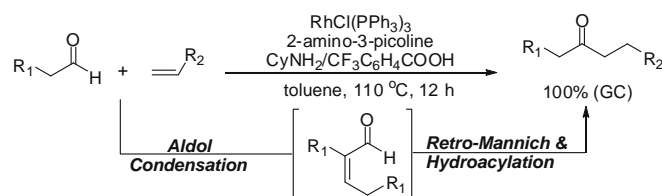


Facile synthesis of 1,2-phenylene-bridged porphyrin dimers via Pd-catalyzed cross-coupling reaction and their photophysical properties are reported.

The effects of amine and acid catalysts on efficient chelation-assisted hydroacylation of alkene with aliphatic aldehyde

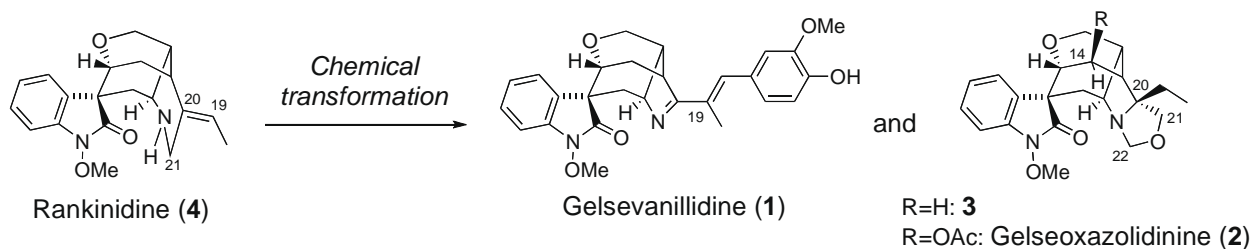
pp 3338–3340

Eun-Ae Jo, Chul-Ho Jun *

**Spectroscopic analyses and chemical transformation for structure elucidation of two novel indole alkaloids from *Gelsemium elegans***

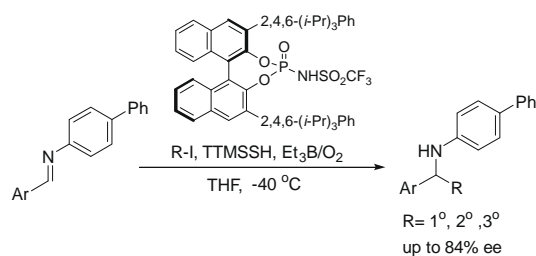
pp 3341–3344

Yousuke Yamada, Mariko Kitajima, Noriyuki Kogure, Sumphan Wongseripipatana, Hiromitsu Takayama *

**Enantioselective radical addition reactions to imines using binaphthol-derived chiral *N*-triflyl phosphoramides**

pp 3345–3348

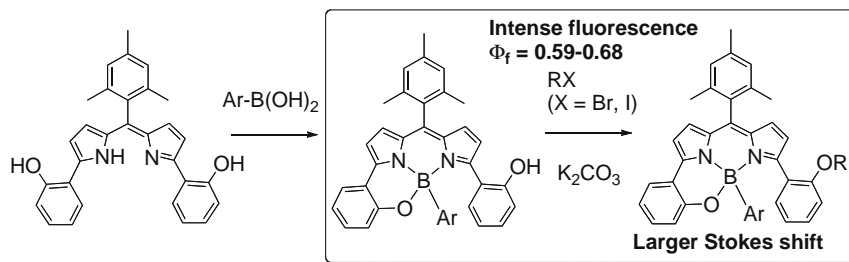
Sunggi Lee, Sunggak Kim *



Convenient and highly efficient synthesis of boron–dipyrins bearing an arylboronate center

pp 3349–3351

Chusaku Ikeda, Tetsuji Maruyama, Tatsuya Nabeshima *

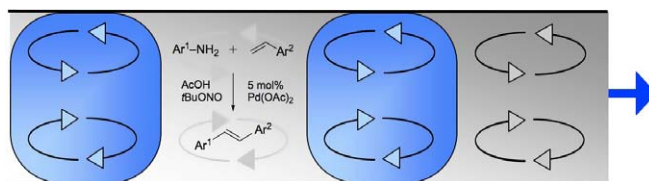


Unique fluorescent boron–dipyrins bearing an aryl group and a phenyloxy group linked directly to the boron center have been prepared in high yields from arylboronic acid.

Heck reactions using segmented flow conditions

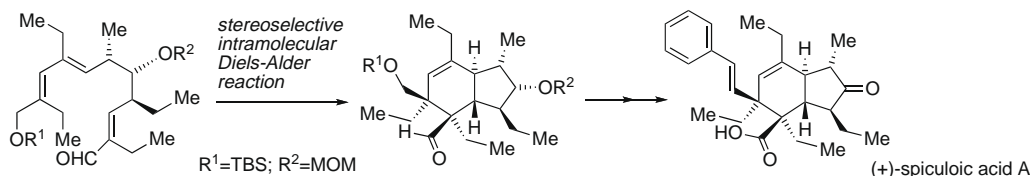
pp 3352–3355

Batoul Ahmed-Omer, David A. Barrow *, Thomas Wirth *

**Total synthesis of (+)-spiculoic acid A**

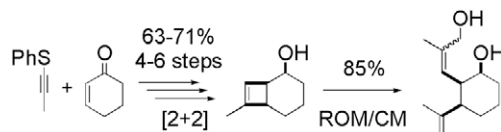
pp 3356–3358

Daisuke Matsumura, Takumi Toda, Takashi Hayamizu, Kiyoto Sawamura, Ken-ichi Takao, Kin-ichi Tadano *

**Studies related to the total synthesis of the sesquiterpene core of the pyrrolbenzoxazine natural products CJ-12662 and CJ-12663**

pp 3359–3362

Małgorzata Commandeur, Claude Commandeur, Michael De Paolis, Andrew J. F. Edmunds, Peter Maienfisch, Léon Ghosez *

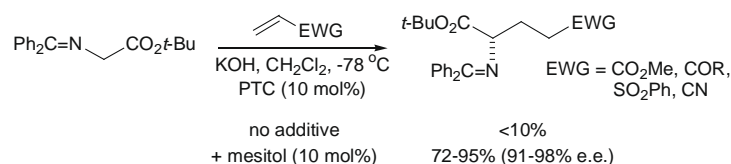


A highly effective procedure is reported to synthesize a substituted bicyclo[4.2.0]octenol derivative by regioselective cycloaddition of phenyl-1-propynyl sulfide with cyclohexenone followed by selective reduction of the ketone group and reductive elimination of phenylsulfonyl group. The strained cyclobutene ring was then engaged in a ring-opening/cross metathesis sequence in the presence of Hoveyda–Grubbs 2nd generation catalyst.

Co-catalyst enhancement of enantioselective PTC Michael additions involving glycine imines

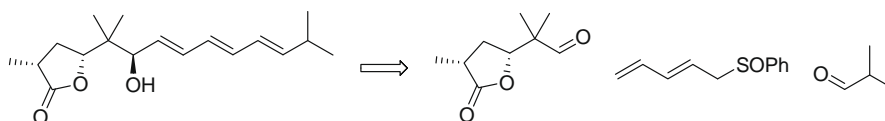
pp 3363–3365

Barry Lygo*, Christopher Beynon, Christopher Lumley, Michael C. McLeod, Charles E. Wade

**Pentadienyl sulfoxide in triene synthesis. Efficient assembly of the Northern fragment of polycavernoside A**

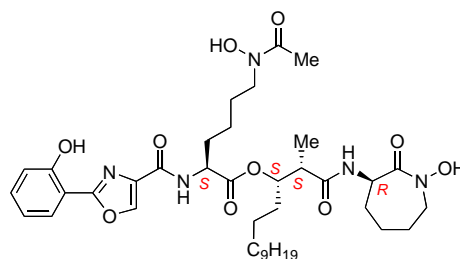
pp 3366–3370

Pierre Jourdain, Freddi Philippart, Raphaël Dumeunier, Istvan E. Markó*

**Synthesis of the reported structure of the naturally occurring siderophore nocardimicin B**

pp 3371–3373

James C. Banks, Christopher J. Moody*

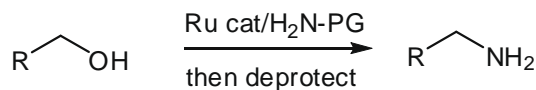


The total synthesis of the reported structure of the siderophore natural product nocardimicin B is described.

Borrowing hydrogen methodology for the conversion of alcohols into N-protected primary amines and in situ deprotection

pp 3374–3377

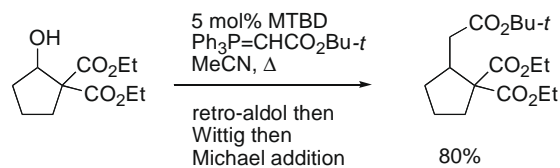
Gareth W. Lamb, Andrew J. A. Watson, Katherine E. Jolley, Aoife C. Maxwell, Jonathan M. J. Williams*

Alcohols have been converted into a variety of protected amines using ruthenium-catalysed borrowing hydrogen methodology. Representative examples have been deprotected leading to an overall conversion of ROH into RNH₂.

Tandem retro-aldol/Wittig/Michael and related cascade processes

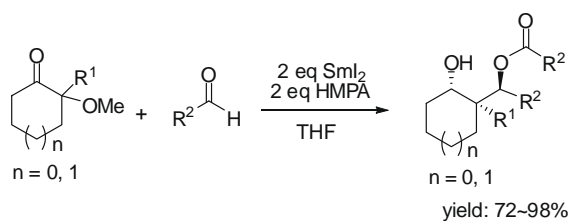
pp 3378–3380

Sandra Beltrán-Rodil, James R. Donald, Michael G. Edwards, Steven A. Raw, Richard J. K. Taylor *

**Rapid assembly of *anti*-1,3-diol units with 2-quaternary carbon stereocenter via samarium diiodide-promoted tandem Aldol/Evans-Tishchenko reaction**

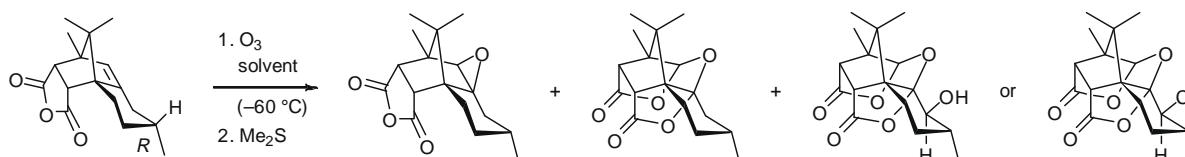
pp 3381–3384

Xing-Wen Sun, Ming-Hua Xu *, Guo-Qiang Lin *

**Neighbouring effect in the course of the ozonolysis of a hindered bornene derivative**

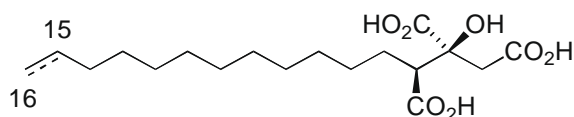
pp 3385–3387

Céline Reynaud, Michel Giorgi, Henri Doucet *, Maurice Santelli *

**Total synthesis and determination of the absolute stereochemistry of the squalene synthase inhibitors CJ-13,981 and CJ-13,982**

pp 3388–3390

Frederick Calo, Alexander Bondke, Jeffery Richardson, Andrew J. P. White, Anthony G. M. Barrett *

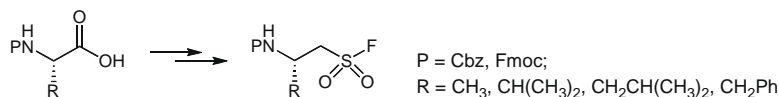


CJ-13,981 (**1**) (15,16-olefin)
CJ-13,982 (**2**) (15,16-dihydro)

Synthesis of β -aminoethanesulfonyl fluorides or 2-substituted taurine sulfonyl fluorides as potential protease inhibitors

pp 3391–3393

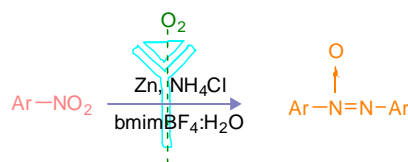
Arwin J. Brouwer, Tarik Ceylan, Tima van der Linden, Rob M. J. Liskamp *



Oxygen as moderator in the zinc-mediated reduction of aromatic nitro to azoxy compounds

pp 3394–3396

Faiz Ahmed Khan *, Ch. Sudheer

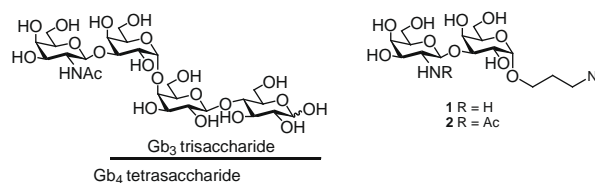


Azoxyarenes have been selectively obtained from the corresponding nitro compounds through a zinc-mediated reduction moderated by oxygen.

Synthesis of prospective disaccharide ligands for *Escherichia coli* O157 verotoxin

pp 3397–3399

Christian Bernlind, Steven W. Homans, Robert A. Field *

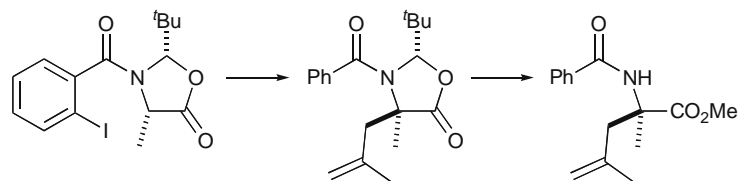


Non-reducing terminal disaccharide fragments of Gb₄ and de-*N*-acetyl Gb₄ glycolipid were prepared as potential ligands for *Escherichia coli* verotoxin.

α -Allylation of α -amino acids via 1,5-hydrogen atom transfer

pp 3400–3403

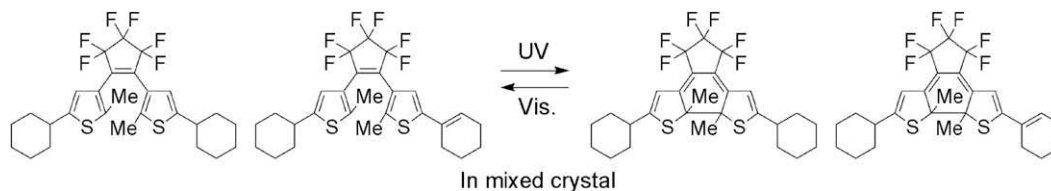
Muhammad I. Chowdhry, Peter N. Horton, Michael B. Hursthouse, Mark E. Wood *



1,5-Hydrogen atom transfer in *N*-(2-iodobenzoyl)oxazolidin-5-ones facilitates the α -allylation of proteinogenic amino acids.

Photochromism of diarylethene derivatives having cyclohexyl and cyclohexenyl groups in single-component crystals and a two-component mixed crystal

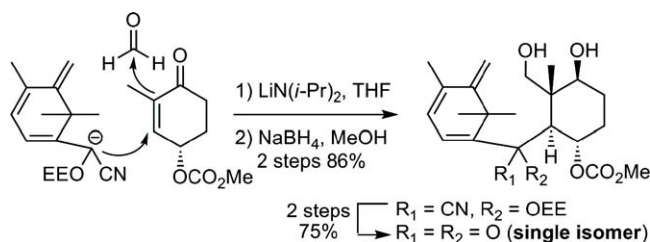
pp 3404–3407

Masakazu Morimoto^{*}, Masahiro Irie^{*}

Two diarylethene derivatives having cyclohexyl and cyclohexenyl groups formed a mixed crystal composed of almost equal amounts of the two components, and underwent photochromism in the mixed crystal.


Stereoselective one-pot three-component coupling approach towards the synthesis of the AC ring system of taxanes

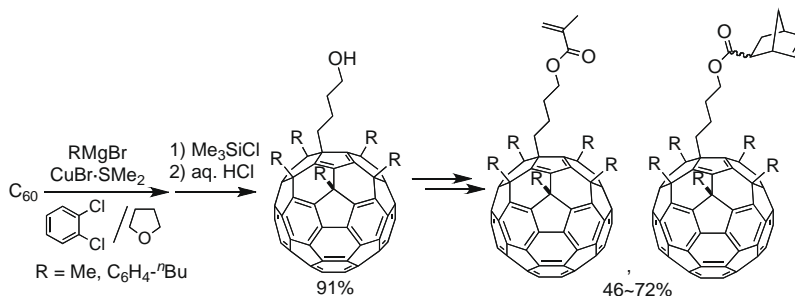
pp 3408–3410

Takayuki Serizawa, Shigeru Miyamoto, Yoshitaka Numajiri, Shinichiro Fuse, Takayuki Doi, Takashi Takahashi^{*}

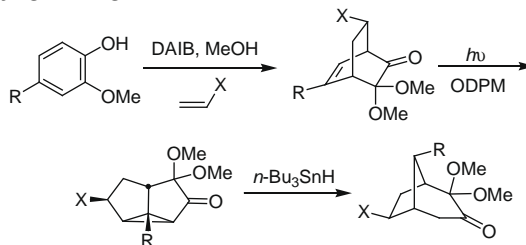
A new method for the construction of the AC ring system of taxanes is described. The key step is the successful application of the stereoselective one-pot three-component coupling of a protected cyanohydrin ether with a substituted cyclohexenone and formaldehyde.

Ring-opening reaction of tetrahydrofuran on the penta(organo)[60]fullerenes: synthesis of hydroxybutyl, methacrylate, and norbornene derivatives

pp 3411–3413

Yutaka Matsuo^{*}, Akihiko Iwashita, Hiromi Oyama, Eiichi Nakamura^{*}
Cyclopropane ring-opening of tricyclo[3.3.0.0^{2,8}]octan-3-ones: a quick access to bicyclo[3.2.1]octanones from 2-methoxyphenols

pp 3414–3417

Chun-Ping Chang, Ching-Hsien Chen, Gary Jing Chuang, Chun-Chen Liao^{*}

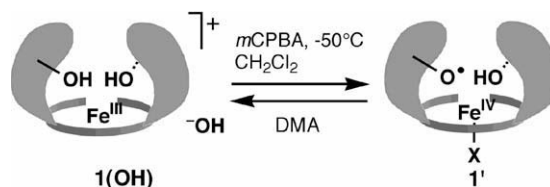
We herein report an efficient and rapid strategy for the synthesis of highly functionalized bicyclo[3.2.1]octanones by sequential 'Diels-Alder reaction of MOB-ODPM rearrangement–reductive cleavage of cyclopropane' and its application for the synthesis of core structure of drechslerine D.



Synthesis and characterization of a new prostaglandin H synthase model

pp 3418–3421

Jakkidi J. Reddy, Takehiro Ohta, Yoshinori Naruta *

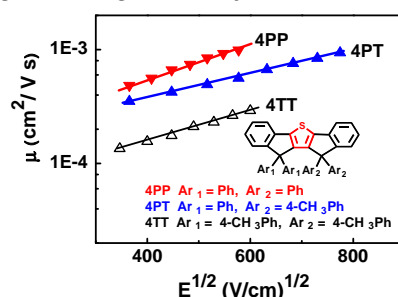


A new prostaglandin H synthase model, having a cavity less hindered and higher flexibility than 'twin-coronet'-type one. The rapid formation of the corresponding $[\text{Fe}^{\text{IV}}(\text{=O})\text{P}(\text{Np}\text{-O})](1')$ was observed upon treatment with *m*CPBA.

**Structural effects on the hole mobilities of indenothiophene-embedded homologs**

pp 3422–3424

Teng-Chih Chao, Ken-Tsung Wong *, Wen-Yi Hung *, Tei-Hung Hou, Wei-Jiun Chen

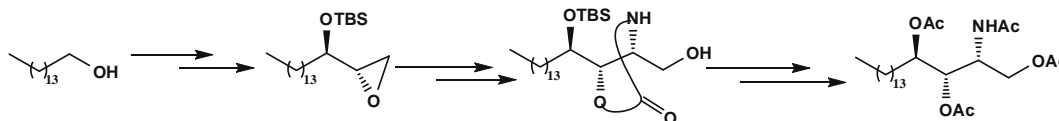


A systematic study of the relationship between the structures and the non-dispersive hole mobilities of a homologous series of amorphous indenothiophene-containing materials is described.

**A tethered aminohydroxylation route to L-arabino-[2R,3S,4R] and L-xylo-[2R,3S,4S]-C₁₈-phytosphingosines**

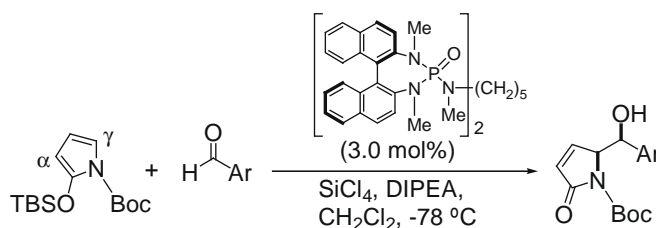
pp 3425–3427

Abhishek Dubey, Pradeep Kumar *

**Asymmetric, catalytic, vinylogous aldol reactions using pyrrole-based dienoxysilanes. Enantioselective synthesis of α,β -unsaturated γ -butyrolactam synthons**

pp 3428–3431

Claudio Curti *, Andrea Sartori, Lucia Battistini, Gloria Rassu, Franca Zanardi, Giovanni Casiraghi *



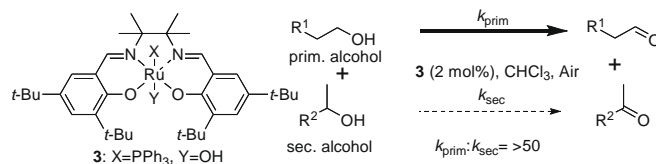
8 examples, isolated yields = 77 - 97%
 $\gamma:\alpha > 99:1$; dr = 84.0:16.0 - >99.5:0.5; ee = 73.6 - >99%



Ru(PPh₃)(OH)-salen complex: a designer catalyst for chemoselective aerobic oxidation of primary alcohols

pp 3432–3435

Hirotaaka Mizoguchi, Tatsuya Uchida, Kohichi Ishida, Tsutomu Katsuki *

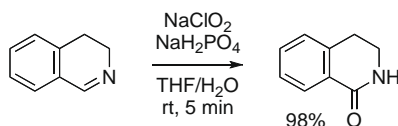


We have found that newly synthesized Ru(PPh₃)(OH)-salen **3** is excellent catalyst for chemoselective aerobic oxidation of primary alcohols to the aldehydes even in the presence of activated secondary alcohols under ambient conditions.

Accessing the amide functionality by the mild and low-cost oxidation of imine

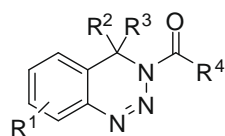
pp 3436–3438

Magdi A. Mohamed, Ken-ichi Yamada, Kiyoshi Tomioka *

**Efficient synthesis of substituted 3-acyl-3,4-dihydrobenzo[d][1,2,3]triazines**

pp 3439–3442

Rüdiger Reingruber, Sylvia Vanderheiden, Thierry Muller, Martin Nieger, Mazen Es-Sayed, Stefan Bräse *

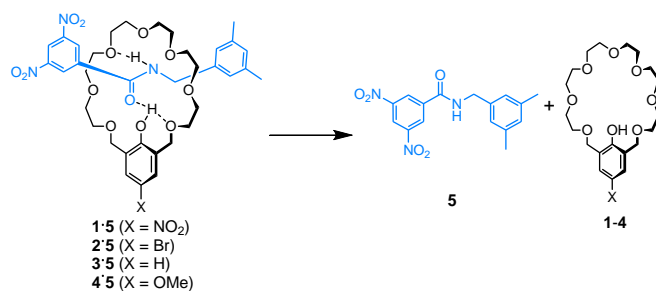


3-Acylbenzo[d][1,2,3]triazine

Remarkable effect of hydrogen bonding between ring and axle components on deslipping reactions of rotaxanes

pp 3443–3445

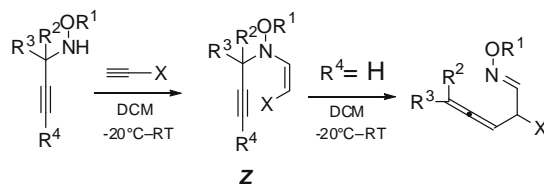
Keiji Hirose *, Yamato Nakamura, Hirokazu Takano, Keiji Nishihara, Yoshito Tobe



A dramatic effect of double bond configuration in *N*-oxy-3-aza Cope rearrangements—a simple synthesis of functionalised allenes

pp 3446–3449

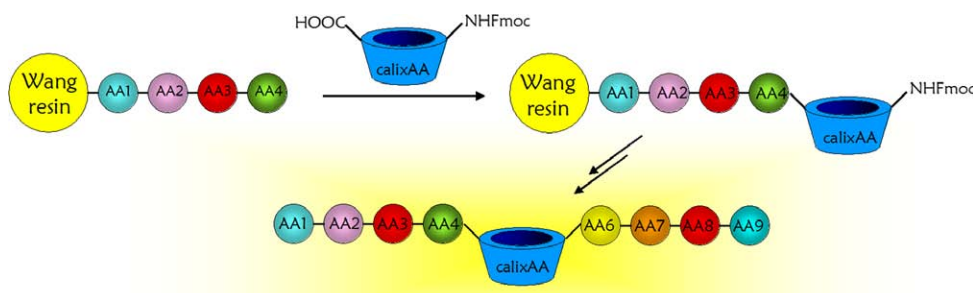
Luis F. V. Pinto, Paulo M. C. Glória, Mário J. S. Gomes, Henry S. Rzepa, Sundaresan Prabhakar *, Ana M. Lobo *

*E* enamines only react at ≥ 70 °C.

Solid-phase synthesis of linear and cyclic peptides containing a calix[4]arene amino acid

pp 3450–3453

Laura Baldini, Francesco Sansone, Federico Scaravelli, Chiara Massera, Alessandro Casnati *, Rocco Ungaro



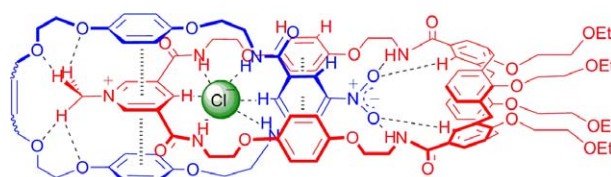
A calixarene amino acid is introduced, for the first time, in a peptide sequence via a stepwise solid-phase synthetic protocol.



A [2]catenane containing an upper-rim functionalized calix[4]arene for anion recognition

pp 3454–3457

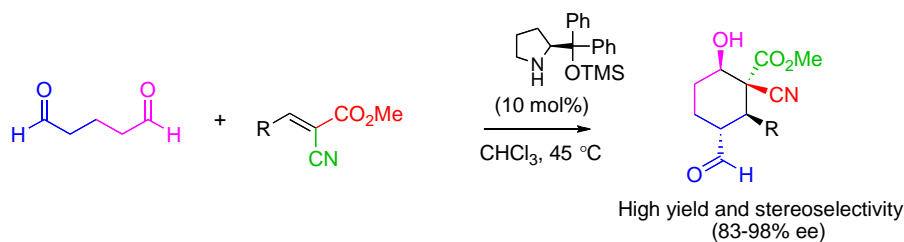
Dale E. Phipps, Paul D. Beer *



Organocatalytic enantioselective domino synthesis of highly functionalized cyclohexanes with an all-carbon quaternary stereocenter

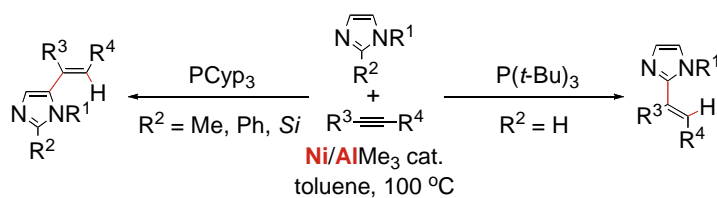
pp 3458–3462

Gui-Ling Zhao, Pawel Dziejcz, Farman Ullah, Lars Eriksson, Armando Córdoba *

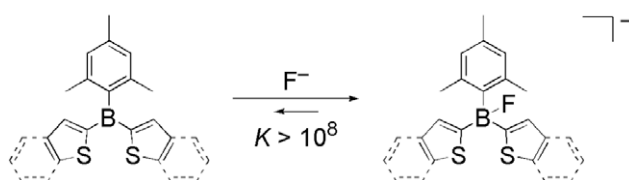


Regioselective alkenylation of imidazoles by nickel/Lewis acid catalysis

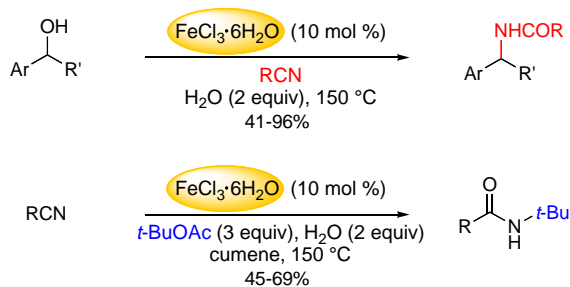
pp 3463–3466

Kyalo Stephen Kanyiva, Florian Löbermann, Yoshiaki Nakao ^{*}, Tamejiro Hiyama ^{*}**Enhancement of the Lewis acidity by substitution of sulfur-containing hetero aromatics in triarylboranes**

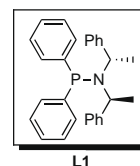
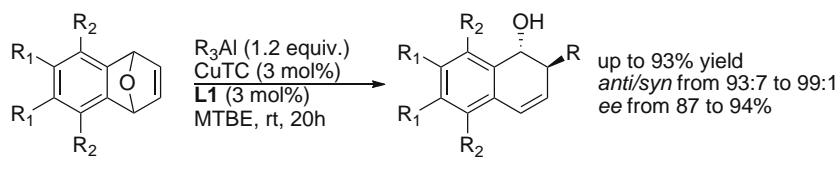
pp 3467–3469

Shinji Miyasaka, Junji Kobayashi ^{*}, Takayuki Kawashima ^{*}**FeCl₃-catalyzed Ritter reaction. Synthesis of amides**

pp 3470–3473

Bruno Anxionnat, Amandine Guérinot, Sébastien Reymond ^{*}, Janine Cossy ^{*}**Copper-catalyzed desymmetrization of oxabenzonorbornadienes with aluminum reagents**

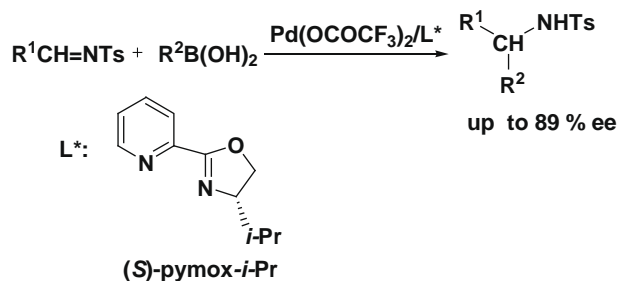
pp 3474–3477

Renaud Millet, Tania Bernardez, Laëticia Palais, Alexandre Alexakis ^{*}

Palladium(II)/2,2'-bipyridine-catalyzed addition of arylboronic acids to *N*-tosyl-aryaldimines

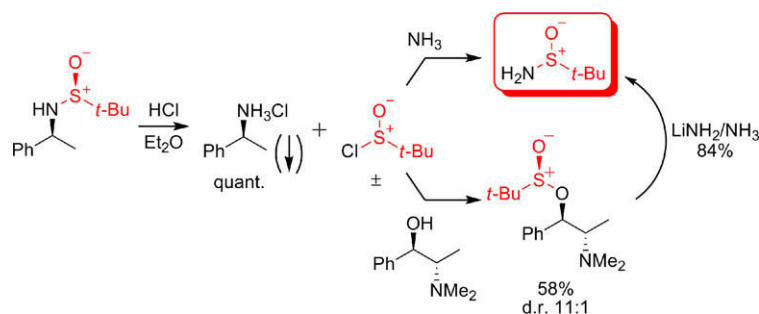
pp 3478–3481

Huixiong Dai, Xiyan Lu *

**The fate of the *tert*-butylsulfinyl auxiliary after acid-promoted cleavage—a method for recycling *t*-BuSONH₂**

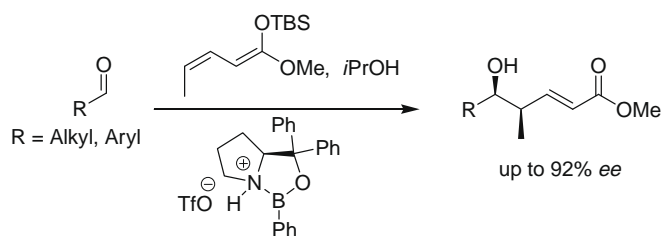
pp 3482–3484

Varinder K. Aggarwal *, Nekane Barbero, Eoghan M. McGarrigle, Greg Mickle, Raquel Navas, José Ramón Suárez, Matthew G. Unthank, Muhammad Yar

*tert*-Butylsulfinamide can be recycled in enantiomerically pure form.**Enantioselective synthesis of polyketide segments through vinylogous Mukaiyama aldol reactions**

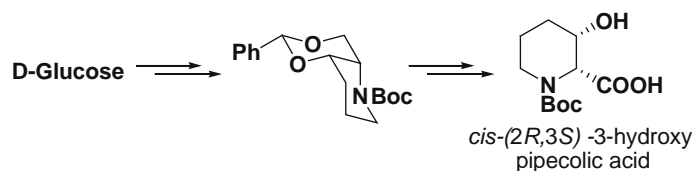
pp 3485–3488

Serkan Simsek, Markus Kalesse *

**A regioselective reductive cleavage of benzylidene acetal: stereoselective synthesis of *N*-Boc-protected *cis*-(2*R*,3*S*)-3-hydroxy pipercolic acid**

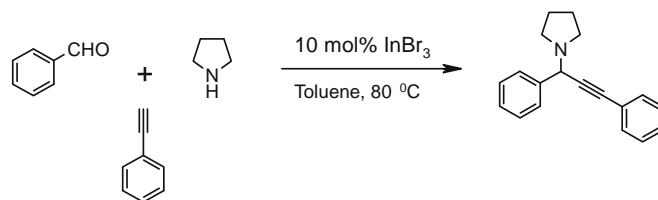
pp 3489–3492

Ponminor Senthil Kumar, Sundarababu Baskaran *

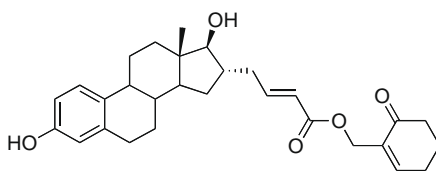


InBr₃-catalyzed three-component reaction: a facile synthesis of propargyl amines

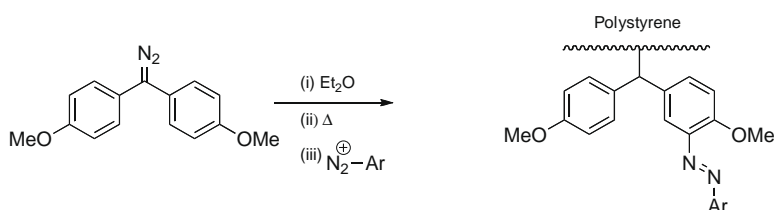
pp 3493–3496

J. S. Yadav^{*}, B. V. Subba Reddy, A. V. Hara Gopal, K. S. Patil**Synthesis of a COMC–estradiol conjugate for targeted, tissue-selective cancer chemotherapy**

pp 3497–3498

Jennifer Marie Oaksmith, Bruce Ganem^{*}**Chemical modification of materials by reaction with diaryl diazomethanes**

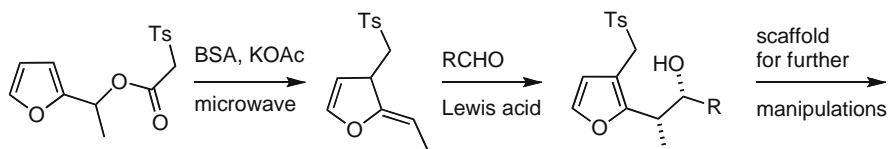
pp 3499–3502

David Leonard, Mark G. Moloney^{*}, Claire Thompson

A direct chemical method for the surface modification of materials (polystyrene, silica, silicon) by reaction with diaryl diazomethanes, and spectroscopic evidence indicative of modification, is presented.

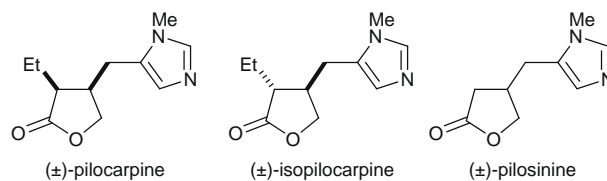
Reactivity of dearomatised furans synthesised via the decarboxylative Claisen rearrangement

pp 3503–3508

Jason E. Camp, Donald Craig^{*}

Syntheses of the racemic jaborandi alkaloids pilocarpine, isopilocarpine and pilosinine

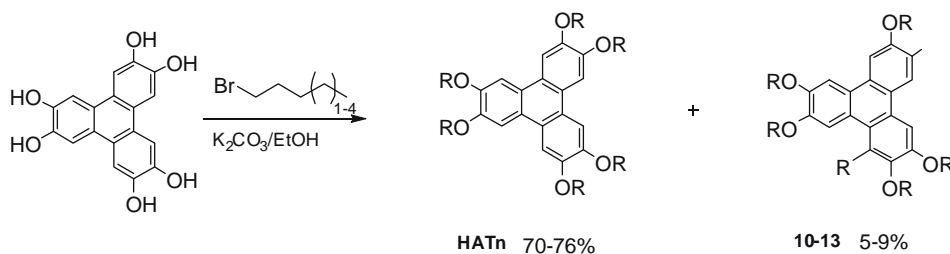
pp 3509–3512

Stephen G. Davies ^{*}, Paul M. Roberts, Peter T. Stephenson, James E. Thomson

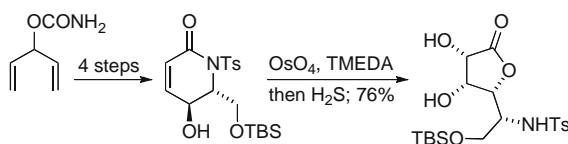
Two efficient routes to facilitate the syntheses of the racemic jaborandi alkaloids pilocarpine, isopilocarpine and pilosinine are described.

Synthesis and characterisation of novel hexaalkoxytriphenylenes bearing an additional alkyl chain in the α -position

pp 3513–3515

Andrew N. Cammidge ^{*}, Hemant Gopee, Hitesh Patel**Concerning directed oxidation and transacylation during a general approach to hydroxylated lactams**

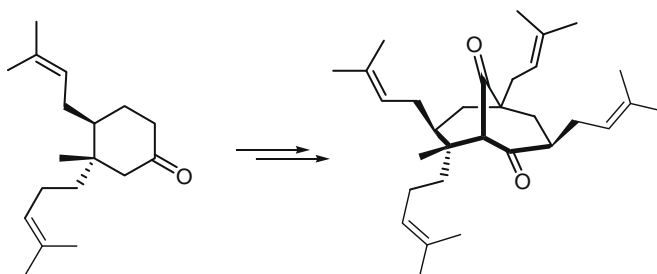
pp 3516–3518

Jeremy Robertson ^{*}, Emilia Abdulmalek

Directed dihydroxylation conditions applied to an *N*-tosyl δ -lactam gave unexpectedly high *anti*-selectivity. In this and related examples it was observed that hydroxylated *N*-tosyl lactams tend to isomerise to γ -lactones.

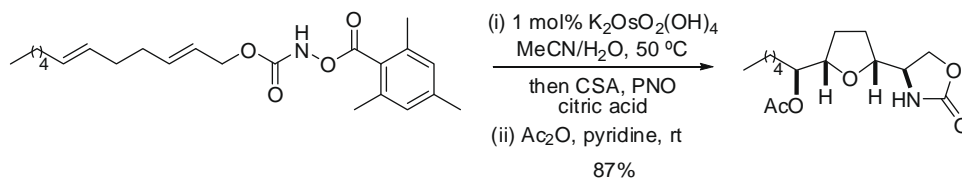
Synthetic studies towards the phloroglucin natural product hyperforin: construction of the fully prenylated bicyclic core

pp 3519–3522

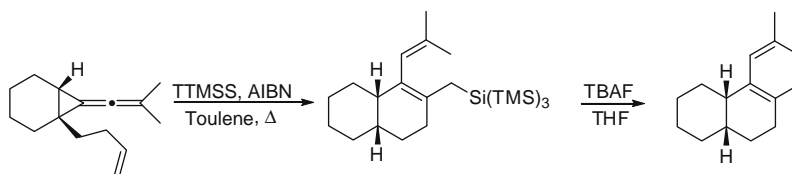
Goverdhan Mehta ^{*}, Mrinal K. Bera

Tandem catalysis in the polycyclisation of dienes to produce multi-substituted tetrahydrofurans

pp 3523–3526

Timothy J. Donohoe^{*}, Peter J. Lindsay-Scott, Jeremy S. Parker**Alkene-allenecyclopropane radical cyclisations promoted by tris-(trimethylsilyl)silane**

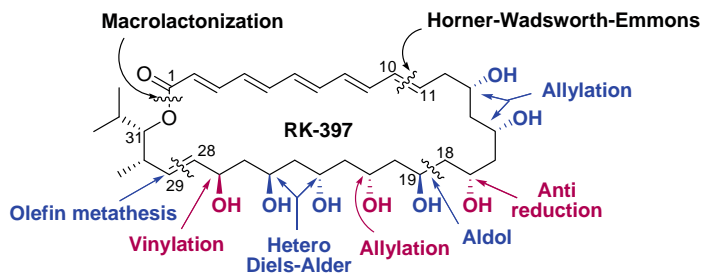
pp 3527–3529

Nigel R. Jones, Gerald Pattenden^{*}

Alkene-substituted allenecyclopropanes undergo radical cyclisation leading to bicyclic 1,3-dienes, on treatment with TTMSS–AIBN.

An asymmetric synthesis of the polyol fragment of the polyene macrolide antibiotic RK-397

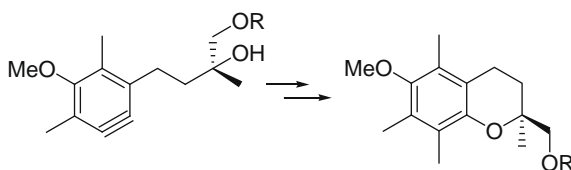
pp 3530–3533

Fan Fu, Teck-Peng Loh^{*}

A highly convergent and asymmetric synthesis of the C11–C31 polyol fragment of RK-397 as a single isomer is accomplished via a catalytic enantioselective hetero-Diels–Alder reaction and an intermolecular olefin cross-metathesis as key steps.

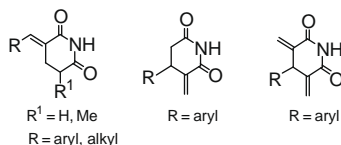
**A synthesis of α -tocopherol featuring benzyne trapping by an alcohol**

pp 3534–3537

David W. Knight^{*}, Xu QingA total synthesis of α -tocopherol has been achieved which features an intramolecular trapping of a highly substituted benzyne, derived from an aminobenzotriazole, with a tertiary alcohol.

A simple protocol for the synthesis of a piperidine-2,6-dione framework from Baylis–Hillman adducts

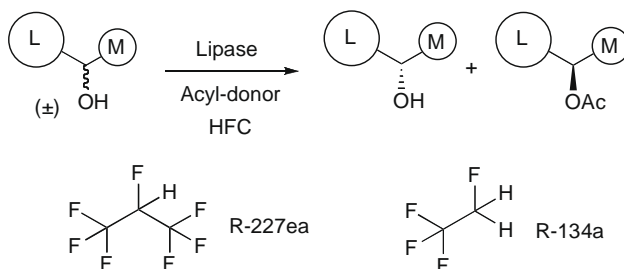
pp 3538–3542

Deevi Basavaiah^{*}, Dandamudi V. Lenin, Badugu Devendar

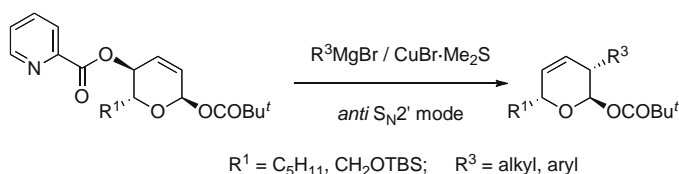
3-Hydroxy-2-methylenealkanenitriles, the Baylis–Hillman alcohols, derived from various aldehydes and acrylonitrile, have been conveniently transformed into 3-arylidene(or alkylidene)piperidine-2,6-diones in an operationally simple one-pot multi-step process involving Johnson–Claisen (J–C) rearrangement, partial hydrolysis, and cyclization. Rearranged Baylis–Hillman alcohols, (*E*)-2-hydroxymethyl-3-arylprop-2-enitriles, have been converted into 4-aryl-3-methylidenepiperidine-2,6-diones in a similar reaction sequence. 4-Aryl-3,5-dimethylidenepiperidine-2,6-dione derivatives have been synthesized from the Baylis–Hillman compounds, 3-aryl-4-cyano-2-methoxycarbonylpenta-1,4-dienes, obtained via the Baylis–Hillman reaction of methyl (*Z*)-2-(bromomethyl)-3-arylprop-2-enoates with acrylonitrile, in a one-pot process.

Lipase-catalysed kinetic resolutions of secondary alcohols in pressurised liquid hydrofluorocarbons

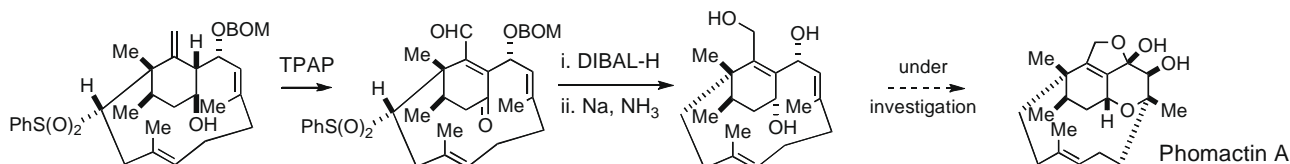
pp 3543–3546

Anthony J. Ball, Stuart Corr, Jason Micklefield^{*}**Allylic substitution on the pyran ring**

pp 3547–3549

Tomonori Hyodo, Yuji Katayama, Yuichi Kobayashi^{*}**Further studies of an approach to a total synthesis of phomactins**

pp 3550–3554

Timothy J. Blackburn, Madeleine Helliwell, Michael J. Kilner, Alan T. L. Lee, Eric J. Thomas^{*}

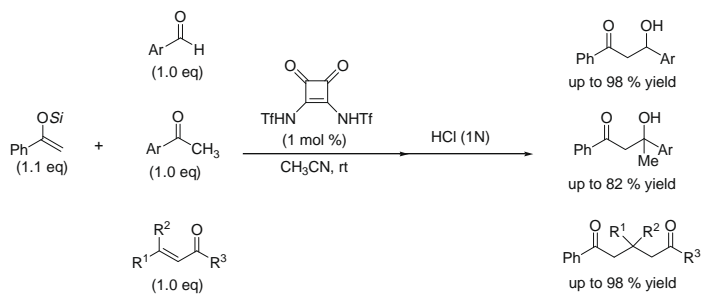
Studies into an approach to the total synthesis of phomactin A are reported in which the oxidation of a homoallylic alcohol into an unsaturated keto-aldehyde using TPAP followed by a stereoselective reduction using DIBAL-H are key steps.

A new Brønsted acid derived from squaric acid and its application to Mukaiyama aldol and Michael reactions

pp 3555–3558

Cheol Hong Cheon, Hisashi Yamamoto *

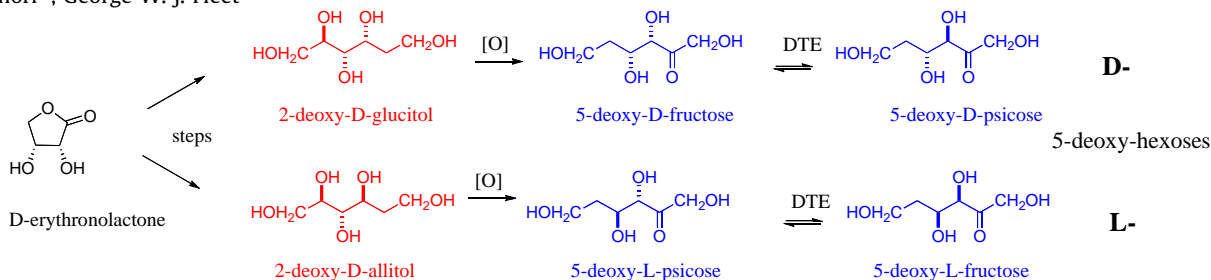
Bis-*N*-trifluoromethanesulfonyl squaramide was prepared as a new bench-stable strong Brønsted acid and applied to the Brønsted acid-catalyzed Mukaiyama aldol and Michael reactions with silyl enol ethers. The resulting Mukaiyama aldol products of aldehydes were obtained in quantitative yields, whereas expansion of the utility of this Brønsted acid to ketones was limited to electron-deficient ketones presumably due to lower reactivity of ketones as well as competing protodesilylation of silyl enol ether. The Brønsted acid was further applied to Mukaiyama Michael reaction of α,β -unsaturated ketones. It is noted that this catalyst loading of all Mukaiyama reaction was only 1 mol % or less, which demonstrated the excellent reactivity of this acid. Mechanistic studies implied that the Mukaiyama aldol reaction might proceed through Brønsted acid catalysis, rather than through Lewis acid catalysis with silylated Brønsted acid.



A concise approach to the synthesis of all twelve 5-deoxyhexoses: *D*-tagatose-3-epimerase—a reagent that is both specific and general

pp 3559–3563

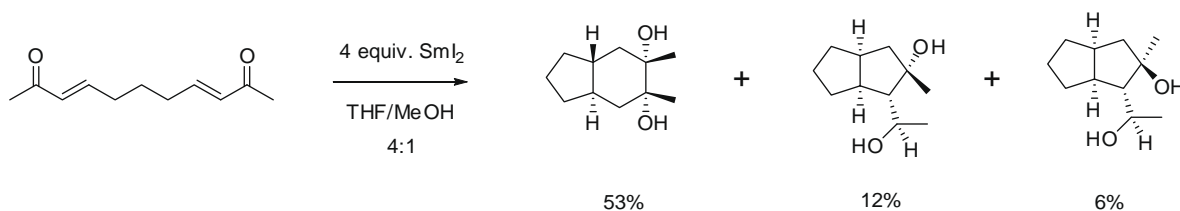
Devendar Rao, Daniel Best, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Mark R. Wormald, Francis X. Wilson, Ken Izumori *, George W. J. Fleet *



Samarium diiodide-mediated intramolecular cyclodimerisation of bis- α,β -unsaturated carbonyl compounds

pp 3564–3567

Jonathan R. Powell, Sally Dixon, Mark E. Light, Jeremy D. Kilburn *



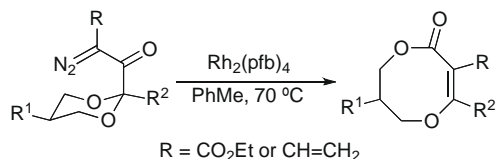
Samarium(II) diiodide-mediated intramolecular cyclodimerisation of simple bis-enones and -enoates in THF/MeOH has been investigated.



A novel rearrangement reaction of β -diazo- α -ketoacetals

pp 3568–3570

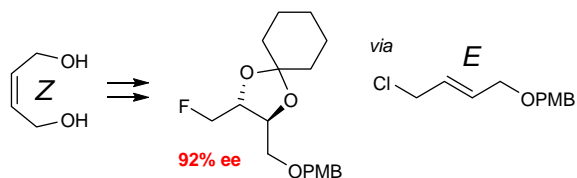
Marvis O. Erhunmwunse, Patrick G. Steel *



Allylic fluorination via an unusual alkene *Z/E* isomerisation

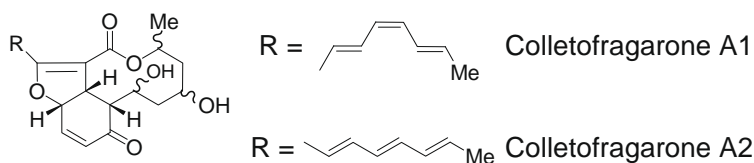
pp 3571–3573

James A. B. Laurenson, Sebastien Meiries, Jonathan M. Percy *, Ricard Roig

**Towards the total synthesis of colletofragarones: constructing the macrocyclic lactone by high pressure-mediated intramolecular Diels–Alder reaction**

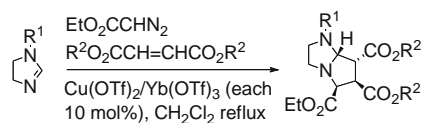
pp 3574–3576

Joaquín G. Marrero, Laurence M. Harwood *

**A catalytic dipolar cycloaddition route to pyrroloimidazoles**

pp 3577–3579

Raymond C. F. Jones *, James N. Iley, Maria Sanchis-Amat, Xiaohui Zhang, Mark R. J. Elsegood

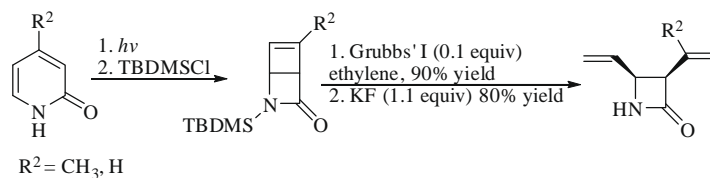


A catalytic method involving carbenoid insertion onto dihydroimidazoles is reported for the generation of dihydroimidazolium ylides, and their subsequent diastereoselective cycloaddition to form pyrrolo[1,2-*a*]imidazoles.

Preparation of functionalised monobactams from pyridones

pp 3580–3584

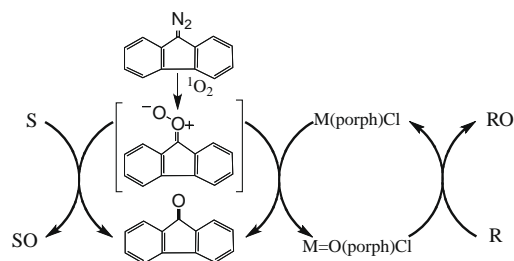
Mauro F. A. Adamo *, Paolo Disetti, Linda Piras



Oxygen atom transfer from carbonyl oxide to alkane catalyzed by metalloporphyrin

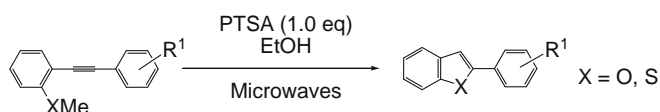
pp 3585–3587

Masayuki Haranaka, Akiko Hara, Wataru Ando, Takeshi Akasaka *

***p*-Toluenesulfonic acid-mediated cyclization of *o*-(1-alkynyl)anisoles or thioanisoles: synthesis of 2-arylsubstituted benzofurans and benzothiophenes**

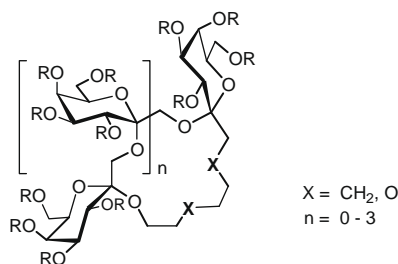
pp 3588–3592

Maud Jacobert, Abdallah Hamze, Olivier Provot, Jean-François Peyrat, Jean-Daniel Brion, Mouad Alami *

**Transformation of linear oligoketosides into macrocyclic neoglycoconjugates**

pp 3593–3596

Alessandro Dondoni *, Alberto Marra *

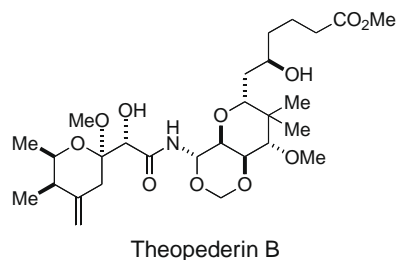


Intramolecular glycosidation and ring-closing metathesis afforded cyclic oligoketosides containing 2 to 5 *D*-galacto-2-heptulopyranose units. Some macrocycles were tested as chiral hosts in a model Michael addition.

First total synthesis of theopederin B

pp 3597–3601

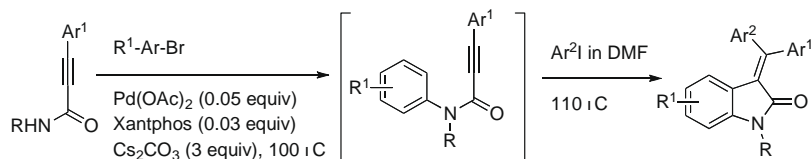
Yoshinori Nishii, Tsuyoshi Higa, Shunya Takahashi, Tadashi Nakata *



Palladium-catalyzed domino N-arylation/carbopalladation/C–H functionalization: three-component synthesis of 3-(diarylmethylene)oxindoles

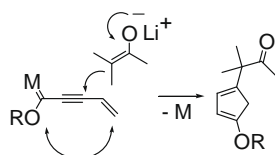
pp 3602–3605

Artur Pinto, Luc Neuville*, Jieping Zhu*

**Consecutive enolate addition/cyclization of Fischer enynyl carbene complexes: facile access to cyclopentenoids**

pp 3606–3608

José Barluenga*, Ana Álvarez-Fernández, Silvia Martínez, Ángel L. Suárez-Sobriño, Miguel Tomás

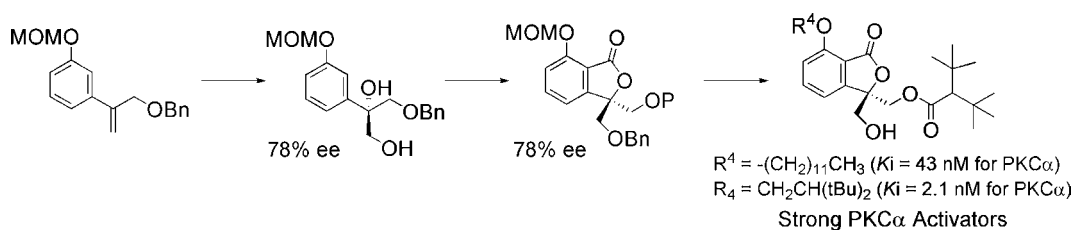


A new pentannulation of Fischer enynyl carbenes promoted by 1,4 conjugated addition of enolates is described.

**Asymmetric synthesis of isobenzofuranone derivatives and their unique character as protein kinase C α (PKC α) activators**

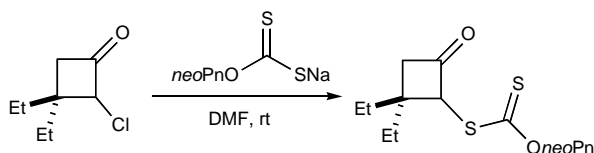
pp 3609–3612

Go Hirai, Yosuke Ogoshi, Megumi Ohkubo, Yuki Tamura, Toru Watanabe, Tadashi Shimizu, Mikiko Sodeoka*

**Substitution of chlorocyclobutanones with xanthate salts. The remarkable effect of added base**

pp 3613–3616

Rama Heng, Béatrice Quiclet-Sire, Samir Z. Zard*



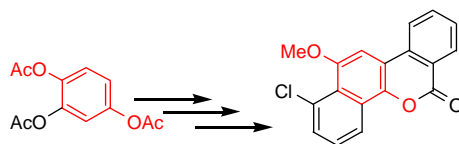
Additive: none ; yield 0%
 Additive: DABCO (0.2 equiv.) ; yield 80%
 (reaction time: 1 hr)
 Additive: DBU (0.2 equiv.) ; yield 84%
 (reaction time: 7 minutes)



Application of the BHQ benzannulation reaction to the synthesis of benzo-fused coumarins

pp 3617–3620

James A. Bull, Cristina Luján, Michael G. Hutchings, Peter Quayle *

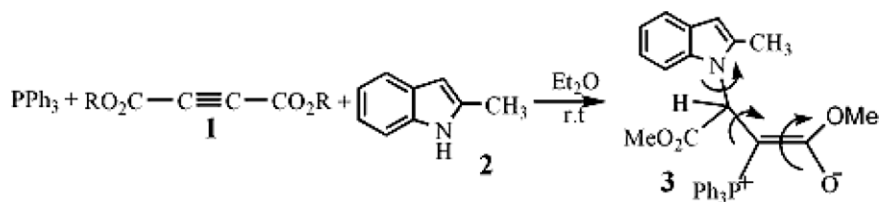


The application of a new benzannulation reaction to the synthesis of the aromatic core of the gilvocarin family of antibiotics is described.

Dynamic ¹H NMR study around the heteroaryl–carbon and carbon–carbon single bonds and also around carbon–carbon double bond in a particular phosphorous ylide involving a 2-methyl indole

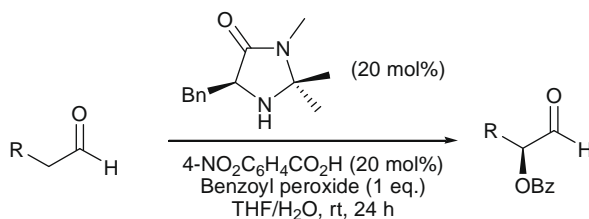
pp 3621–3624

Sayyed Mostafa Habibi-Khorassani *, Malek Taher Maghsoodlou, Ali Ebrahimi, Fatemeh Vasheghani Farahani, Elahe Mosaddeg, Mohammad Amin Kazemian

**Organocatalytic α -oxybenzylation of aldehydes**

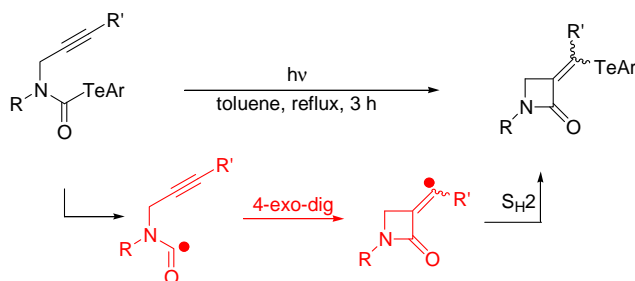
pp 3625–3627

Matti J. P. Vaismaa, Sze Chak Yau, Nicholas C. O. Tomkinson *

**A new entry to α -alkylidene- β -lactams by 4-*exo-dig* cyclization of carbamoyl radicals**

pp 3628–3630

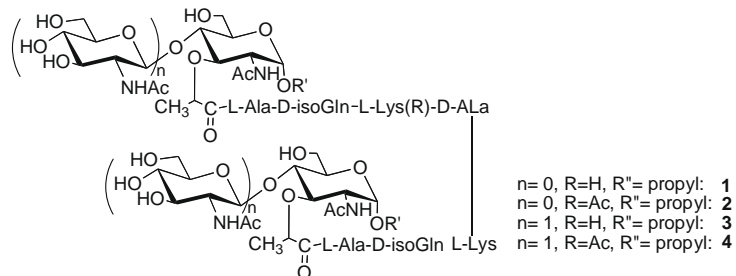
Shin-ichi Fujiwara, Yoshihiko Shimizu, Yuji Imahori, Masashi Toyofuku, Tsutomu Shin-ike, Nobuaki Kambe *



Synthesis of crosslinked peptidoglycan fragments for investigation of their immunobiological functions

pp 3631–3634

Yukari Fujimoto, Yasuko Konishi, Osamu Kubo, Mizuho Hasegawa, Naohiro Inohara, Koichi Fukase *

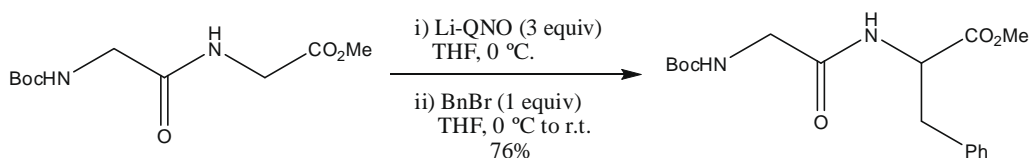


The synthesis of crosslinked peptidoglycan (PGN) fragments from *Streptococcus pneumoniae* cell wall was achieved and the immunostimulatory activities of the compounds were also determined.

**The synthesis of functionalised peptides using α -lithio quinuclidine *N*-oxide (Li-QNO)**

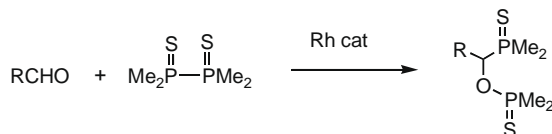
pp 3635–3638

Ian A. O'Neil *, Inder Bhamra

**Rhodium-catalyzed addition reaction of diphosphine disulfide to aldehydes and ketones**

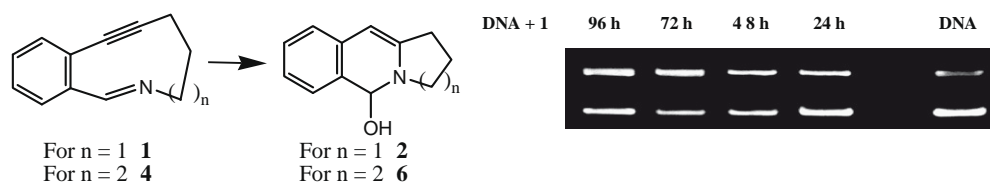
pp 3639–3640

Mieko Arisawa, Masahiko Yamaguchi *

**Aza Hopf cyclization: synthesis and reactivity of cyclic azadienynes**

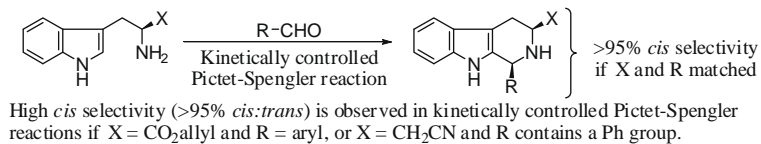
pp 3641–3644

Sayantan Mandal, Amit Basak *

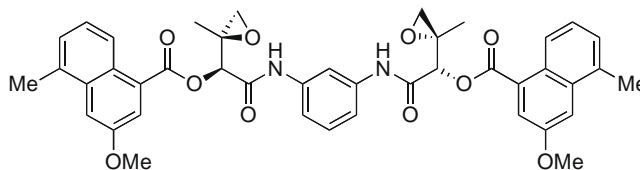


Unexpected *cis* selectivity in the Pictet–Spengler reaction

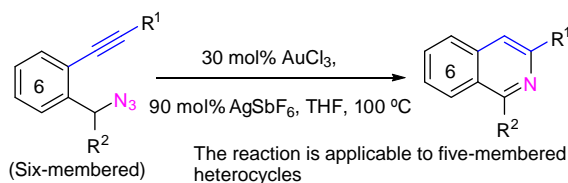
pp 3645–3647

Patrick D. Bailey ^{*}, Mark A. Beard, Theresa R. Phillips**Azinomycin bisepoxides containing rigid aromatic linkers: synthesis, cytotoxicity and DNA interstrand cross-linking activity**

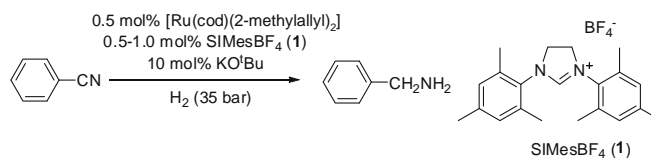
pp 3648–3650

Matthew J. Finerty, John P. Bingham, John A. Hartley, Michael Shipman ^{*}**Gold-catalyzed synthesis of isoquinolines via intramolecular cyclization of 2-alkynyl benzyl azides**

pp 3651–3653

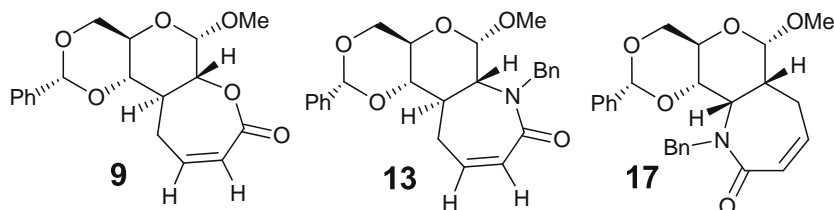
Zhibao Huo, Yoshinori Yamamoto ^{*}**Ruthenium N-heterocyclic carbene catalysts for selective reduction of nitriles to primary amines**

pp 3654–3656

Daniele Addis, Stephan Enthaler, Kathrin Junge, Bianca Wendt, Matthias Beller ^{*}

Stereoselective synthesis of seven-membered lactams and lactones on a carbohydrate scaffold using ring-closing metathesis pp 3657–3660

Dominic L. Laventine, Paul M. Cullis, Marcos D. García*, Paul R. Jenkins*

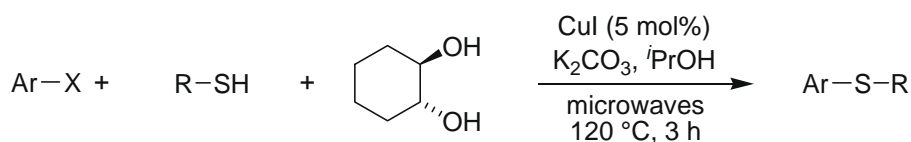


Ring-closing metathesis (RCM) using Grubbs' 2nd generation catalyst was successfully applied to the synthesis of a seven-membered dihydrooxepinone **9** and the dihydrozepinones **13** and **17** on a sugar glycoside scaffold. These compounds are advantageous precursors for the synthesis of polyhydroxylated heteroannulated sugars as potential glycosidase inhibitors.



Rapid Ullmann-type synthesis of aryl sulfides using a copper(I) catalyst and ligand under microwave irradiation pp 3661–3664

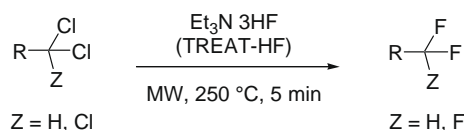
Mark C. Bagley*, Matthew C. Dix, Vincenzo Fusillo



Microwave irradiation of an aryl halide and thiol in 2-propanol in the presence of *trans*-cyclohexane-1,2-diol as ligand, potassium carbonate as base and a copper(I) catalyst gives the corresponding aryl sulfide, often in excellent yield.

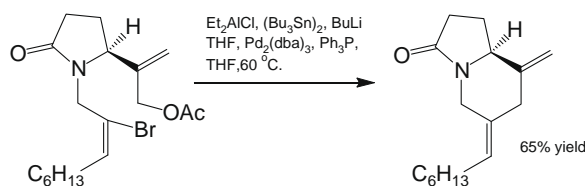
Microwave-assisted aliphatic fluorine–chlorine exchange using triethylamine trihydrofluoride (TREAT-HF) pp 3665–3668

Jennifer M. Kremsner, Michael Rack, Christian Pilger, C. Oliver Kappe*



Palladium-mediated reductive coupling, a stereoselective approach to the 8-dehydropumiliotoxin skeleton pp 3669–3671

Stephanie A. Feutran, Helena McAlonan, Paul J. Stevenson*, Andrew D. Walker

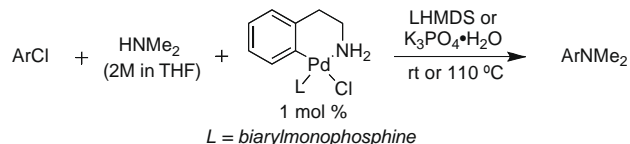


Palladium-catalysed reductive coupling of an *E*-vinyl bromide with an allylic acetate, gave the 8-dehydropumiliotoxin core.

Simple, efficient protocols for the Pd-catalyzed cross-coupling reaction of aryl chlorides and dimethylamine

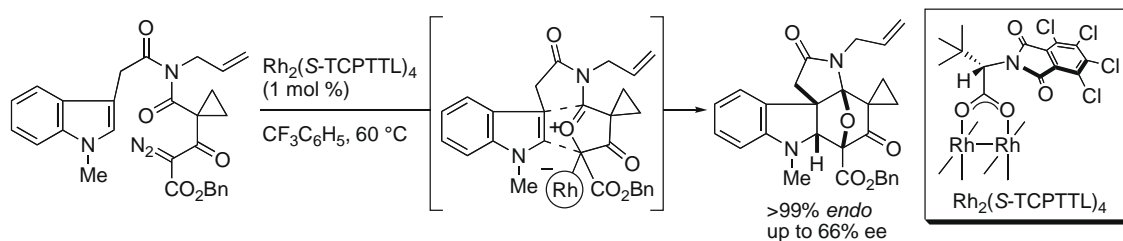
pp 3672–3674

Brian K. Lee, Mark R. Biscoe, Stephen L. Buchwald *

**Asymmetric approach to the pentacyclic skeleton of *Aspidosperma* alkaloids via enantioselective intramolecular 1,3-dipolar cycloaddition of carbonyl ylides catalyzed by chiral dirhodium(II) carboxylates**

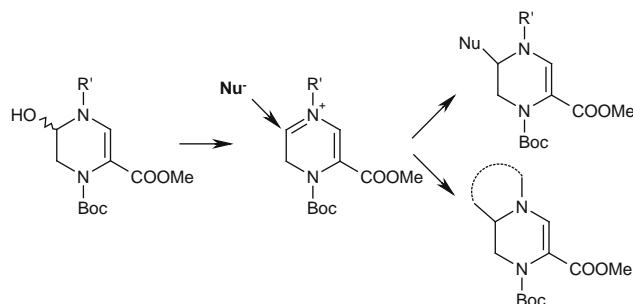
pp 3675–3678

Hisanori Nambu, Mayuka Hikime, Janagiraman Krishnamurthi, Megumi Kamiya, Naoyuki Shimada, Shunichi Hashimoto *

**Reactivity of 5-hydroxy-5,6-dihydro-4H-pyrazines—easy and efficient access to ring-fused polycyclic diazinic systems**

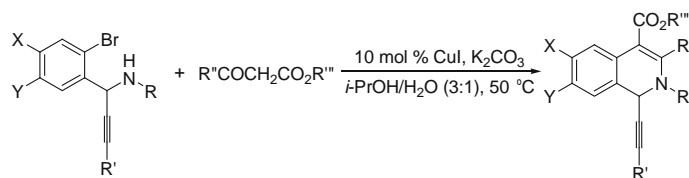
pp 3679–3682

Elise Claveau, Isabelle Gillaizeau *, Gérard Coudert *

**Synthesis of polysubstituted 1,2-dihydroisoquinolines via a CuI-catalyzed arylation/condensation cascade process**

pp 3683–3685

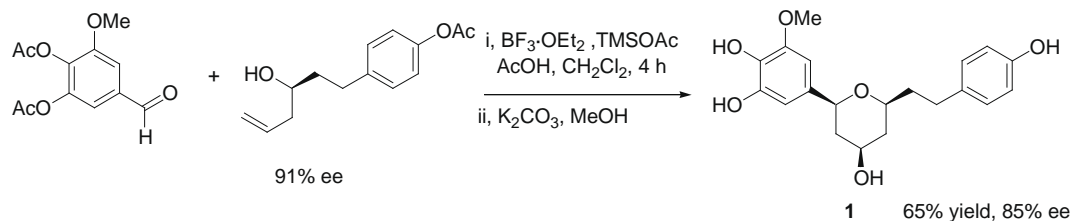
Yangyang Wu, Yihua Zhang *, Yongwen Jiang *, Dawei Ma *



Synthesis of a novel diarylheptanoid isolated from *Zingiber officinale*

pp 3686–3689

Gregory D. Parker, Peter T. Seden, Christine L. Willis*

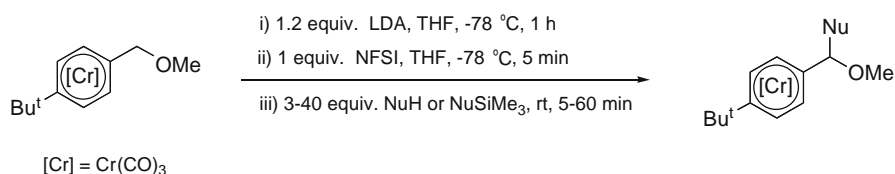


Syntheses of 4-acetoxy-2,6-disubstituted tetrahydropyrans via Prins cyclisation of homoallylic alcohols with benzylic aldehydes are described and the methodology is applied to the total synthesis of diarylheptanoid **1** confirming both the structure and absolute configuration of the natural product.

Substitution of a benzylic hydrogen by nucleophiles on a chromium tricarbonyl complex of a benzyl ether

pp 3690–3692

Mar Martin-Fontecha, Keren Abecassis, Susan E. Gibson*



Deprotonation of a chromium tricarbonyl complex of a benzyl ether followed by reaction with *N*-fluorobenzenesulfonimide (NFSI) generated a species that reacts with oxygen, sulfur and carbon nucleophiles.

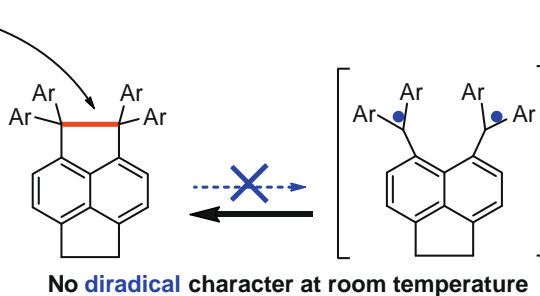
Negligible diradical character for the ultralong C–C bond in 1,1,2,2-tetraarylpyracene derivatives at room temperature

pp 3693–3697

Takashi Takeda, Hidetoshi Kawai, Rainer Herges, Eva Mucke, Yoshitaka Sawai, Kei Murakoshi, Kenshu Fujiwara, Takanori Suzuki*

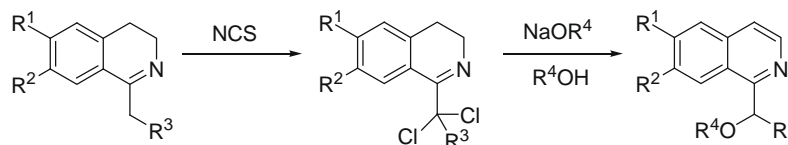
Ultralong C–C bond (> 1.75 Å)

ν_{C-C} 638 cm⁻¹
 for Ar = C₆H₅
 1.761(4) Å at 123 K
 for Ar = 4-F-C₆H₄
 1.771(3) Å at 90 K
 for Ar₂C = spiro(10-methylacridan)


1,4-Dehydrochlorination of 1-(1-haloalkyl)-3,4-dihydroisoquinolines as a convenient route to functionalized isoquinolines

pp 3698–3701

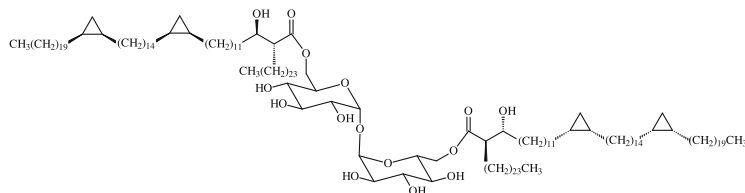
Jan Jacobs, Tuyen Nguyen Van, Christian V. Stevens, Peter Markusse, Paul De Cooman, Leendert Maat, Norbert De Kimpe*



The first unique synthetic mycobacterial cord factors

pp 3702–3705

Juma'a R. Al Dulayymi, Mark S. Baird *, Maximiliano Maza-Iglesias, Seppe Vander Beken, Johan Grooten

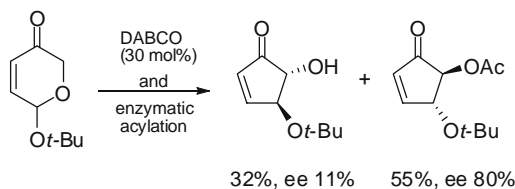


We report the syntheses of trehalose mono- and dimycolates (cord factors) based on unique synthetic mycolic acids matching the chain lengths of components of mycobacterial cells such as the α -mycolic acid trehalose dimycolate shown below.

Asymmetric synthesis of functionalised cyclopentenones via organocatalysed rearrangement and enzymatic resolution of pyranones

pp 3706–3708

João P. M. Nunes, Carlos A. M. Afonso *, Stephen Caddick *

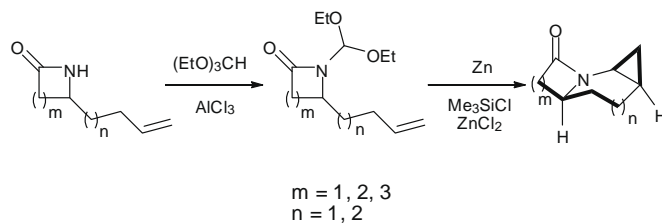


A direct asymmetric synthesis of a *trans*-4,5-dioxygenated cyclopentenone derivative has been achieved by organocatalysed rearrangement of a pyranone in *tert*-butanol by DABCO and in situ enzymatic resolution

Intramolecular amidocyclopropanation reactions using diethoxymethyl-functionalised lactams as organozinc carbenoid precursors

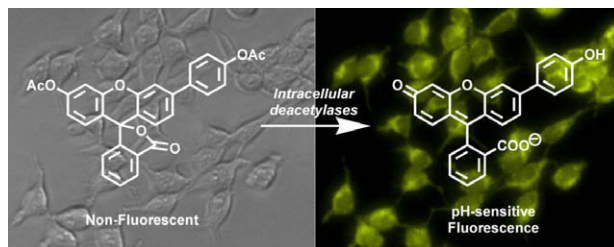
pp 3709–3712

Laure Jerome, Tom D. Sheppard, Abil E. Aliev, William B. Motherwell *

**A fluorescein-derived anthocyanidin-inspired pH sensor**

pp 3713–3715

Asier Unciti-Broceta, M. Rahimi Yusop, Patricia R. Richardson, Jeffrey G. A. Walton, Mark Bradley *

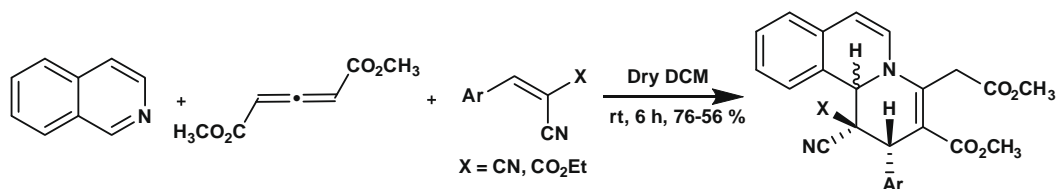


Anthofluorescein, a new multicolor fluorophore with high pH-sensitivity in the physiological range has been synthesized from fluorescein using microwave-assisted cross-coupling chemistry.



A novel multicomponent reaction involving isoquinoline, allenolate and cyanoacrylates

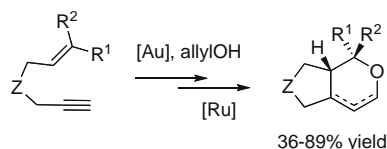
pp 3716–3718

Vijay Nair ^{*}, Beneesh Pattoorpadu Babu, Vimal Varghese, C. R. Sinu, Rony Rajan Paul, E. R. Anabha, Eringathodi Suresh

A novel MCR involving isoquinoline–allenolate zwitterion is reported.

Synthesis of polycyclic heterocycles via sequential Au-catalyzed cycloisomerization and Ru-catalyzed metathesis reactions

pp 3719–3722

Chung-Meng Chao, Patrick Yves Toullec, Véronique Michelet ^{*}**OTHER CONTENTS****Calendar**

p I

^{*}Corresponding author

Supplementary data available via ScienceDirect

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ISSN 0040-4039