

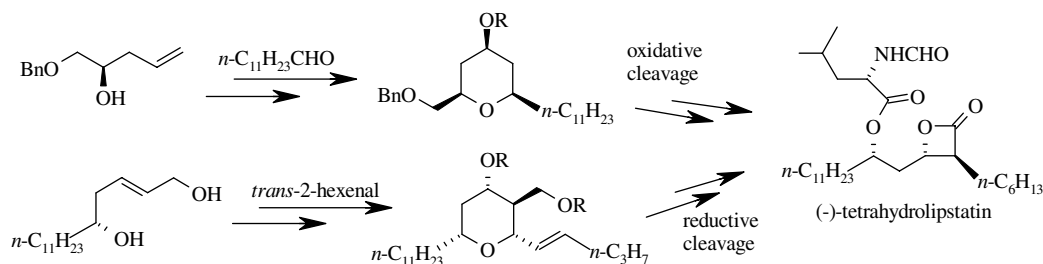
Contents

COMMUNICATIONS

Stereoselective syntheses of (-)-tetrahydrolipstatin via Prins cyclisations

pp 4995–4998

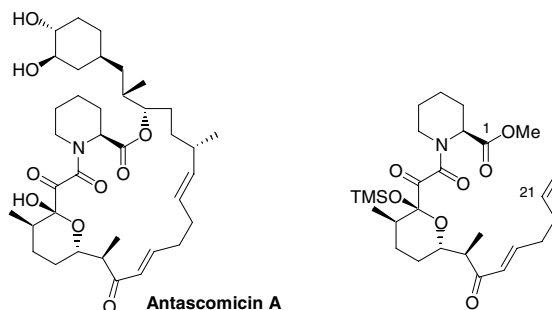
J. S. Yadav,\* M. Sridhar Reddy and A. R. Prasad



Studies directed towards the synthesis of antascomicin A: stereoselective synthesis of the C1–C21 fragment of the molecule

pp 4999–5002

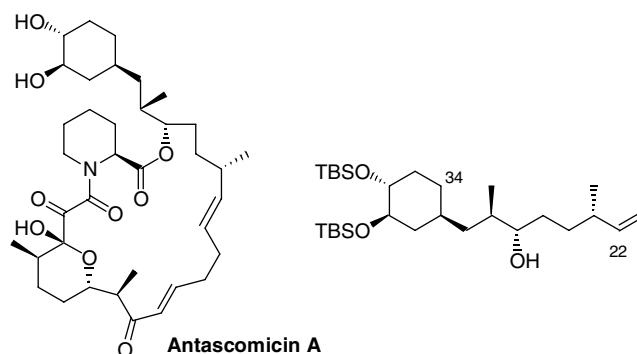
Tushar Kanti Chakraborty\* and Bajjuri Krishna Mohan



Studies directed towards the synthesis of antascomicin A: stereoselective synthesis of the C22–C34 fragment of the molecule

pp 5003–5005

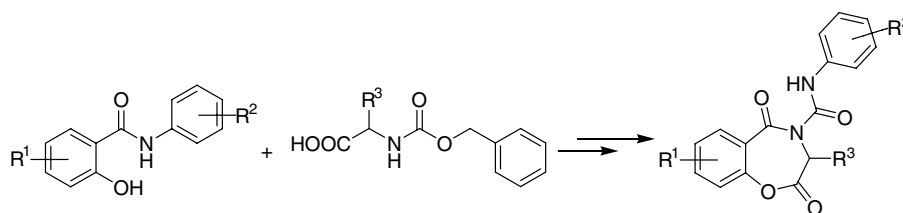
Tushar Kanti Chakraborty,\* Bajjuri Krishna Mohan and Midde Sreekanth



**Salicylanilide esterification: unexpected formation of novel seven-membered rings**

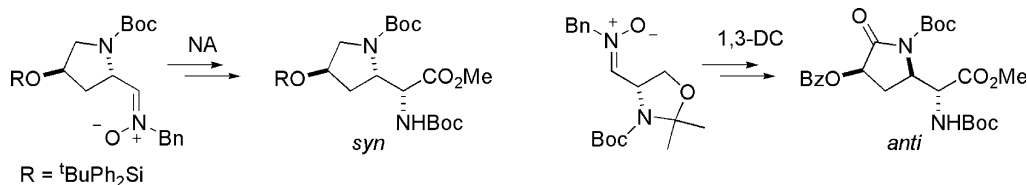
pp 5007–5011

Aleš Imramovský, Jarmila Vinšová,\* Juana Monreal Ferriz, Jiří Kuneš, Milan Pour and Martin Doležal

**Stereoselective synthesis of pyrrolidinyl glycines from nitrones: complementarity of nucleophilic addition and 1,3-dipolar cycloaddition**

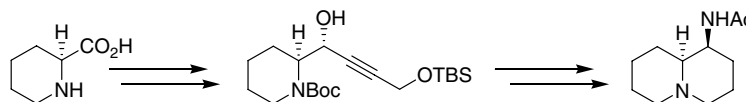
pp 5013–5016

Pedro Merino,\* Petra Pádár, Ignacio Delso, Muniappan Thirumalaikumar, Tomás Tejero and Lajos Kovács\*

**A concise synthesis of (±) and a total synthesis of (+)-epiquinamide**

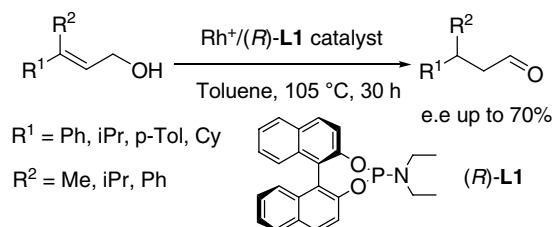
pp 5017–5020

Sok Teng (Amy) Tong and David Barker\*

**First rhodium/phosphoramidite complex-catalyzed enantioselective isomerization of allylic alcohols into aldehydes**

pp 5021–5024

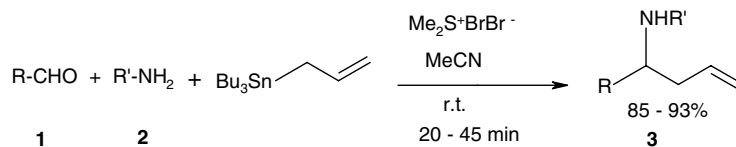
Fabien Boeda, Paul Mosset and Christophe Crévisy\*



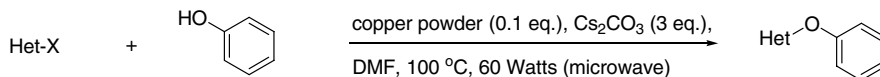


**(Bromodimethyl)sulfonium bromide catalyzed efficient multicomponent one-pot synthesis of homoallylic amines** pp 5041–5044

Biswanath Das,\* B. Ravikanth, P. Thirupathi and B. Vittal Rao

**Effect of microwave heating on Ullmann-type heterocycle-aryl ether synthesis using chloro-heterocycles** pp 5045–5048

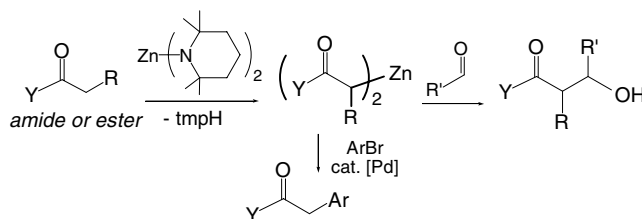
Noel D. D'Angelo, Joseph J. Peterson, Shon K. Booker, Ingrid Fellows, Celia Dominguez, Randall Hungate, Paul J. Reider and Tae-Seong Kim\*



Ullmann ether synthesis was conducted on a variety of chloro-heterocycles with different phenols using optimized conditions involving copper powder and cesium carbonate. On many substrates, microwave heating afforded higher yields in significantly shorter reaction times compared to conventional heating conditions. These findings provide a facile method for aryl ether synthesis from chloropyridines, chloroquinolines, and chlorobenzothiazoles.

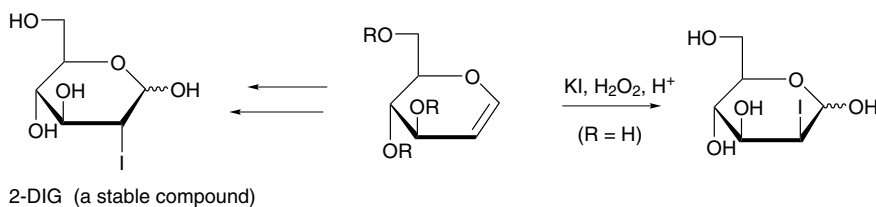
**One-step deprotonation route to zinc amide and ester enolates for use in aldol reactions and Negishi couplings** pp 5049–5053

Mark L. Hlavinka and John R. Hagadorn\*

**Procurement of 2-deoxy-2-iodo-D-glucose (2-DIG)**

pp 5055–5058

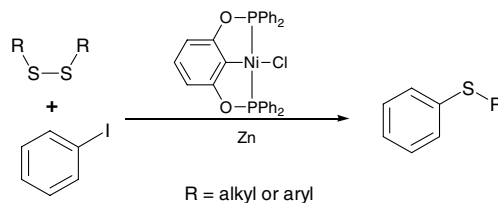
Christophe Morin



**High yield thiolation of iodobenzene catalyzed by the phosphinite nickel PCP pincer complex:**  
**[NiCl{C<sub>6</sub>H<sub>3</sub>-2,6-(OPPh<sub>2</sub>)<sub>2</sub>}]**

pp 5059–5062

Valente Gómez-Benítez, Oscar Baldovino-Pantaleón, Cesar Herrera-Álvarez, Rubén A. Toscano and David Morales-Morales\*

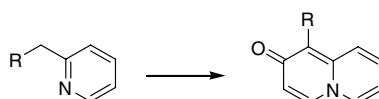


[NiCl{C<sub>6</sub>H<sub>3</sub>-2,6-(OPPh<sub>2</sub>)<sub>2</sub>}] efficiently catalyzes the thiolation of iodobenzene with a broad scope of disulfides in the presence of zinc, the coupled products are obtained in excellent and in many cases nearly quantitative yields.

**Synthesis of the 2H-quinolizin-2-one scaffold via a stepwise acylation—intramolecular annulation strategy**

pp 5063–5067

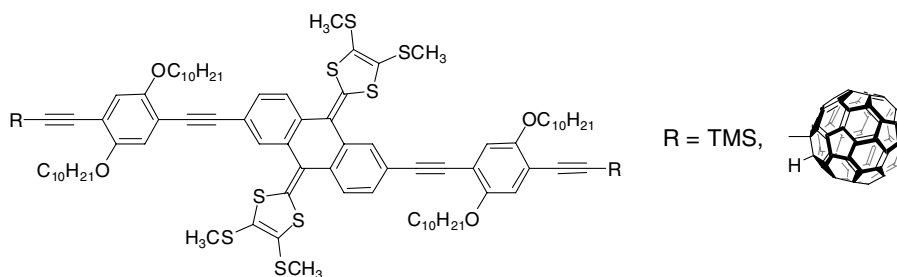
Swaminathan R. Natarajan,\* Meng-Hsin Chen,\* Stephen T. Heller, Robert M. Tynebor, Ellen M. Crawford, Cui Minxiang, Han Kaizheng, Jingchao Dong, Bin Hu, Wu Hao and Shu-Hui Chen



**Synthesis and electronic properties of alkyne–TTFAQ based molecular wires**

pp 5069–5073

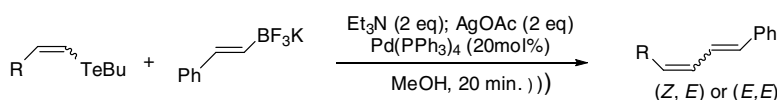
Guang Chen and Yuming Zhao\*



**Palladium-catalyzed cross-coupling of vinylic tellurides and potassium vinyltrifluoroborate salt: synthesis of 1,3-dienes**

pp 5075–5078

Rodrigo Cella, Aline T. G. Orfão and Hélio A. Stefani\*



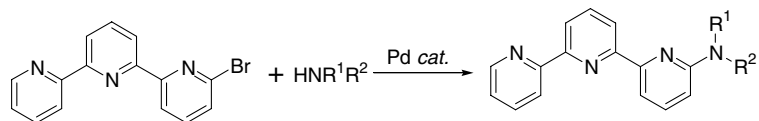
R=phenyl, naphthyl, alkyl, alkenyl, hydroxi.



**Preparation of a series of novel fluorophores, N-substituted 6-amino and 6,6''-diamino-2,2':6',2''-terpyridine by palladium-catalyzed amination**

pp 5079–5082

Jin-Dong Cheon, Toshiki Mutai and Koji Araki\*

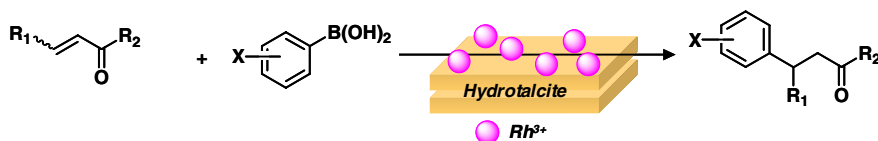


A new series of highly fluorescent tpy derivatives, N-substituted 6-amino- and 6,6''-diamino-2,2':6',2''-terpyridine was conveniently prepared in one-step by Pd-catalyzed amination of bromo-substituted tpy's with various amines.

**A rhodium-grafted hydrotalcite as a highly efficient heterogeneous catalyst for 1,4-addition of organoboron reagents to  $\alpha,\beta$ -unsaturated carbonyl compounds**

pp 5083–5087

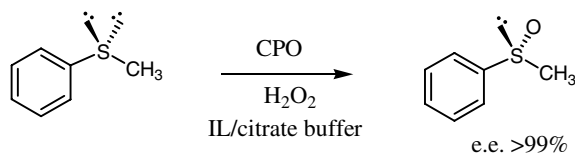
Noriaki Fujita, Ken Motokura, Kohsuke Mori, Tomoo Mizugaki, Kohki Ebitani, Koichiro Jitsukawa and Kiyotomi Kaneda\*



**Application of hydrophilic ionic liquids as co-solvents in chloroperoxidase catalyzed oxidations**

pp 5089–5093

Cinzia Chiappe,\* Lisa Neri and Daniela Pieraccini

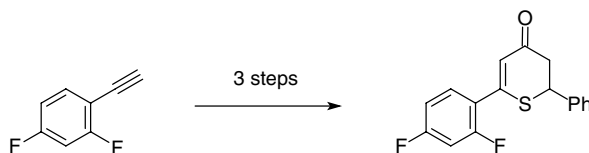


IL = [mmim][Me<sub>2</sub>PO<sub>4</sub>] or [N<sub>1112</sub>OH][Cit] or [N<sub>1112</sub>OH][OAc]

**Synthesis of unsymmetrically 2,6-disubstituted 2,3-dihydrothiopyran-4-ones**

pp 5095–5097

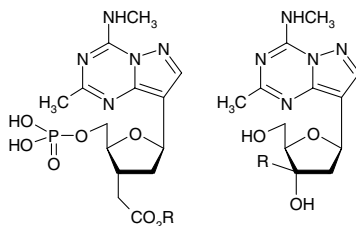
Anna Rosiak and Jens Christoffers\*



**Stereoselective synthesis of 3'-substituted 2'-deoxy C-nucleoside pyrazolo[1,5-a]-1,3,5-triazines and their 5'-phosphate nucleotides**

pp 5099–5103

Romain Mathieu, Martine Schmitt\* and Jean-Jacques Bourguignon

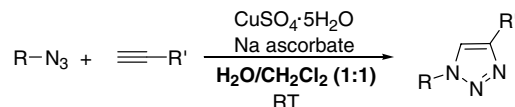


3'-Substituted 2'-deoxynucleoside analogues in the pyrazolotriazine series were prepared from the corresponding 3'-ketonucleoside via the Wittig reaction or a stereoselective addition of alkynylcerium reagents.

**A new solvent system for efficient synthesis of 1,2,3-triazoles**

pp 5105–5109

Bo-Young Lee, So Ra Park, Heung Bae Jeon\* and Kwan Soo Kim\*

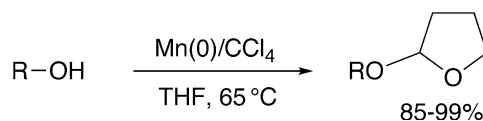


CH<sub>2</sub>Cl<sub>2</sub>/H<sub>2</sub>O solvent system increased reaction rates and provided 1,2,3-triazoles in excellent yields compared to other known solvent systems.

**An economic and practical synthesis of the 2-tetrahydrofuranyl ether protective group**

pp 5111–5113

J. R. Falck,\* De Run Li, Romain Bejot and Charles Mioskowski\*

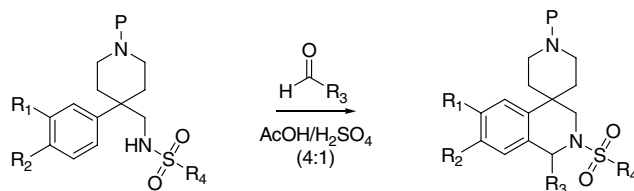


A wide variety of alcohols are efficiently transformed into the corresponding 2-tetrahydrofuranyl ethers by a combination of Mn(0) powder and CCl<sub>4</sub> in tetrahydrofuran.

**Preparation of 2,3-dihydro-1H-spiro[isoquinoline-4,4'-piperidine] via an N-sulfonyl Pictet–Spengler reaction**

pp 5115–5117

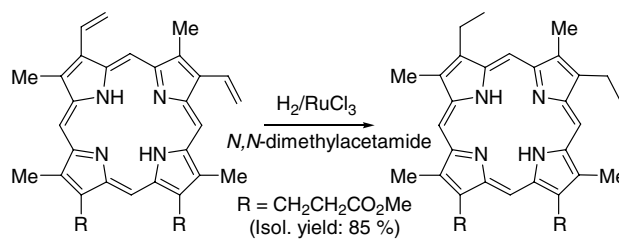
Jian Liu,\* Tianying Jian, Iyassu Sebhat and Ravi Nargund



### A simple, catalytic H<sub>2</sub>-hydrogenation method for the synthesis of fine chemicals; hydrogenation of protoporphyrin IX dimethyl ester

pp 5119–5122

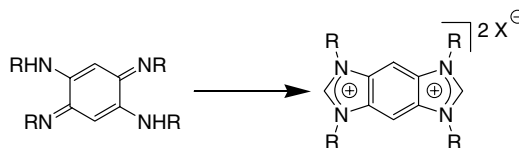
Júlio S. Rebouças and Brian R. James\*



### An alternative synthesis of benzobis(imidazolium) salts via a ‘one-pot’ cyclization/oxidation reaction sequence

pp 5123–5125

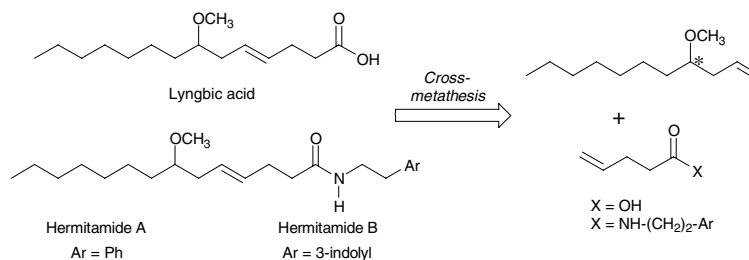
Andrew J. Boydston, Dimitri M. Khramov and Christopher W. Bielawski\*



### Total and formal enantioselective synthesis of lyngbic acid and hermitamides A and B

pp 5127–5130

Marie-Alice Virolleaud, Christine Menant, Bernard Fenet and Olivier Piva\*

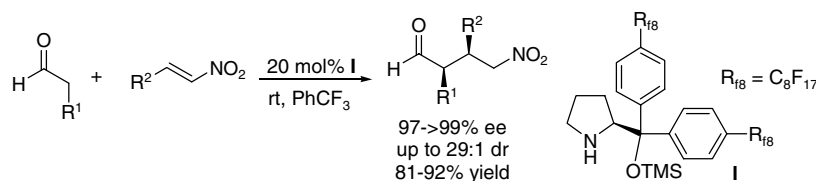


A short access to racemic lyngbic acid and hermitamides A and B and a formal enantioselective synthesis of these compounds have been devised based on a cross-metathesis reaction between readily available substrates.

### Highly enantioselective aldehyde–nitroolefin Michael addition reactions catalyzed by recyclable fluororous (*S*) diphenylpyrrolinol silyl ether

pp 5131–5134

Liansuo Zu, Hao Li, Jian Wang, Xinhong Yu\* and Wei Wang\*

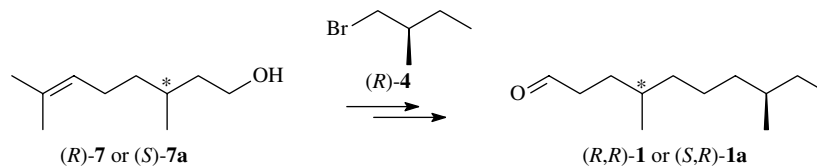




**Synthesis of (4*R*,8*R*)- and (4*S*,8*R*)-4,8-dimethyldecanal: the common aggregation pheromone of flour beetles**

pp 5135–5137

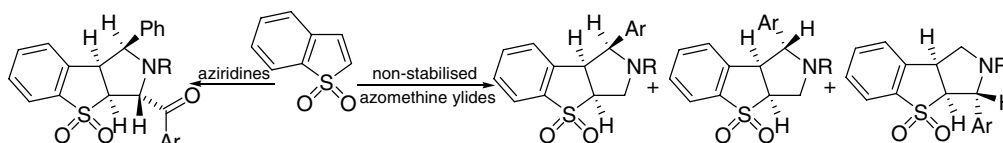
Ellen M. Santangelo, Arlene G. Corrêa and Paulo H. G. Zarbin\*



**1,3-Dipolar cycloaddition reactions of benzo[*b*]thiophene 1,1-dioxide with azomethine ylides**

pp 5139–5142

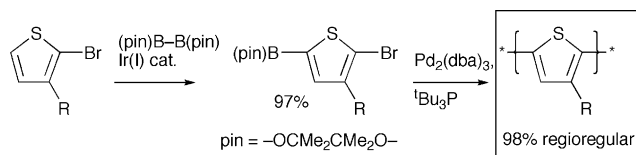
Nela Malatesti,\* Andrew N. Boa, Stephen Clark and Robert Westwood



**Suzuki route to regioregular polyalkylthiophenes using Ir-catalysed borylation to make the monomer, and Pd complexes of bulky phosphanes as coupling catalysts for polymerisation**

pp 5143–5146

Iain A. Liversedge, Simon J. Higgins,\* Mark Giles, Martin Heeney and Iain McCulloch



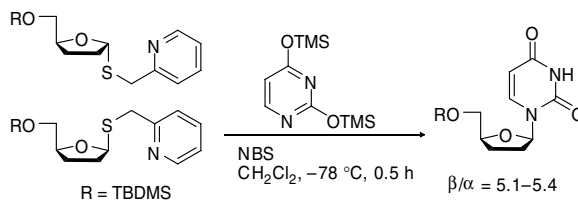
Bulky, electron-rich Pd(0)–phosphane complexes are effective catalysts for the preparation of regioregular polyalkylthiophenes using Suzuki coupling; the necessary monomer can be prepared in high yield by Ir-catalysed borylation, without the need for strong bases.



**Synthesis of 2',3'-dideoxynucleosides via C–S bond cleavage: N-glycosylation of 2,3-dideoxy-1-[(2-pyridylmethyl)thio]glycoside**

pp 5147–5150

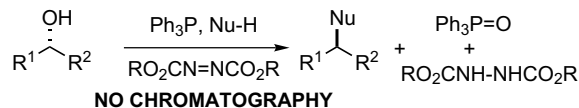
Koichi Mitsudo, Wataru Matsuda, Seiji Miyahara and Hideo Tanaka\*



**Chromatography-free product separation in the Mitsunobu reaction**

pp 5151–5154

Anthony J. Proctor, Kevin Beautement, John M. Clough, David W. Knight\* and Yingfa Li

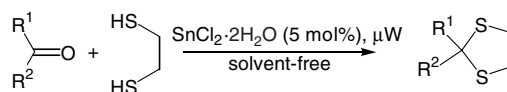


Products can easily be isolated in generally excellent yields from Mitsunobu reactions without resort to chromatography by prior oxidation using dilute hydrogen peroxide followed by simple filtrations through silica gel and aqueous washings.

**A rapid and efficient method for 1,3-dithiolane synthesis**

pp 5155–5157

Ghanashyam Bez\* and Dipankoj Gogoi



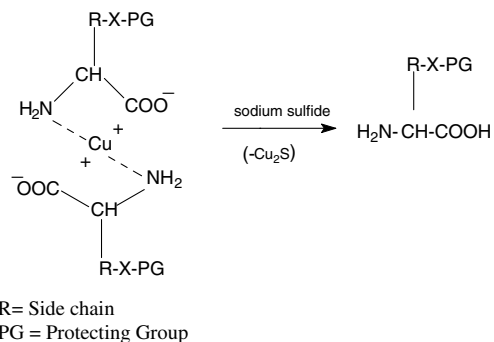
A mild, efficient and solvent-free protocol for conversion of aldehydes and ketones into their corresponding 1,3-dithiolanes using 1,2-ethanedithiol in the presence of a catalytic amount of SnCl<sub>2</sub>·2H<sub>2</sub>O is reported.

**Decomposition of copper–amino acid complexes by sodium sulfide**

pp 5159–5161

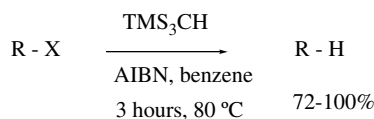
Shaik Nowshuddin and A. Ram Reddy\*

Sodium sulfide reductively removes copper from amino acid complexes to give the free colorless amino acid and insoluble copper(I) sulfide.

**On the use of (TMS)<sub>3</sub>CH as novel tin-free radical reducing agent**

pp 5163–5165

V. Tamara Perchyonok

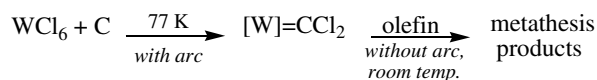


where X = Cl, Br, I, OC(S)SMe,  
PTOC, C(O)ONMeC(S)SMe

**The first example of tungsten-based carbene generation from  $WCl_6$  and atomic carbon and its use in olefin metathesis**

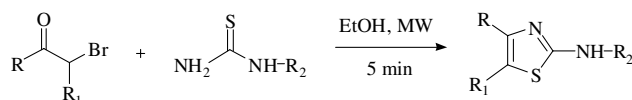
pp 5167–5170

Bülent Düz,\* Dilek Yüksel, Abdulilah Ece and Fatma Sevin\*

**Microwave promoted synthesis of functionalized 2-aminothiazoles**

pp 5171–5172

George W. Kabalka\* and Arjun R. Mereddy

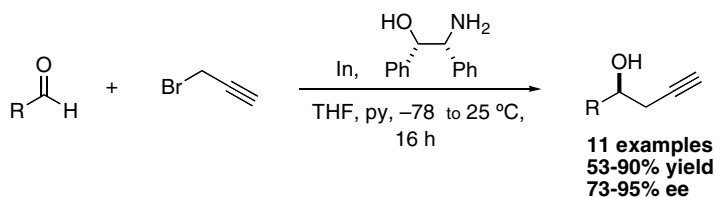
R = Ar; R<sub>1</sub> = H, CH<sub>3</sub>, Ph; R<sub>2</sub> = H, CH<sub>3</sub>, Ph

Microwave irradiation promotes the rapid one-pot synthesis of 2-aminothiazoles formed via the condensation of  $\alpha$ -bromoketones with thiourea.

**Asymmetric indium-mediated synthesis of homopropargylic alcohols**

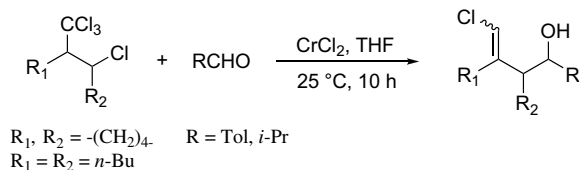
pp 5173–5176

Lacie C. Hirayama, Kevin K. Dunham and Bakthan Singaram\*

**Reactivity of  $\gamma$ -chloro-*gem*-trichloroalkanes with chromous chloride**

pp 5177–5180

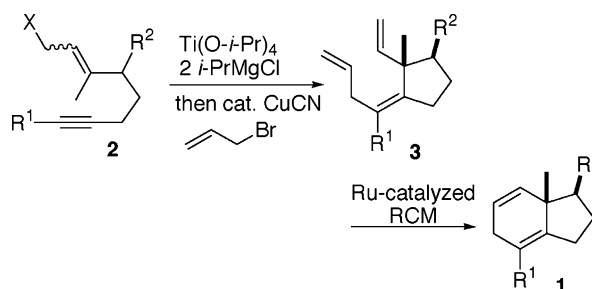
Steve Tisserand, Romain Bejot, Célia Billaud, De Run Li, J. R. Falck\* and Charles Mioskowski\*



**Stereoselective construction of 3a-methylhydrindanes starting from 2,7-enynol derivatives based on Ti(II)-mediated cyclization and Ru-catalyzed ring-closing metathesis**

pp 5181–5185

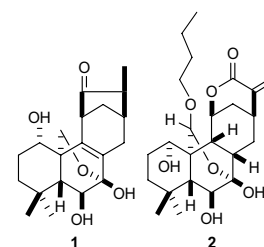
Mutsumi Ohkubo, Wataru Uchikawa, Hitomi Matsushita, Aiko Nakano, Takayuki Shirato and Sentaro Okamoto\*


**A new rearranged and a new *seco-ent*-kaurane diterpenoids from *Isodon parvifolius***

pp 5187–5190

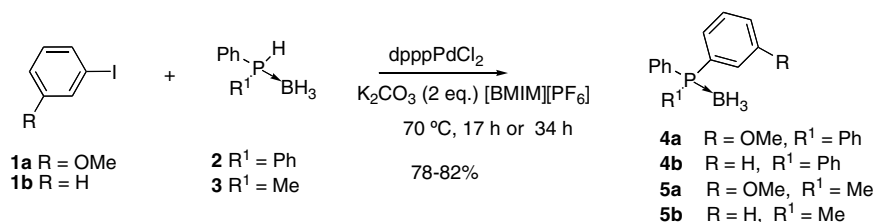
Li-Mei Li, Guo-You Li, Wei-Lie Xiao, Yan Zhou, Sheng-Hong Li, Sheng-Xiong Huang, Quan-Bin Han, Li-Sheng Ding, Li-Guang Lou and Han-Dong Sun\*

Parvifoline X (**1**), a new rearranged *ent*-kaurane diterpenoid, and parvifoline Y (**2**), a new 8,15-*seco-ent*-kaurane diterpenoid, were isolated from the leaves of *Isodon parvifolius*. Their structures were elucidated by spectroscopic methods including 2D NMR analysis, and supported by a biogenetic pathway. Parvifoline X (**1**), possessing a new 15(8→11)-*abeo*-7 $\alpha$ ,20-epoxy-*ent*-kaurane skeleton, was found from the genus *Isodon* for the first time. Compounds **1** and **2** were evaluated for their inhibitory activity against A549, HT-29, and K562 cell lines. Parvifoline Y (**2**) was the most cytotoxic against A549 cells with an IC<sub>50</sub> value of 4.97  $\mu$ M.


**Palladium catalyzed C–P cross-coupling reactions in ionic liquids**

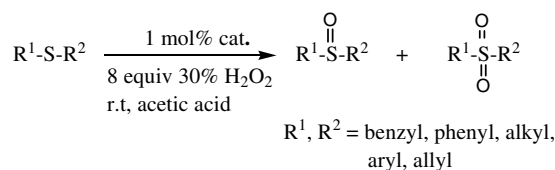
pp 5191–5193

H el ene Vallette, St ephanie Pican, C edric Boudou, Jocelyne Levillain, Jean-Christophe Plaquevent and Annie-Claude Gaumont\*


**Mn(III)-catalyzed oxidation of sulfides to sulfoxides with hydrogen peroxide**

pp 5195–5197

Farideh Hosseinpoor and Hamid Golchoubian\*

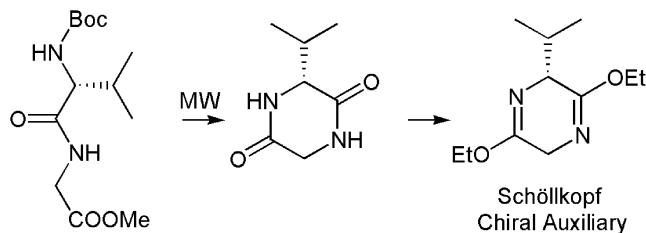


Sulfides were selectively oxidized to the corresponding sulfoxides in good yields with hydrogen peroxide using a manganese(III) Schiff-base complex as catalyst in glacial acetic acid as solvent under mild conditions.

**Microwave-assisted synthesis of the Schöllkopf chiral auxiliaries: (3*S*)- and (3*R*)-3,6-dihydro-2,5-diethoxy-3-isopropyl-pyrazine**

pp 5199–5201

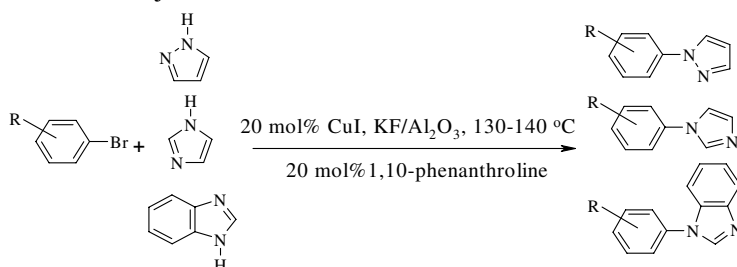
Anna-Carin Carlsson, Fariba Jam, Marcus Tullberg, Å. Pilotti, Panos Ioannidis, Kristina Luthman and Morten Grøtli\*



**Copper-catalyzed N-arylation of diazoles with aryl bromides using KF/Al<sub>2</sub>O<sub>3</sub>: an improved protocol**

pp 5203–5205

Rahman Hosseinzadeh,\* Mahmood Tajbakhsh and Mohammad Alikarami

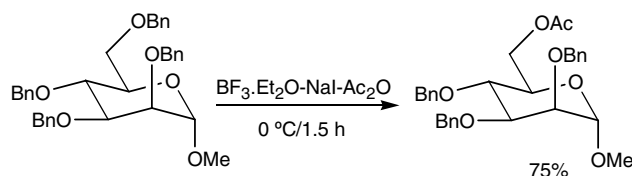


A simple and efficient method for the coupling of aryl bromides with heterocyclic compounds such as diazoles that does not require the use of alkoxide bases is described.

**A one-pot selective deprotective acetylation of benzyl ethers and OTBDMS ethers using the BF<sub>3</sub>·Et<sub>2</sub>O–NaI–Ac<sub>2</sub>O reagent system**

pp 5207–5210

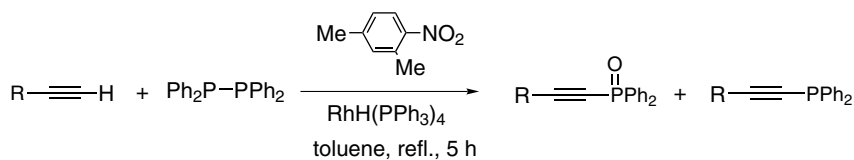
Anita Brar and Yashwant D. Vankar\*



**Rhodium-catalyzed synthesis of 1-alkynylphosphine oxides from 1-alkynes and tetraphenylbiphosphine**

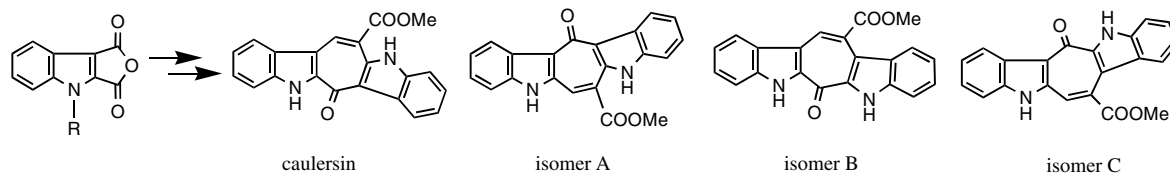
pp 5211–5213

Mieko Arisawa, Masato Onoda, Chieko Hori and Masahiko Yamaguchi\*



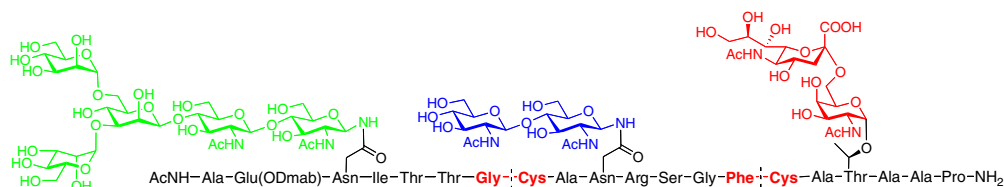
**Synthesis of caulersin and its isomers by reaction of indole-2,3-dicarboxylic anhydrides with methyl indoleacetates** pp 5215–5218

Yasuyoshi Miki,\* Yosiyuki Aoki, Hideaki Miyatake, Toshie Minematsu and Hajime Hibino



**Reiterative cysteine-based coupling leading to complex, homogeneous glycopeptides** pp 5219–5223

Bin Wu, J. David Warren, Jiehao Chen, Gong Chen, Zihao Hua and Samuel J. Danishefsky\*



\*Corresponding author

† Supplementary data available via ScienceDirect

**COVER**

We have demonstrated the synthesis of a multifunctional glycopeptide through reiterative native chemical ligation. The compatibility of both N-linked and O-linked glycans in this process is noteworthy. Its ability to encompass the biologically critical sialic acid glycosides is particularly encouraging. In our ongoing quest to develop methodologies to enable the total synthesis of multiply glycosylated complex glycoproteins of potential clinical value, this new reiterative coupling protocol constitutes an important, if early, entry. We expect that the strategies and protocols of the type disclosed herein will be extendable in pursuing our quest of building homogeneous complex glycoproteins of medicinal value. *Tetrahedron Letters* 2006, 47, 5219–5223.

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