



Tetrahedron Vol. 69, No. 22, 2013

Tetrahedron Symposium-in-Print Number 163

Metal–Catalyzed C–H Bond Functionalization

Guest editor: Olivier Baudoin

Institut de Chimie et Biochimie Moléculaires et Supramoléculaires, Université Claude Bernard Lyon 1, 43 Boulevard du 11 Novembre 1918, 69622 Villeurbanne, France

Contents

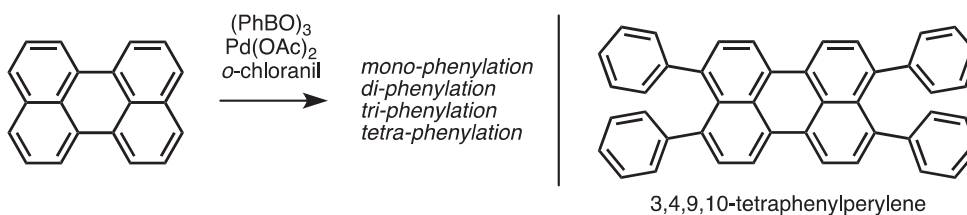
Tetrahedron Symposia-in-Print
 Professor Olivier Baudoin
 Editorial

pp 4365–4368
 p 4369
 p 4370

Palladium-catalyzed direct phenylation of perylene: structural and optical properties of 3,4,9-triphenylperylene and 3,4,9,10-tetraphenylperylene

pp 4371–4374

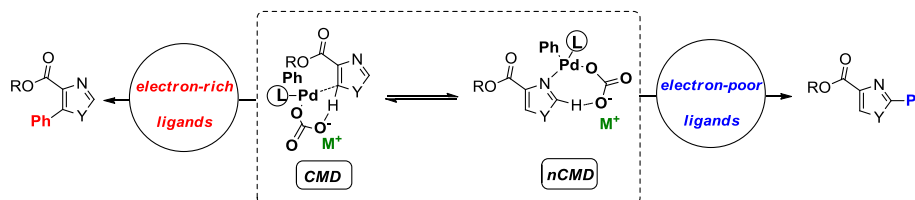
Katsuaki Kawasumi, Kenji Mochida, Yasutomo Segawa, Kenichiro Itami*



Ligand controlled orthogonal base-assisted direct C–H bond arylation in oxa(thia)zole-4-carboxylate series. New insights in nCMD mechanism

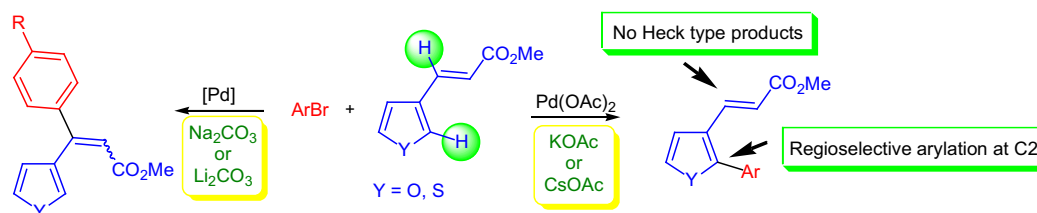
pp 4375–4380

Laure Théveau, Olivier Querolle, Georges Dupas, Christophe Hoarau*



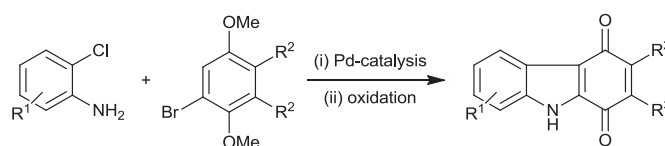
Palladium-acetate catalyst for regioselective direct arylation at C2 of 3-furanyl or 3-thiophenyl acrylates with inhibition of Heck type reaction pp 4381–4388

Lu Chen, Christian Bruneau, Pierre H. Dixneuf, Henri Doucet*



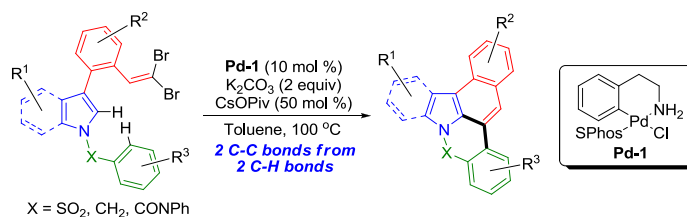
Synthesis of murrayaquinone A and analogues via ring-closing C–H arylation pp 4389–4394

Robin B. Bedford*, John G. Bowen, Amanda L. Weeks



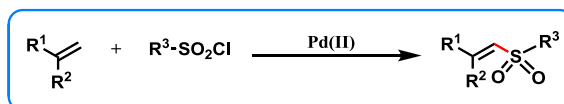
Domino C–H functionalization reactions of gem-dibromoolefins: synthesis of N-fused benzo[c]carbazoles pp 4395–4402

Richard Y. Huang, Patrick T. Franke, Norman Nicolaus, Mark Lautens*



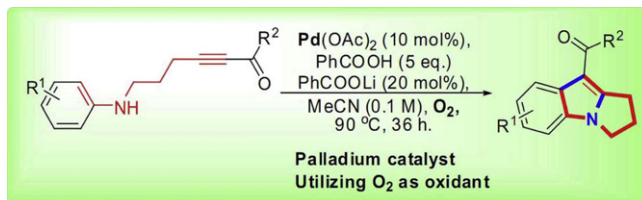
Palladium-catalyzed alkenyl C–H bond sulfonylation reaction using organosulfonyl chlorides pp 4403–4407

Yun-He Xu, Min Wang, Ping Lu, Teck-Peng Loh*

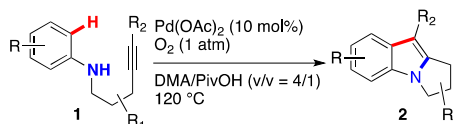


Pd(II)-catalyzed aerobic oxidative intramolecular hydroamination and C–H functionalization of *N*-alkynyl anilines for the synthesis of indole derivatives pp 4408–4414

Long Ren, Zhuangzhi Shi, Ning Jiao*

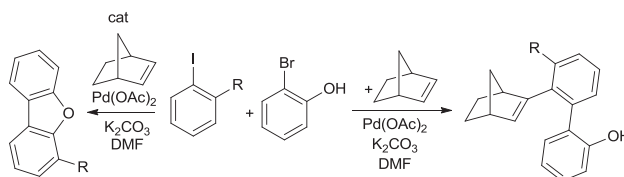
**Pd(II)-catalyzed intramolecular aminopalladation/direct C–H arylation under aerobic conditions: synthesis of pyrrolo [1,2-*a*]indoles** pp 4415–4420

Tiffany Piou, Luc Neuville*, Jieping Zhu*

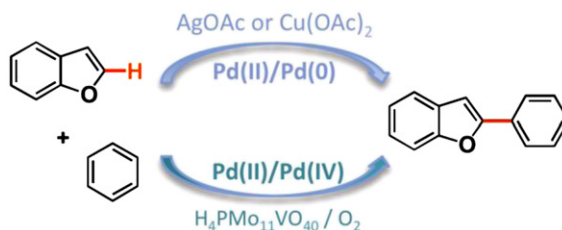
**Competitive pathways in Pd-catalyzed synthesis of arylphenols**

Elena Motti, Nicola Della Ca', Di Xu, Simone Armani, Brunella Maria Aresta, Marta Catellani*

pp 4421–4428

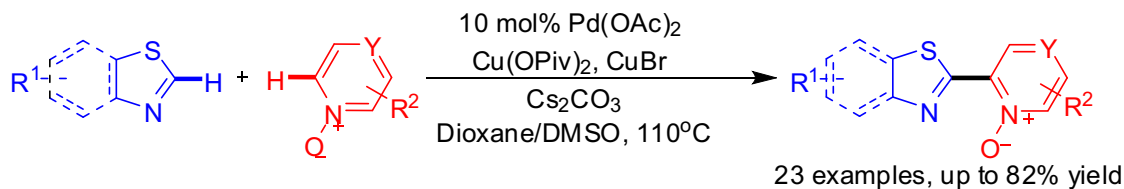
**Insight into the palladium-catalyzed oxidative arylation of benzofuran: heteropoly acid oxidants evoke a Pd(II)/Pd(IV) mechanism** pp 4429–4435

Kyle C. Pereira, Ashley L. Porter, Shathaverdhan Potavathri, Alexis P. LeBris, Brenton DeBoef*

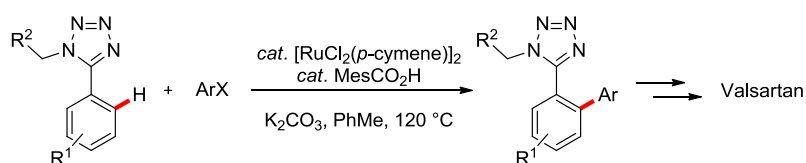


Dual C–H activations of electron-deficient heteroarenes: palladium-catalyzed oxidative cross coupling of thiazoles with azine *N*-oxides pp 4436–4444

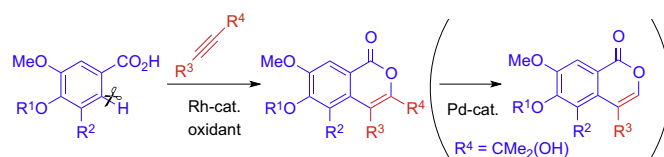
Xiao-Pu Fu, Qing-Qing Xuan, Li Liu*, Dong Wang, Yong-Jun Chen, Chao-Jun Li*


Carboxylate-assisted ruthenium(II)-catalyzed C–H arylations of 5-aryl tetrazoles: step-economical access to Valsartan pp 4445–4453

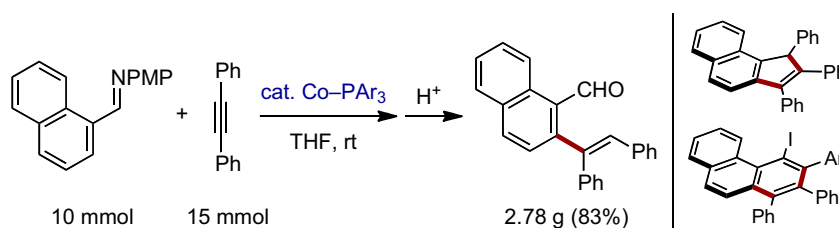
Emelyne Diers, N.Y. Phani Kumar, Tom Mejuch, Ilan Marek, Lutz Ackermann*


Synthesis of highly substituted isocoumarins by rhodium-catalyzed annulation of readily available benzoic acids pp 4454–4458

Yuto Unoh, Koji Hirano, Tetsuya Satoh*, Masahiro Miura*


Cobalt-catalyzed *ortho*-alkenylation of aromatic aldimines via chelation-assisted C–H bond activation pp 4459–4465

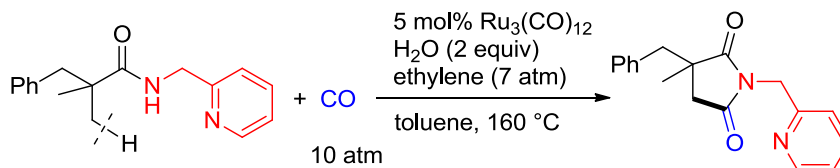
Takeshi Yamakawa, Naohiko Yoshikai*



Ruthenium-catalyzed cyclocarbonylation of aliphatic amides through the regioselective activation of unactivated C(sp³)-H bonds

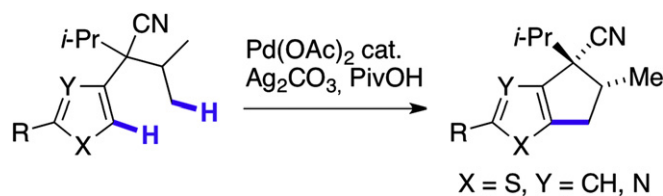
pp 4466–4472

Nao Hasegawa, Kaname Shibata, Valentine Charra, Satoshi Inoue, Yoshiya Fukumoto, Naoto Chatani*

**Intramolecular Pd^{II}-catalyzed dehydrogenative C(sp³)-C(sp²) coupling: an alternative to Pd⁰-catalyzed C(sp³)-H arylation from aryl halides?**

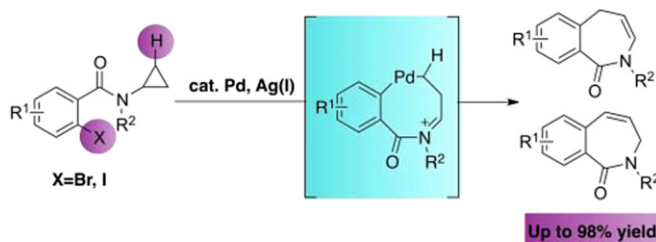
pp 4473–4478

Cathleen Pierre, Olivier Baudoin*

**Palladium-catalyzed ring-opening of cyclopropyl benzamides: synthesis of benzo[c]azepine-1-ones via C(sp³)-H functionalization**

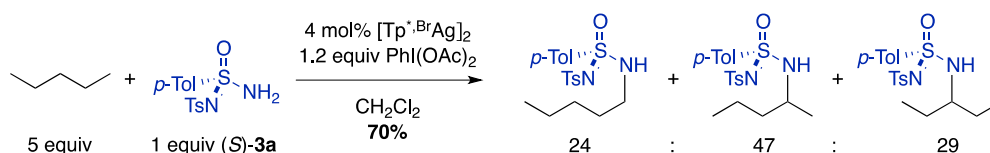
pp 4479–4487

Carolyn L. Ladd, Daniela Sustac Roman, André B. Charette*


**Catalytic C-H amination of alkanes with sulfonimidamides: silver(I)-scorpionates vs. dirhodium(II) carboxylates**

pp 4488–4492

Álvaro Beltrán, Camille Lescot, M. Mar Díaz-Requejo*, Pedro J. Pérez*, Philippe Dauban*



*Corresponding author

 Supplementary data available via SciVerse ScienceDirect

COVER

Examples of metal-catalyzed C–H functionalization reactions reported in this special issue. © 2013 O. Baudoin.

Available online at www.sciencedirect.com

SciVerse ScienceDirect

Full text of this journal is available, on-line from **SciVerse ScienceDirect**. Visit www.sciencedirect.com for more information.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei compendex, EMBASE/Excerpta Medica, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database Sciverse SCOPUS[®]. Full text available on Sciverse ScienceDirect[®].



ELSEVIER

ISSN 0040-4020