



## Tetrahedron Vol. 66, Issue 1, 2010

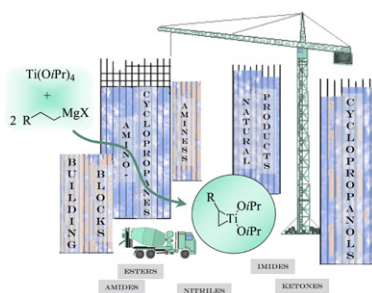
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## REPORT

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Andrzej Wolan\*, Yvan Six

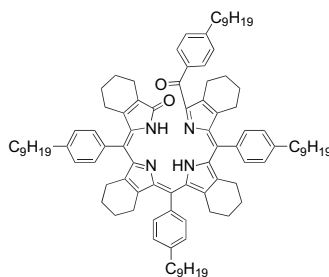


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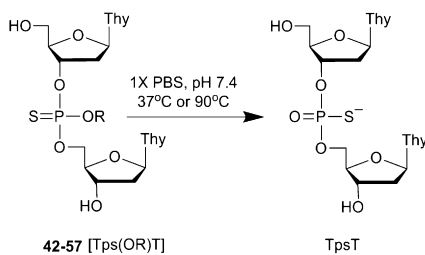
Owendi Ongayi, M. Graça H. Vicente, Brahma Ghosh, Frank R. Fronczek, Kevin M. Smith\*



**Assessment of heat-sensitive thiophosphate protecting groups in the development of thermolytic DNA oligonucleotide prodrugs**

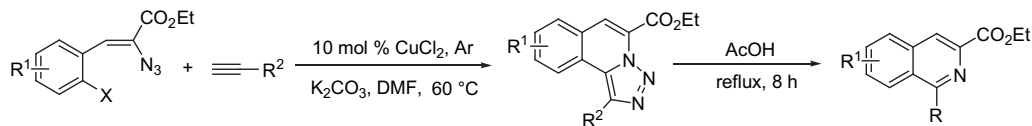
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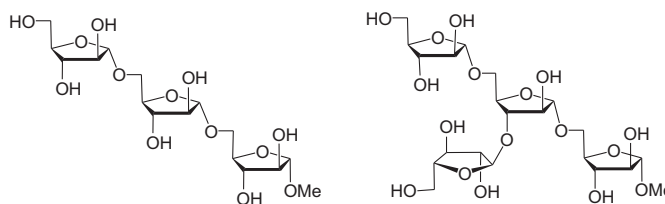
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**Efficient one-pot syntheses of  $\alpha$ -D-arabinofuranosyl tri- and tetrasaccharides present in cell wall polysaccharide of *Mycobacterium tuberculosis***

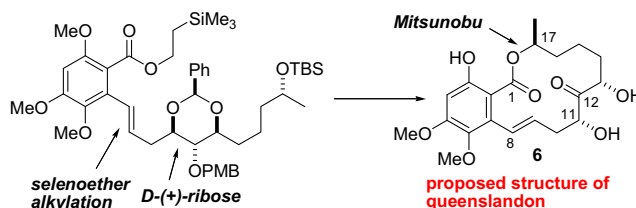
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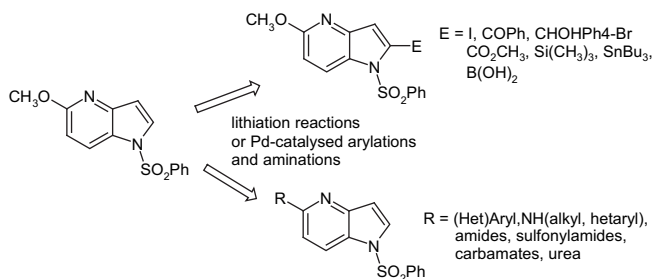
Vaidotas Navickas, Martin E. Maier\*



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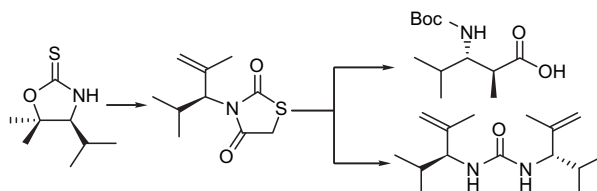
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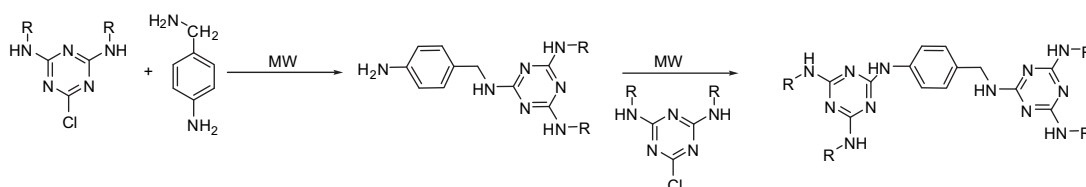
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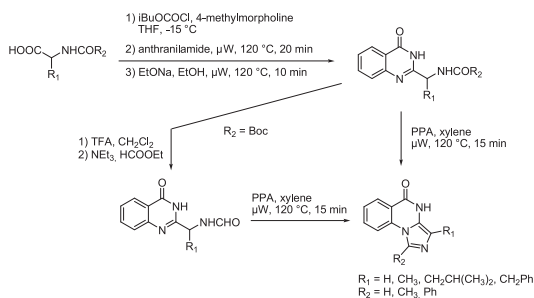
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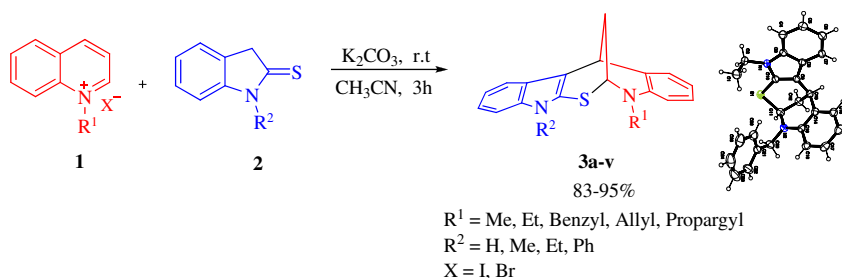
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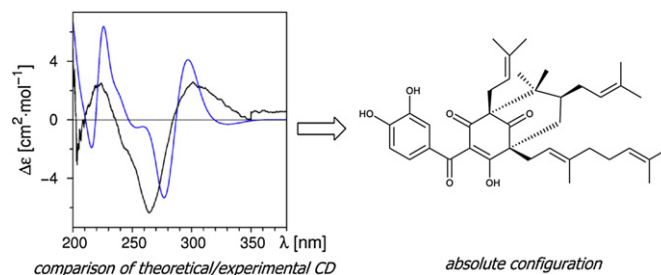
Firouz Matloubi Moghaddam\*, Zohreh Mirjafary, Hamdollah Saeidian, Salman Taheri, Malihe Doulabi, Mostafa Kiamehr



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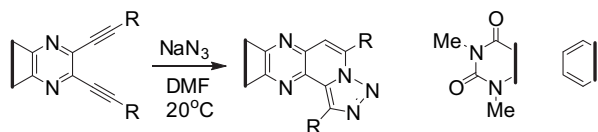
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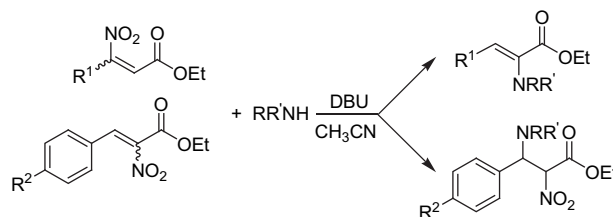
A.V. Gulevskaya\*, Shee Van Dang, A.S. Tyaglivy, A.F. Pozharskii, O.N. Kazheva, A.N. Chekhlov, O.A. Dyachenko



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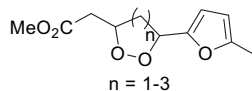
Elzbieta Lewandowska\*, Kinga Wichlacz, Adam J. Sobczak



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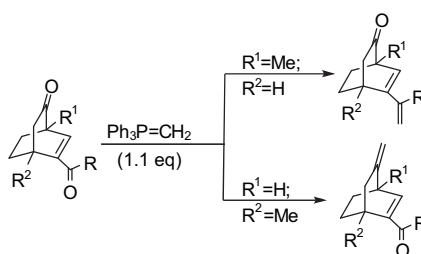
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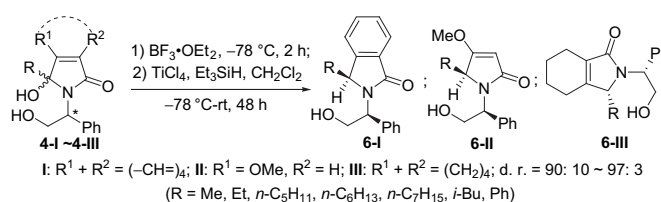
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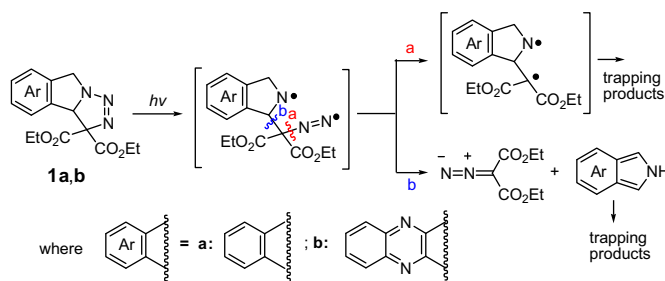
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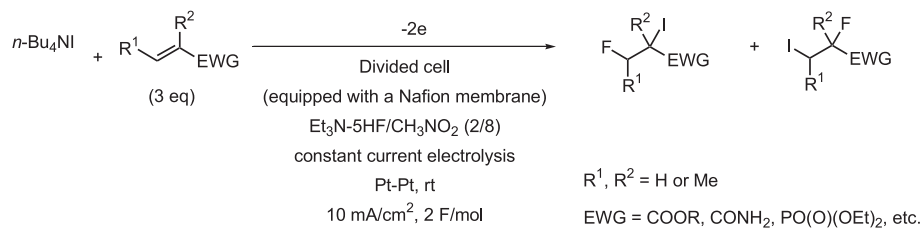
Yu-Jen Chen, Hao-Chih Hung, Chin-Kang Sha\*, Wen-Sheng Chung\*



**Electrochemical iodofluorination of electron-deficient olefins**

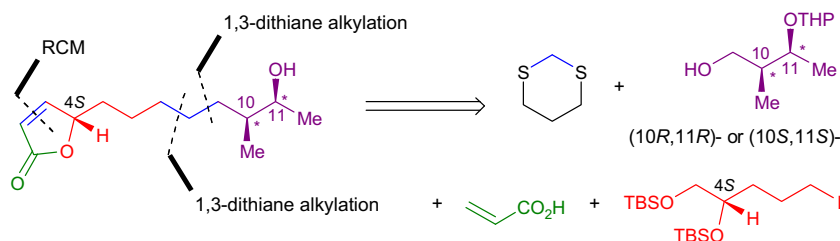
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**Total synthesis of diastereomeric marine butenolides possessing a *syn*-aldol subunit at C10 and C11 and the related C11-ketone**

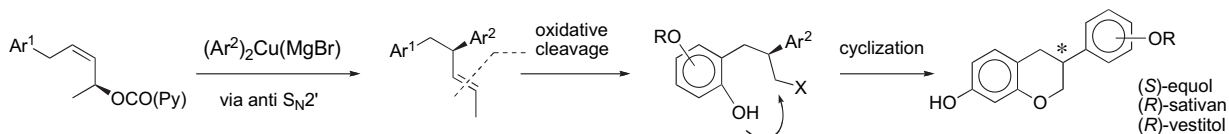
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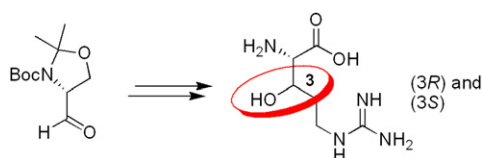
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Yuji Takashima, Yuki Kaneko, Yuichi Kobayashi\*

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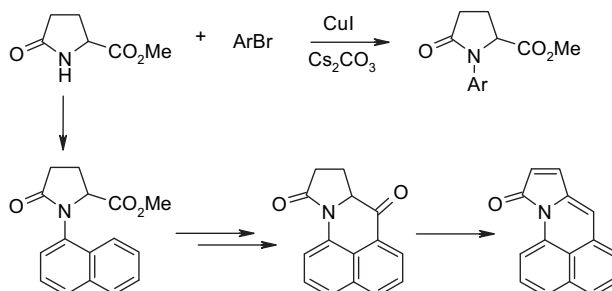
Anke Lemke, Martin Büschleb, Christian Ducho\*



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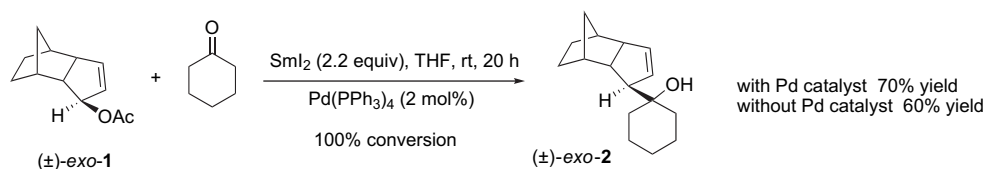
Alina Ghinet, Souhila Oudir, Jean-Pierre Hénichart, Benoît Rigo\*, Nicole Pommery, Philippe Gautret



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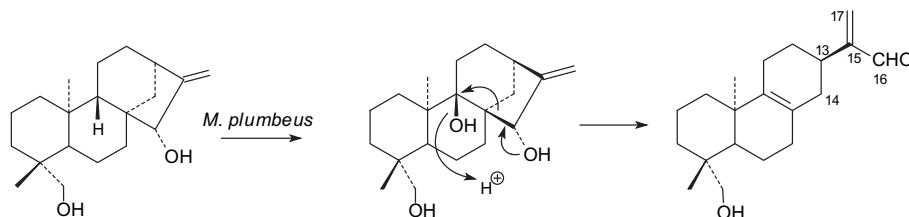
Olivier Jacquet, Timm Bergholz, Caroline Magnier-Bouvier, Mohamed Mellah, Régis Guillot, Jean-Claude Fiaud\*



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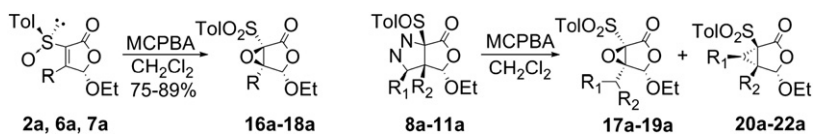
Braulio M. Fraga\*, Ignacio de Alfonso, Victoria Gonzalez-Vallejo, Ricardo Guillermo



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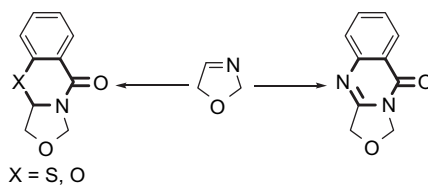
Alberto Fraile, José Luis García Ruano\*, M. Rosario Martín\*, Amelia Tito



**Synthesis of different types of valerolactams starting from 2,5-dihydrooxazoles**

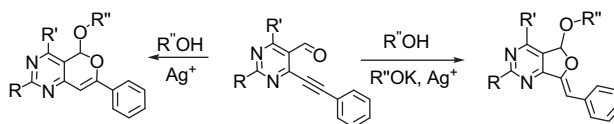
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Katharina Johannes, Jürgen Martens\*


**Tandem reactions of 6-phenylethynylpyrimidine-5-carbaldehydes with alcohols: regioselective synthesis of 5-alkoxy-(7Z)-7-benzylidene-5,7-dihydrofuro[3,4-d]pyrimidines and 5-alkoxy-7-phenyl-5H-pyrano[4,3-d]pyrimidines**

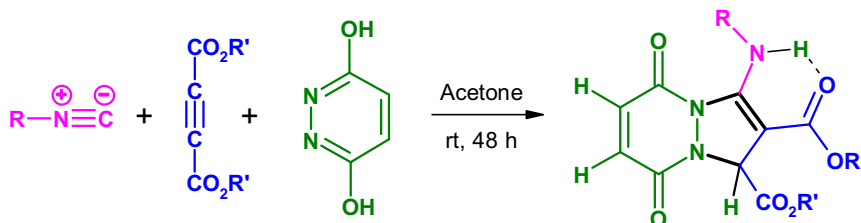
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Inga Cikotiene\*, Rita Buksnaitiene, Simonas Rudys, Marius Morkunas, Dainius Motiejaitis


**Facile synthesis of 1H-pyrazolo[1,2-a]pyridazine-5,8-dione derivatives by a one-pot, three-component reactions**

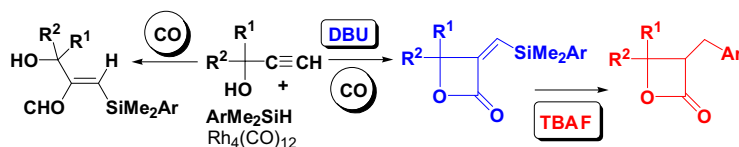
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Mohammad Bagher Teimouri\*, Farideh Mansouri, Reihaneh Bazhrang


**Synthesis of functionalised β-lactones via silylcarbocyclisation/desilylation reactions of propargyl alcohols**

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Laura Antonella Aronica\*, Caterina Mazzoni, Anna Maria Caporusso

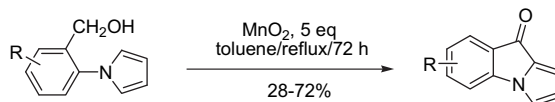




**Efficient synthesis of 9H-pyrrolo[1,2-a]indol-9-one derivatives based on active manganese dioxide promoted intramolecular cyclization**

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Francesca Aiello, Antonio Garofalo\*, Fedora Grande

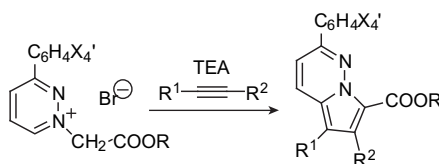


A series of 9H-pyrrolo[1,2-a]indol-9-ones have been prepared via in-situ sequential oxidation of [2-(1H-pyrrol-1-yl)phenyl]methanols promoted by active manganese dioxide, under mild conditions.

**Pyrrolopyridazine derivatives as blue organic luminophores: synthesis and properties. Part 2**

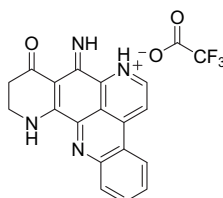
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Gheorghita Zbancioc, Ionel I. Mangalagiu\*

**Ecionines A and B, two new cytotoxic pyridoacridine alkaloids from the Australian marine sponge, *Ecionemia geoides***

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Emma C. Barnes, Nur Akmarina B.M. Said, Elizabeth D. Williams, John N.A. Hooper, Rohan A. Davis\*

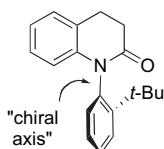


Ecionine A

**Atropisomeric lactam chemistry: catalytic enantioselective synthesis, application to asymmetric enolate chemistry and synthesis of key intermediates for NET inhibitors**

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Masashi Takahashi, Hajime Tanabe, Tsuyoshi Nakamura, Daisuke Kuribara, Toshiyuki Yamazaki, Osamu Kitagawa\*



Catalytic Enantioselective Synthesis

Separation of Excess Enantiomers

Asymmetric Enolate Chemistry

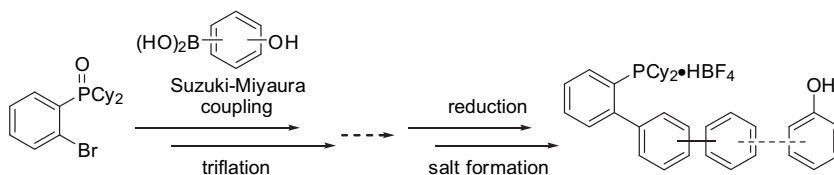
Synthesis of NET Inhibitors



### Synthesis of hydroxylated oligoarene-type phosphines by a repetitive two-step method

Shunpei Ishikawa, Kei Manabe\*

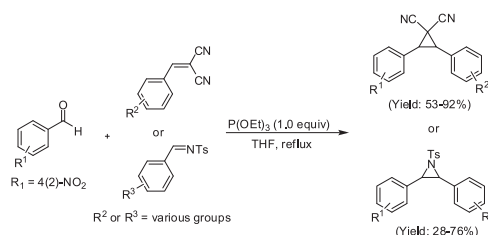
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### Phosphite-mediated annulation: an efficient protocol for the synthesis of multi-substituted cyclopropanes and aziridines

Xu-Guang Liu, Yin Wei, Min Shi\*

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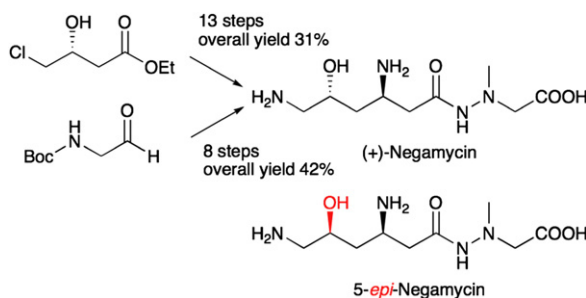
In the presence of phosphine or phosphite, the reaction between 4-, 2-nitrobenzaldehyde and methylenemalononitriles proceeded smoothly to give the cyclopropane derivatives in high yields, while the reaction between 4-, 2-nitrobenzaldehyde, and *N*-tosylbenzaldimines giving the aziridine derivatives in moderate to high yields. A plausible mechanism was discussed and the strongly electron-withdrawing nitro-group is believed to play an important role in these transformations.



### Total synthesis of (+)-negamycin and its 5-*epi*-derivative

Shigenobu Nishiguchi, Magne O. Sydnnes, Akihiro Taguchi, Thomas Regnier, Tetsuya Kajimoto, Manabu Node, Yuri Yamazaki, Fumika Yakushiji, Yoshiaki Kiso, Yoshio Hayashi\*

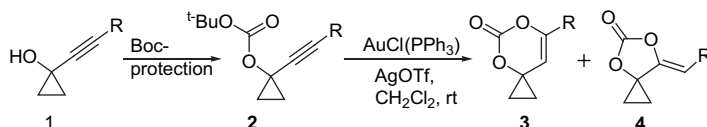
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### Gold-catalyzed cyclization of 1-alkynyl cyclopropyl *tert*-butyl carbonate to construct multifunctionalized vinyl cyclopropane derivatives

Yu-Xin Zhang, Lin Guo\*, Ya-Hui Wang, Li-Li Zhu, Zili Chen\*

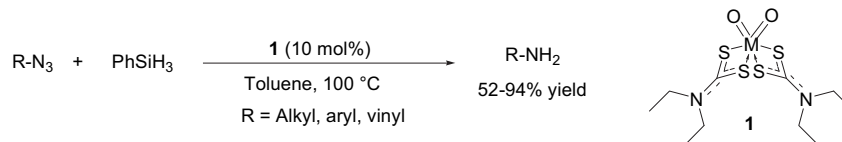
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### Chemoselective reduction of azides catalyzed by molybdenum xanthate by using phenylsilane as the hydride source

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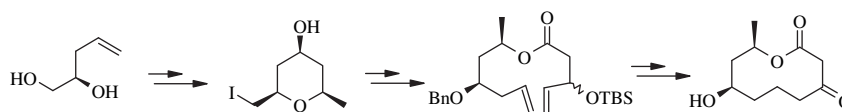
Mahagundappa R. Maddani, Saravana K. Moorthy, Kandikere R. Prabhu\*



### Stereoselective total synthesis of decarestrictine-J via Ring Closing Metathesis (RCM)

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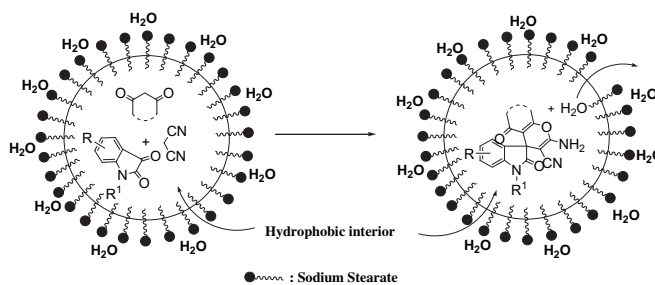
J.S. Yadav\*, K. Anantha Lakshmi, N. Mallikarjuna Reddy, Attaluri R. Prasad, Basi V. Subba Reddy



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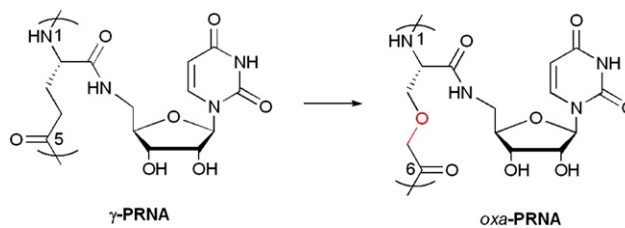
Li-Min Wang\*, Ning Jiao, Jun Qiu, Jian-Jun Yu, Jin-Qian Liu, Feng-Lou Guo, Ying Liu



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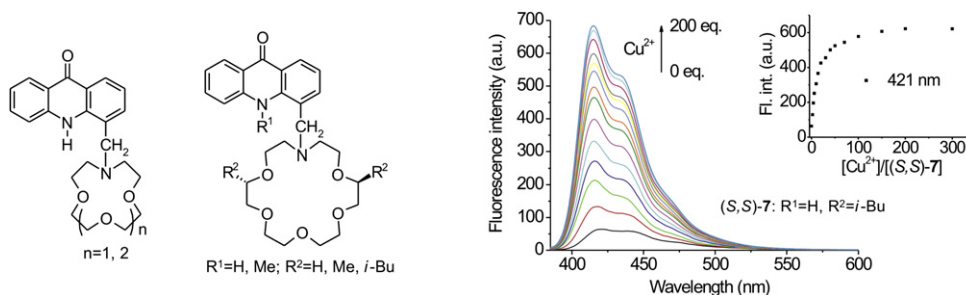
Nobuya Sawa, Takehiko Wada\*, Yoshihisa Inoue\*



**Synthesis and optical characterization of novel azacrown ethers containing an acridinone or an *N*-methylacridinone unit as potential fluorescent chemosensors**

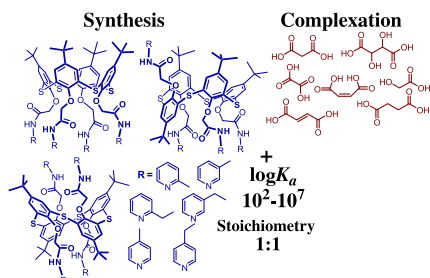
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Ildikó Móczár, Péter Huszthy\*, András Mezei, Mihály Kádár, József Nyitrai, Klára Tóth


***p*-tert-Butyl thiocalix[4]arenes functionalized at the lower rim by *o*-, *m*-, *p*-amido and *o*-, *m*-, *p*-(amidomethyl)pyridine fragments as receptors for  $\alpha$ -hydroxy- and dicarboxylic acids**

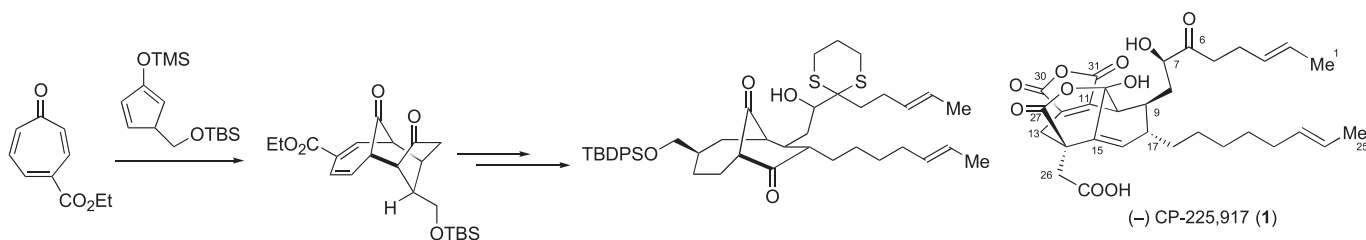
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Ivan I. Stoikov\*, Arkadiy Yu. Zhukov, Maria N. Agafonova, Ruzal R. Sitdikov, Igor S. Antipin, Alexander I. Konovalov


**Application of a [6+4] cycloaddition strategy toward the total synthesis of CP-225,917**

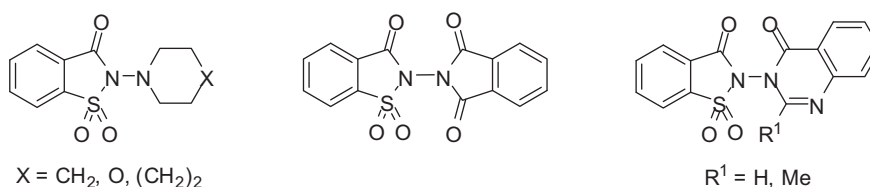
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James A. Ashenurst, Ljubomir Isakovic, James L. Gleason\*


***N,N'*-Linked 1,2-benzisothiazol-3(2*H*)-one 1,1-dioxides: synthesis, biological activity, and derived radicals**

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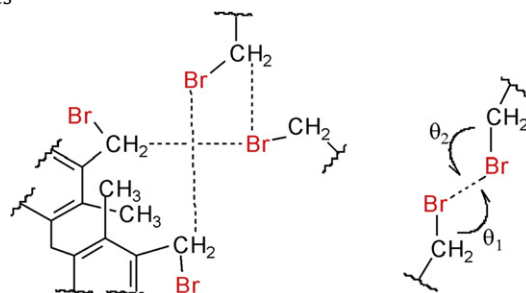
Valeria M. Zakharova\*, Ortwin Brede, Michael Gütschow, Mikhail A. Kuznetsov, Mikhail Zibinsky, Joachim Sieler, Bärbel Schulze



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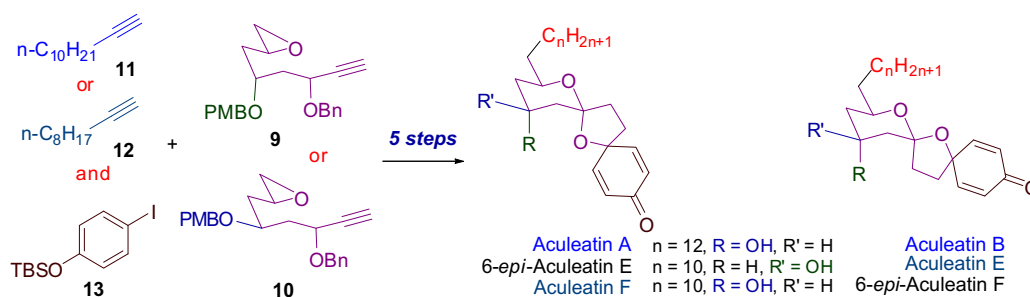
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Monika Mazik\*, Arno C. Buthe, Peter G. Jones

**A modular total synthesis of aculeatins A, B, E, F and 6-*epi*-aculeatins E, F**

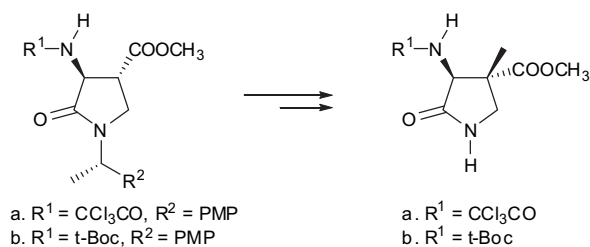
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C.V. Ramana\*, Sunil Kumar Pandey

**A novel conformationally restricted analogue of 3-methylaspartic acid via stereoselective methylation of chiral pyrrolidin-2-ones**

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Emanuela Crucianelli, Roberta Galeazzi, Gianluca Martelli, Mario Orena\*, Samuele Rinaldi, Piera Sabatino





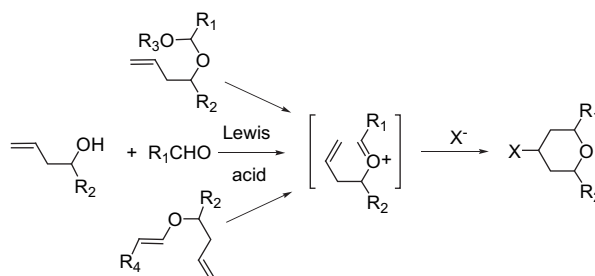
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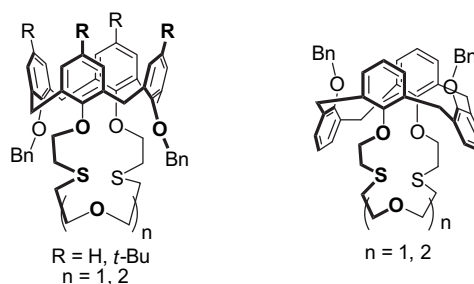
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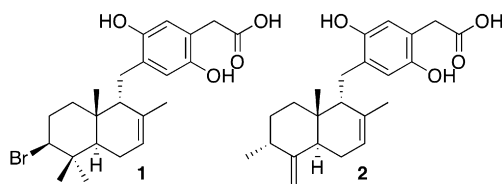
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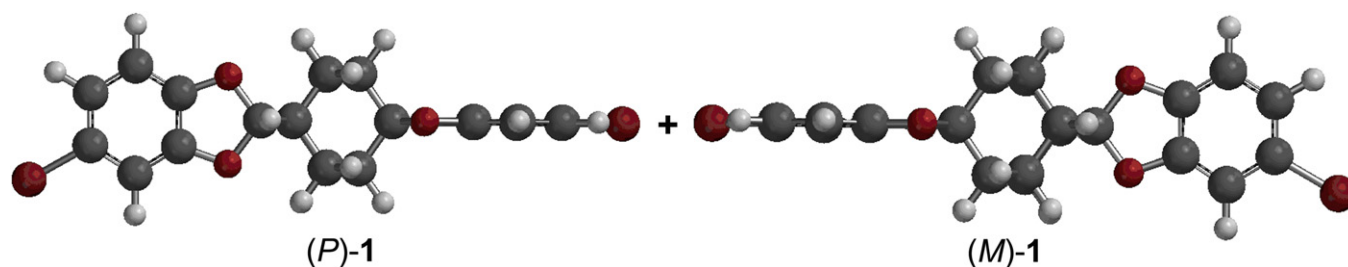
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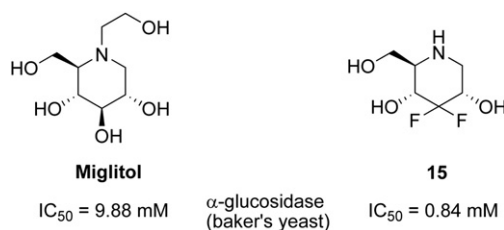
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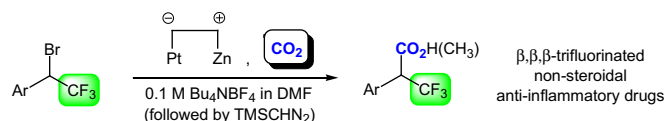
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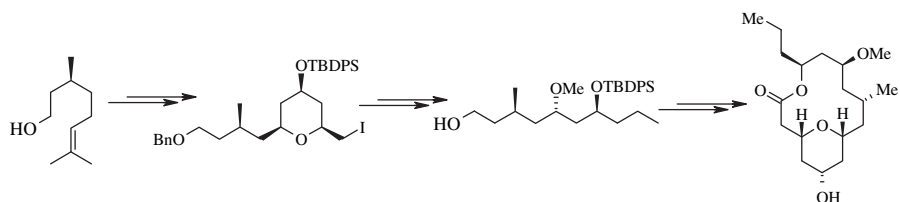
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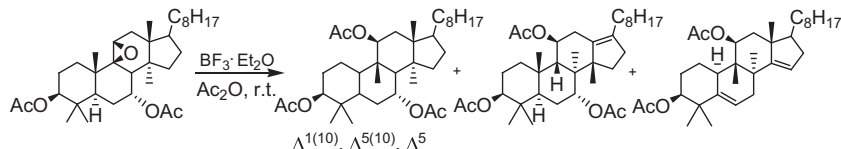
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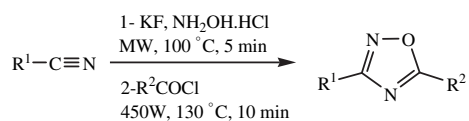
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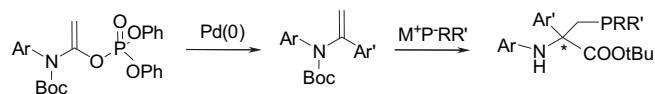
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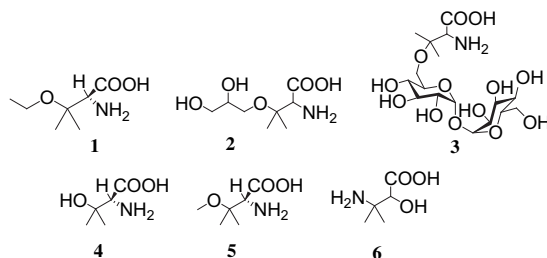




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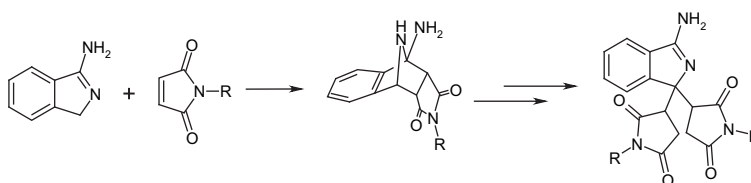
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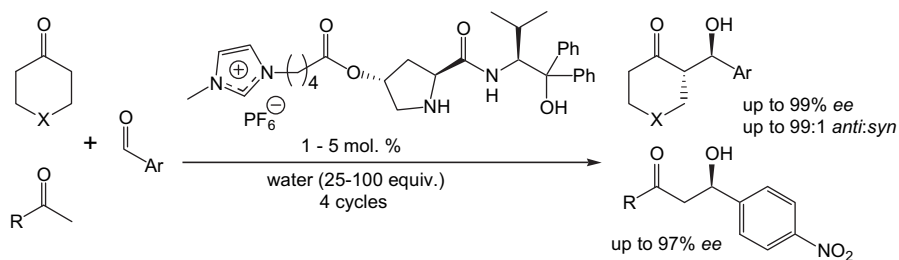
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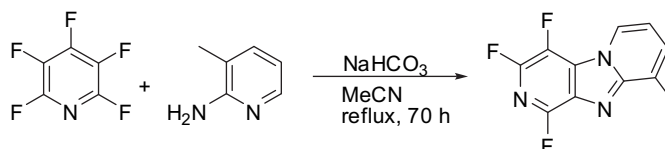
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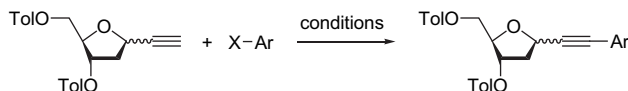
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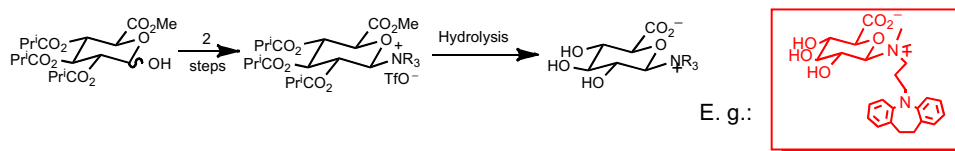
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Tomáš Bobula, Michal Hocek\*, Martin Kotora\*

**A convenient new synthesis of quaternary ammonium glucuronides of drug molecules**

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Lisa Iddon, Ryan A. Bragg, John R. Harding, Andrew V. Stachulski\*



*N*-Glucuronides are important metabolites for a variety of drugs containing tertiary amino groups. We now report a new method for their synthesis using a readily prepared glucuronic acid hemiacetal, via glycosylamine formation, quaternisation and controlled hydrolysis. Both linear and cyclic amine examples are presented. We comment on the stability and isolation of both final products and intermediates as these are critical factors for effective synthesis.



\*Corresponding author

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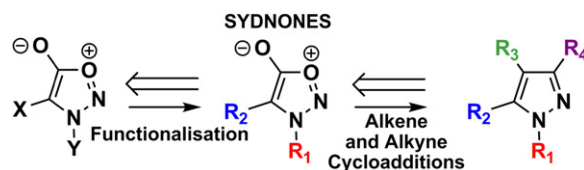
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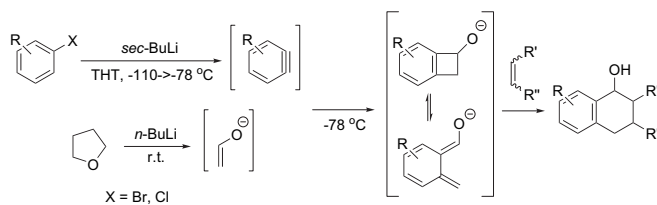


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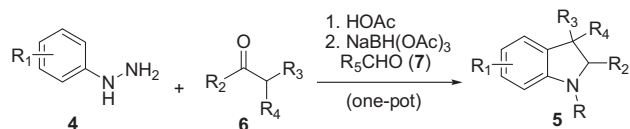
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**One-pot synthesis of highly substituted indolines**

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Kevin G. Liu\*, Jennifer R. Lo, Albert J. Robichaud

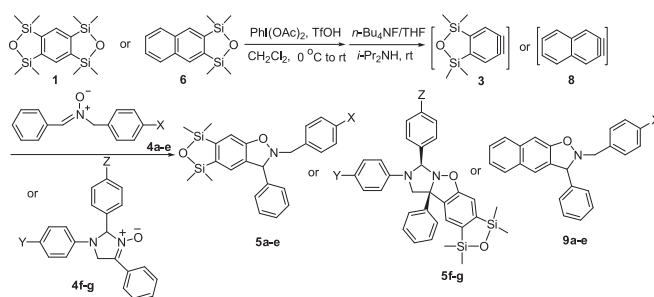


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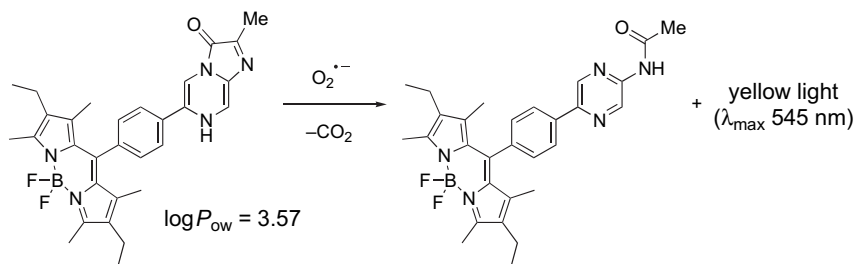
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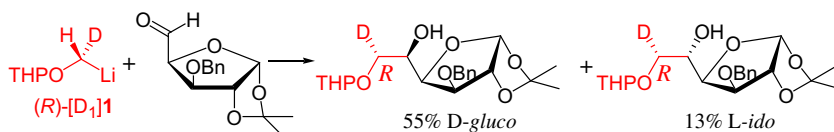
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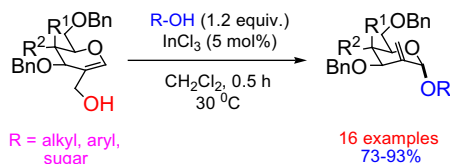
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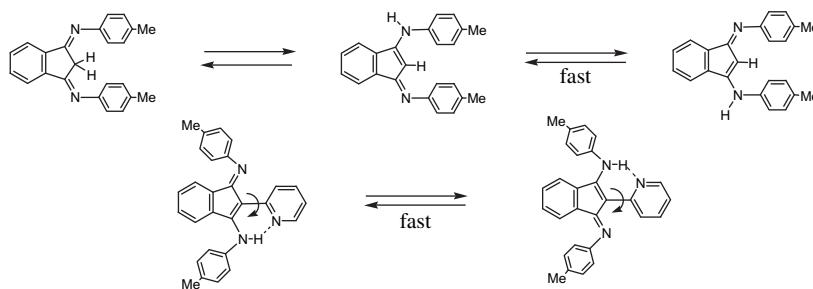
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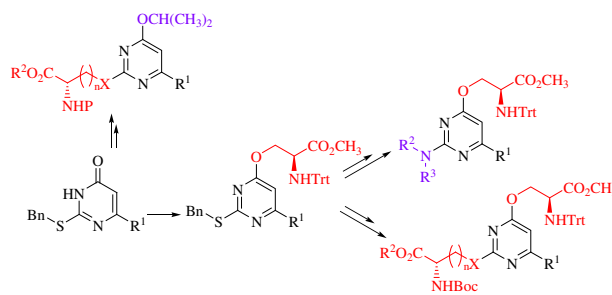
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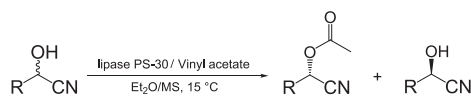
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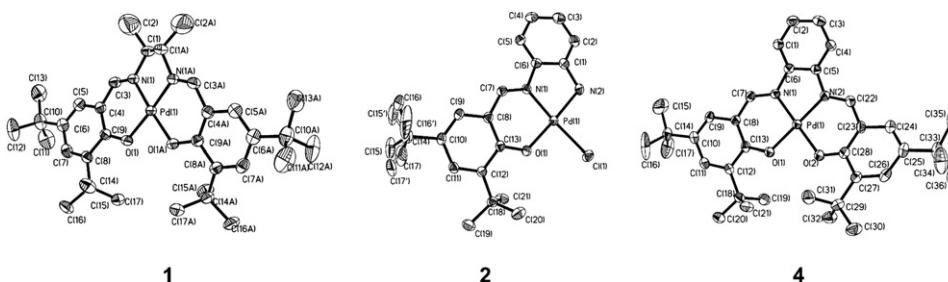


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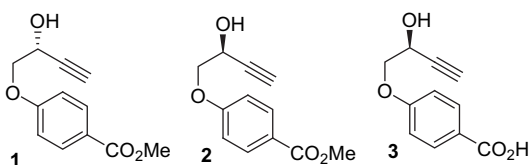
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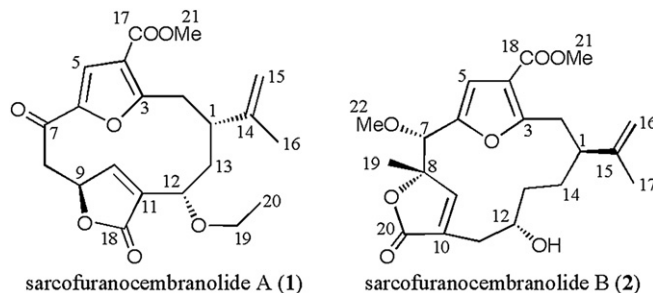
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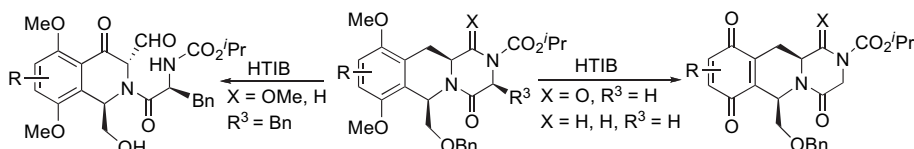
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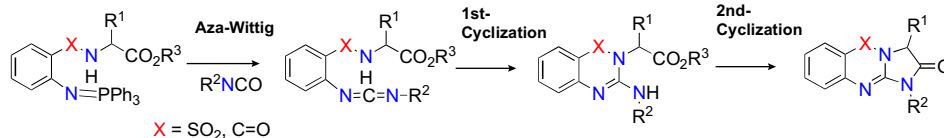
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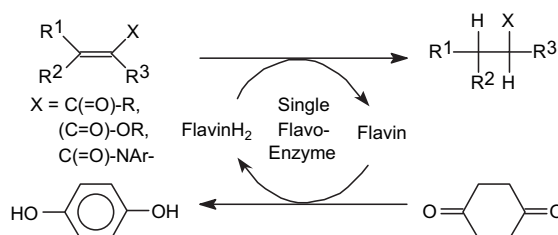
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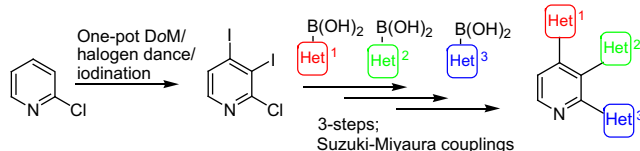
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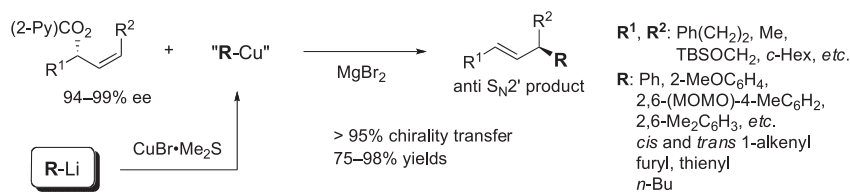
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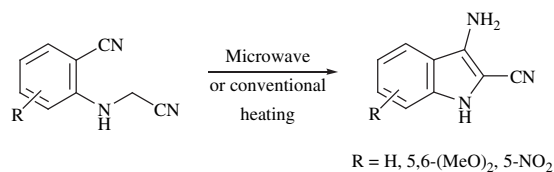
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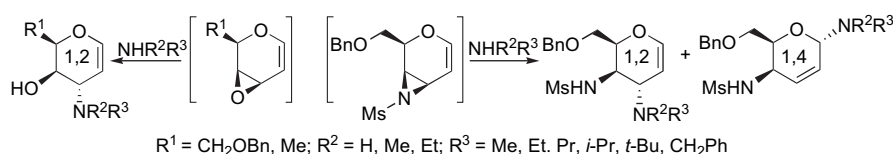
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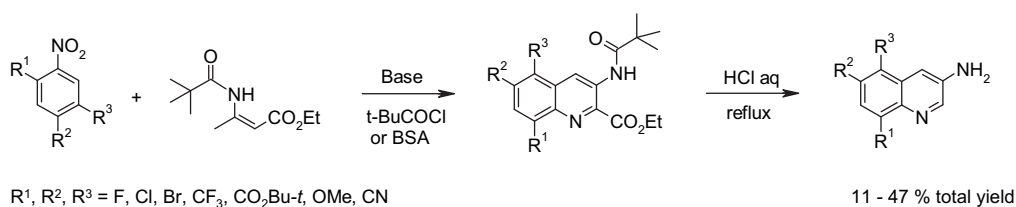
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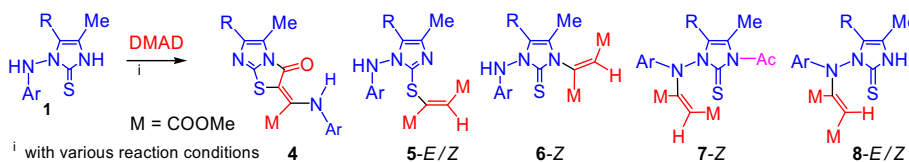
Robert Bujok, Andrzej Kwast, Piotr Cmoch, Zbigniew Wróbel\*



### A thorough study on the reaction of DMAD with 1-arylaminoimidazole-2-thiones. Expedient synthesis of imidazo[2,1-*b*][1,3]thiazoles through a novel arylamino rearrangement

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Constantinos Neochoritis, Nicolaos Eleftheriadis, Constantinos A. Tsoleridis\*, Julia Stephanidou -Stephanatou\*



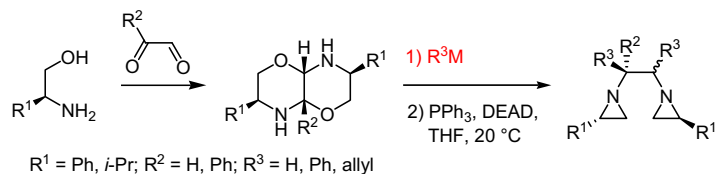
Upon reaction of 1-arylamino-imidazole-2-thiones **1** with DMAD only the *S*-substituted products **5** were formed, whereas in the presence of 2.2 equiv of NaH imidazo[2,1-*b*][1,3]thiazoles **4** were exclusively formed. Compounds **5** could be converted either to **6** by heating in benzene, or to **8** upon reaction with 1.1 equiv of NaH, and also to **7** upon reaction with acetic anhydride.



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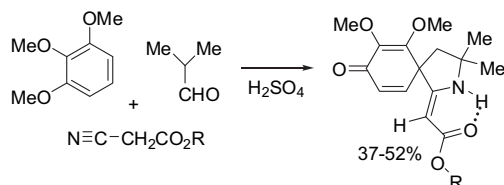
Andrea Gualandi, Francesco Manoni, Magda Monari, Diego Savoia\*



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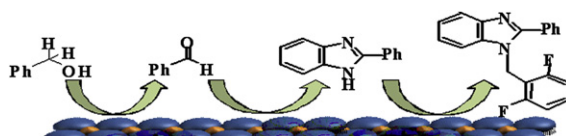
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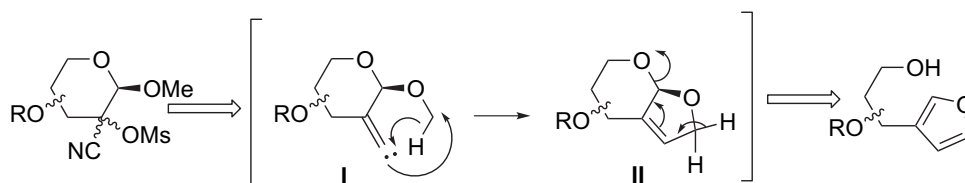
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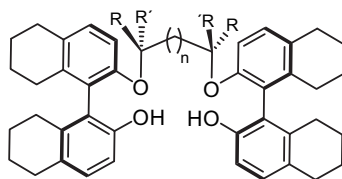
Romarc Cordonnier, Albert Nguyen Van Nhien\*, Elena Soriano, José Marco-Contelles, Denis Postel\*



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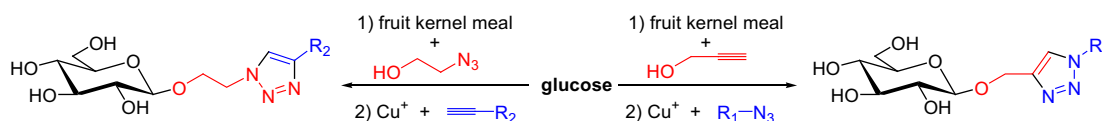
Artur R. Abreu, Mariette M. Pereira\*, J. Carles Bayón\*



### Expanding the application scope of glycosidases using click chemistry

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Wen-Ya Lu, Xing-Wen Sun, Chen Zhu, Jian-He Xu, Guo-Qiang Lin\*



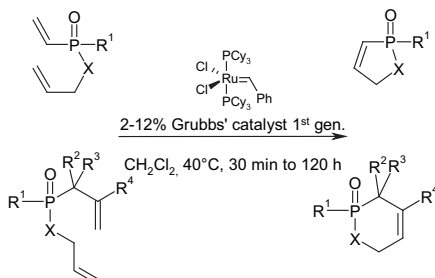
Glycosidase-mediated glycosylation of alkynyl alcohols and azide-containing alcohols was followed by a click reaction, affording various types of triazole glycosides. The activities of triazole glycosides detected in subsequent bioassays show that this procedure is a feasible approach to the development of anti-fungal drugs.



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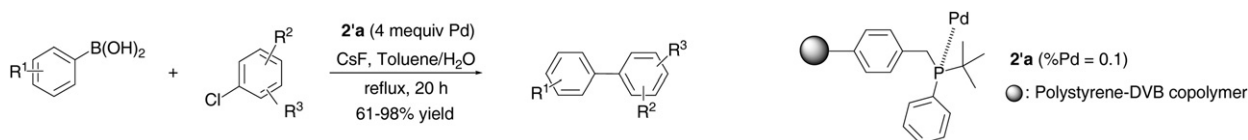
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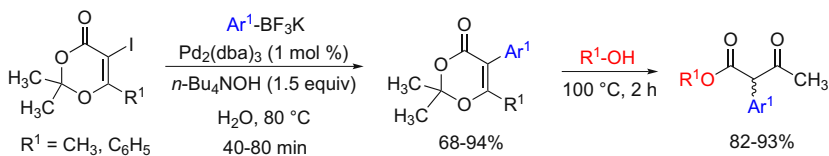
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Adriano S. Vieira, Rodrigo L.O.R. Cunha, Clécio F. Klitzke, Julio Zukerman-Schpector, Hélio A. Stefani\*



\*Corresponding author

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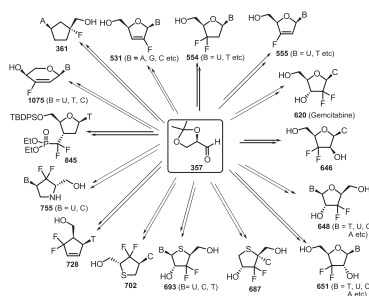
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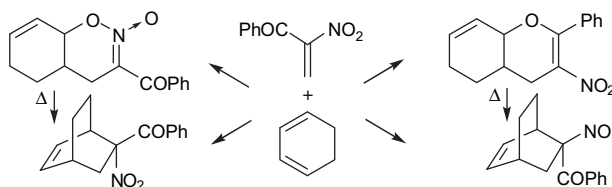


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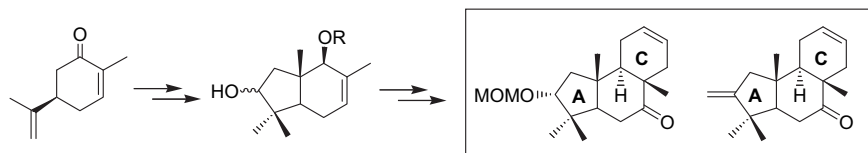
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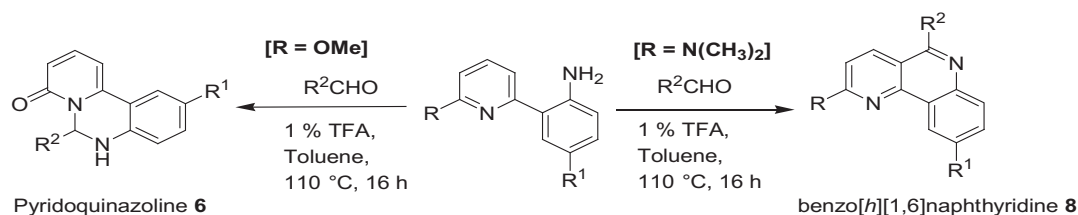
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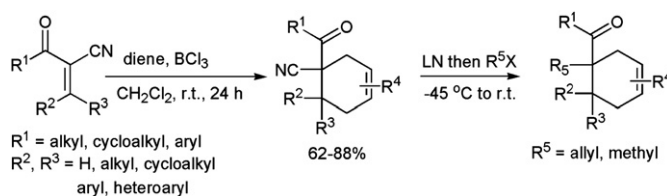
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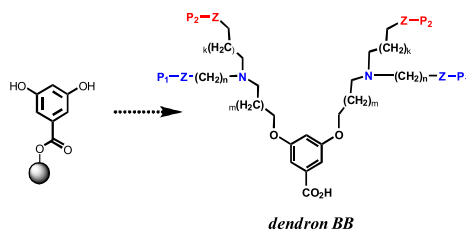
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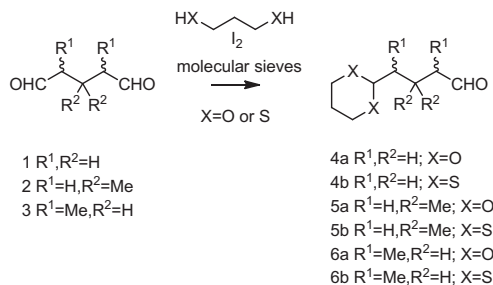
Z = NH, P<sub>1</sub>, P<sub>2</sub> = Boc, Alloc, Fmoc, Nosyl k, m, n = 1–3;  
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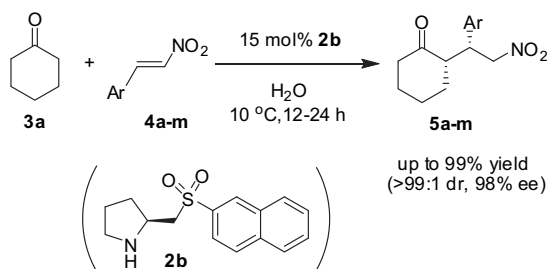
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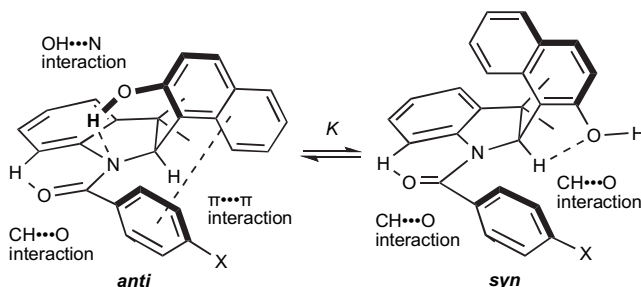
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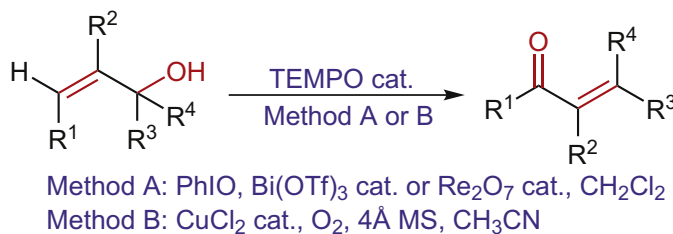
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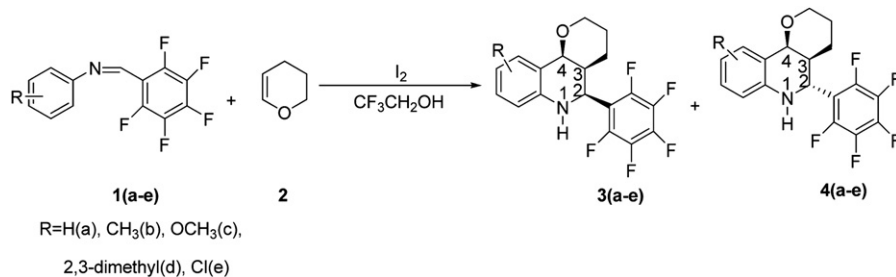
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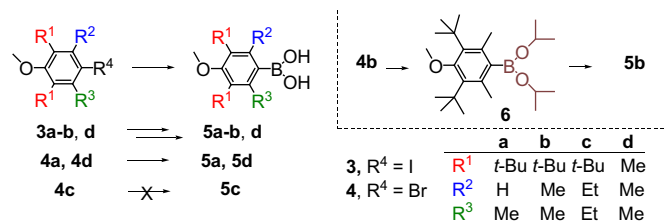
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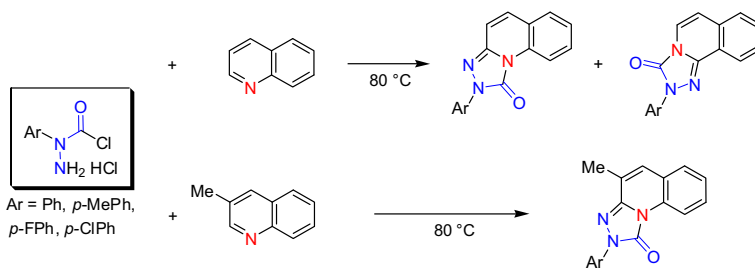
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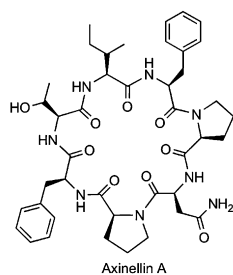
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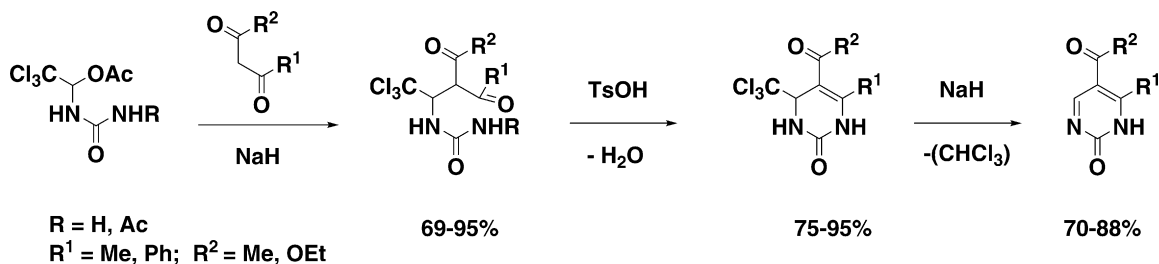
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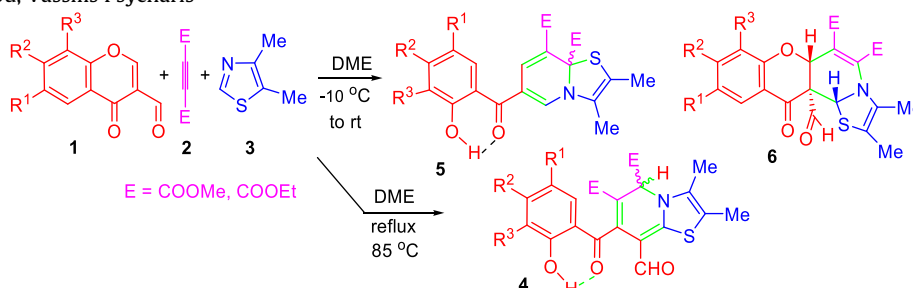
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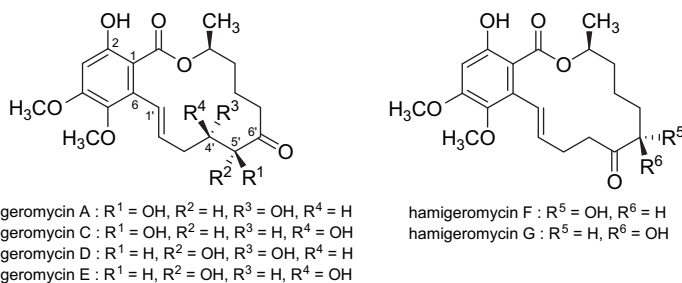


4,5-Dimethylthiazole and acetylene react at low temperature with 3-formylchromones **1** resulting in thiazolo[3,2-a]pyridine derivatives **5** and in tetracyclic chromenothiazolopyridines **6**. At higher temperature, after 1,2-aryl migration, 8-formyl-5H-[1,3]thiazolo[3,2-a]pyridines **4** are formed as a mixture of two rotamers.

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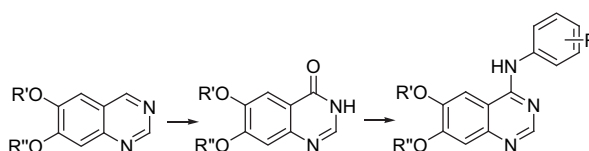
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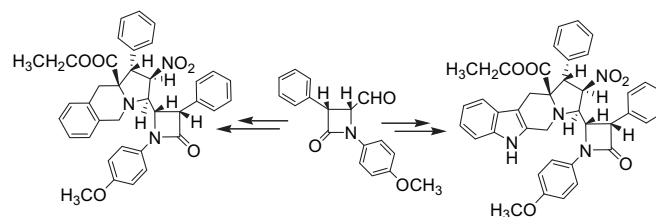




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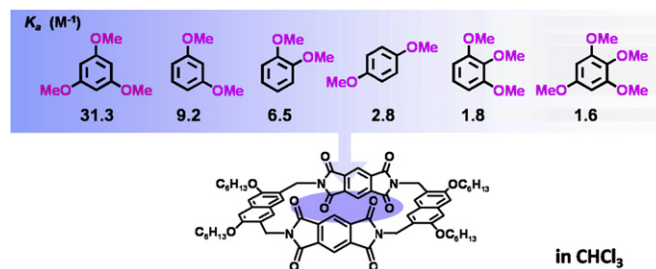
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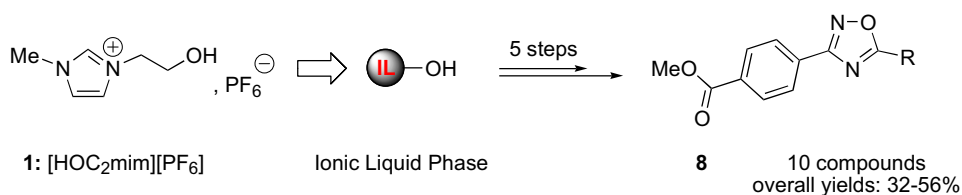
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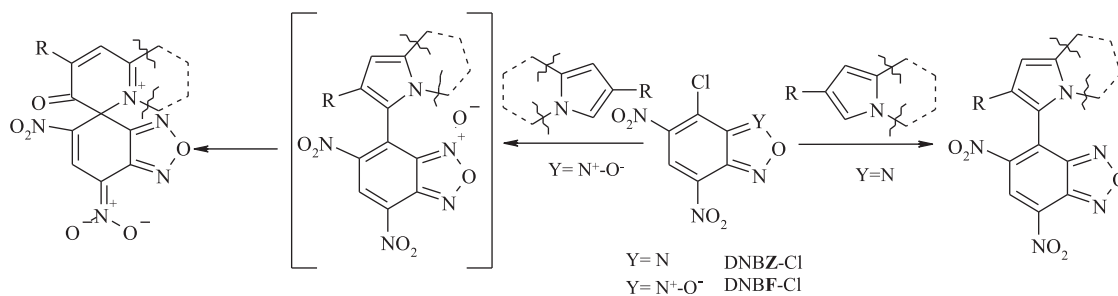
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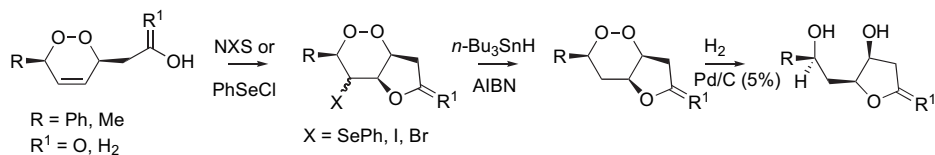
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Ondrej Zvarec, Thomas D. Avery, Dennis K. Taylor\*, Edward R.T. Tiekink



\*Corresponding author

Supplementary data available via ScienceDirect



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