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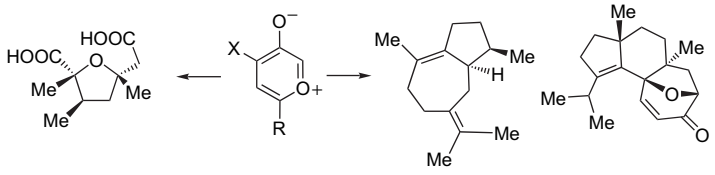

Cycloaddition of oxidopyrylium and related species and their application in the synthesis is described.

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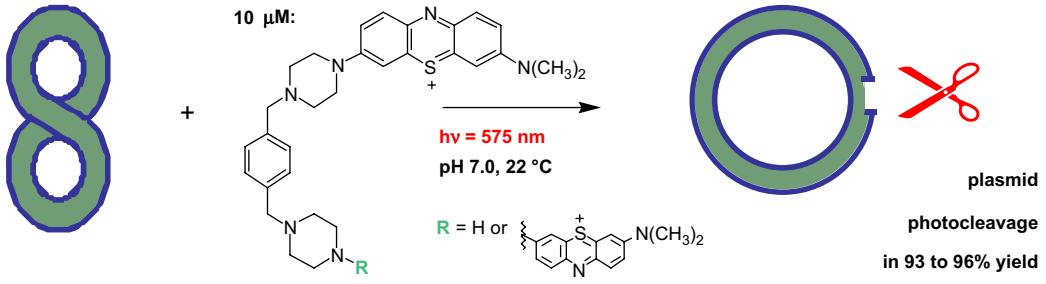

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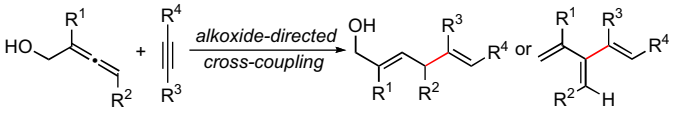

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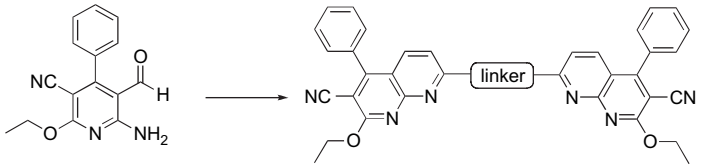

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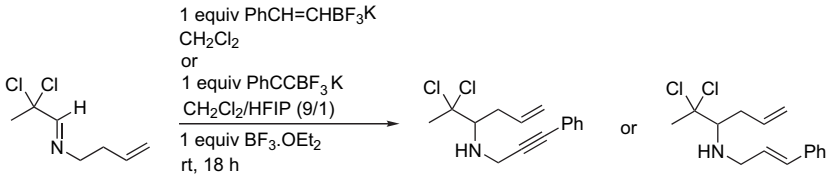

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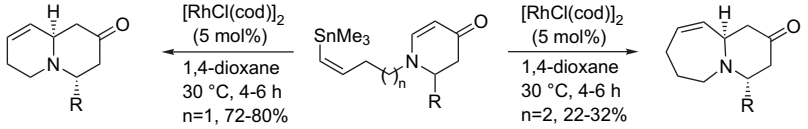

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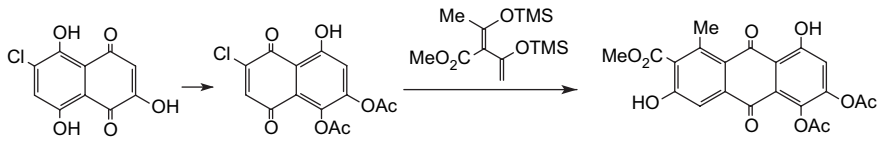

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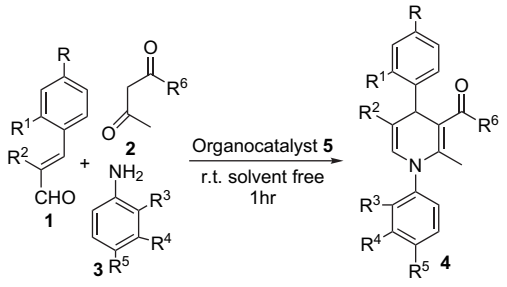
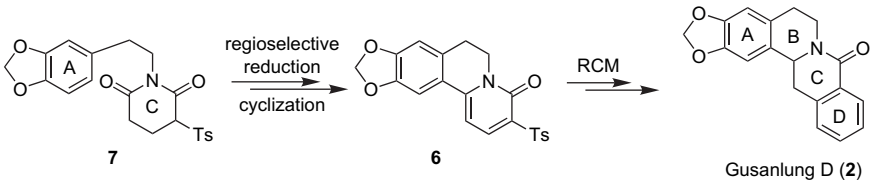
Atul Kumar*, Ram Awatar Maurya

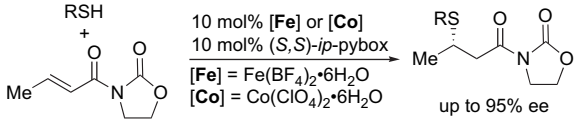


Total synthesis of (±)-gusanlung D **pp 3483–3487**
Jung-Kai Chang, Nein-Chen Chang*

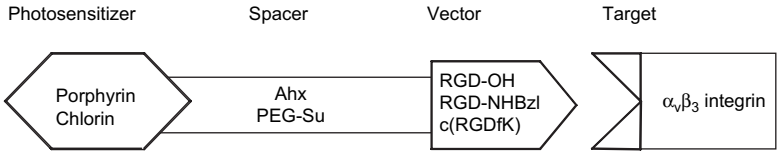


A new approach to the core structure of protoberberine alkaloid was described. Total synthesis of (±)-gusanlung D (**2**) was reported.

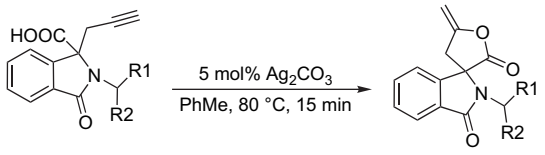
Asymmetric conjugate addition of thiols to (*E*)-3-crotonoyloxazolidin-2-one by iron or cobalt/pybox catalyst **pp 3488–3493**
Motoi Kawatsura*, Yuji Komatsu, Masashi Yamamoto, Shuichi Hayase, Toshiyuki Itoh*



Design and photophysical properties of new RGD targeted tetraphenylchlorins and porphyrins **pp 3494–3504**
Michel Boisbrun, Régis Vanderesse, Philippe Engrand, Alexis Olié, Sébastien Hupont, Jean-Bernard Regnouf-de-Vains, Céline Frochot*

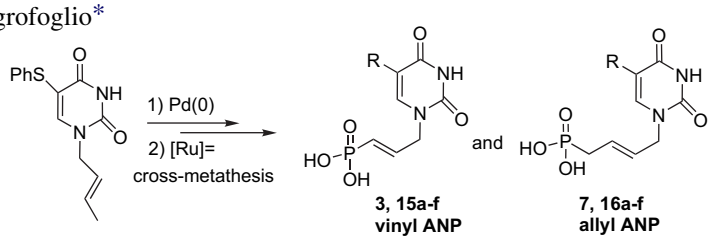


Silver-catalyzed spirolactonization: first synthesis of spiroisoindole-γ-methylene-γ-butyrolactones **pp 3505–3516**
Mohamed M. Rammah, Mohamed Othman*, Kabula Ciamala, Carsten Strohmann, Mohamed B. Rammah



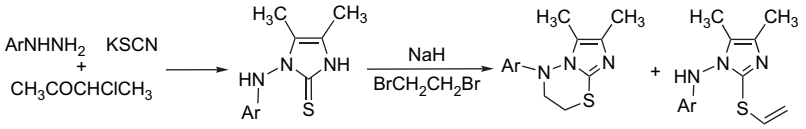
Spirolactonization of isoindoloacetylenic carboxylic acids was efficiently catalyzed by silver carbonate under extremely mild conditions. This process was found to be an easy route to novel spiro-γ-methylene-γ-butyrolactones.

Preparation of acyclo nucleoside phosphonate analogues based on cross-metathesis **pp 3517–3526**
Hiroki Kumamoto, Dimitri Topalis, Julie Broggi, Ugo Pradère, Vincent Roy, Sabine Berteina-Raboin, Steven P. Nolan, Dominique Deville-Bonne, Graciela Andrei, Robert Snoeck, Daniel Garin, Jean-Marc Crance, Luigi A. Agrofoglio*

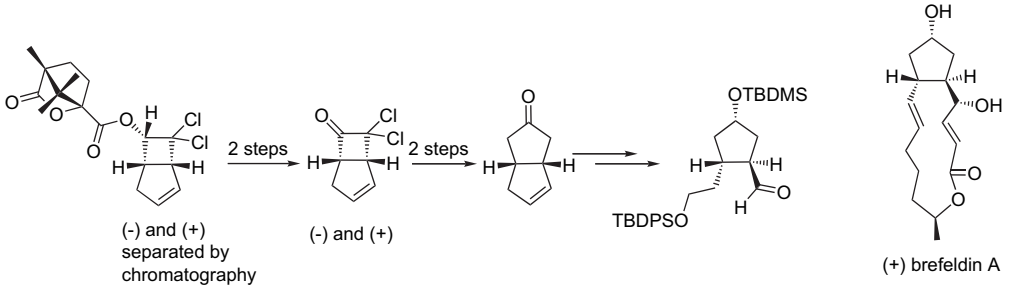


In our on-going program targeting anti-pox activity, the synthesis of various acyclic nucleoside phosphonates is described using olefin cross-metathesis reaction and Pd(0)-mediated alkylation at the C5-position of the uracil moiety.

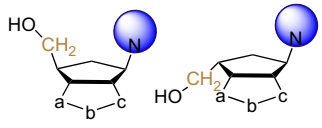
1-Arylaminoimidazole-2-thiones as intermediates in the synthesis of imidazo[2,1-*b*][1,3,4]thiadiazines **pp 3527–3533**
Constantinos Neochoritis, Constantinos A. Tsoleridis*, Julia Stephanidou-Stephanatou



A practical route to both enantiomers of bicyclo[3.3.0]oct-2-en-7-one and their use for the synthesis of key trisubstituted cyclopentanes **pp 3534–3540**
David Cousin, John Mann*



From cyclopentadiene to isoxazoline-carbocyclic nucleosides: a rapid access to biological molecules through aza-Diels–Alder reactions **pp 3541–3547**
Paolo Quadrelli*, Andrea Piccanello, Mariella Mella, Antonino Corsaro, Venerando Pistarà



A rapid access to carbocyclic nucleosides containing a fused isoxazoline ring is proposed through the Grieco cycloaddition of cyclopentadiene to iminium salts. The prolific elaboration of the isoxazoline cycloadducts allowed preparation of the target aminols through the unmasking of the hydroxymethylene group at the C3 level of the azanorbornene structure. The heterocyclic aminols are readily converted into nucleosides via the linear construction of purine heterocycles.

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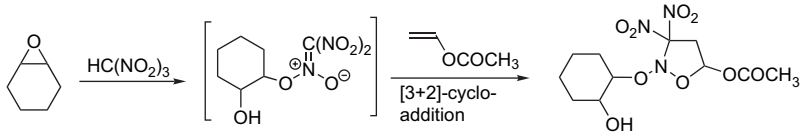

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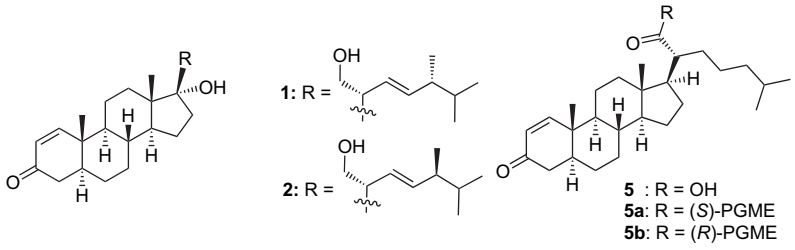

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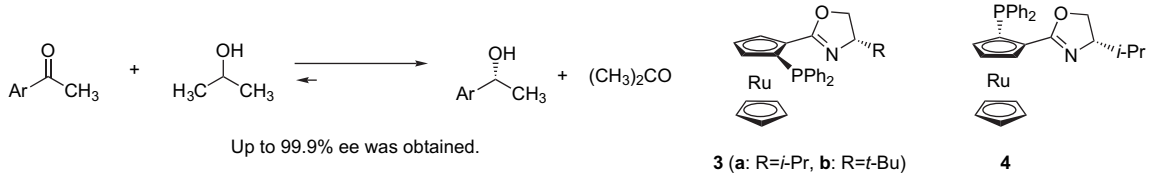

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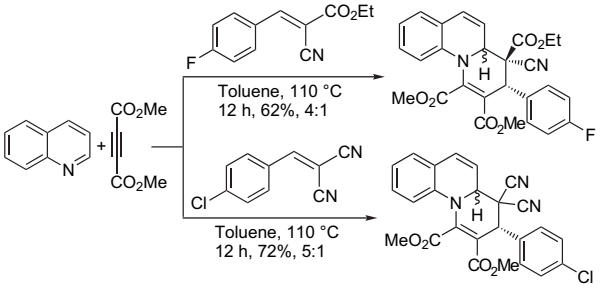

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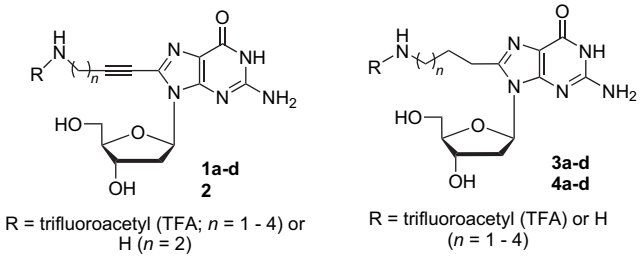

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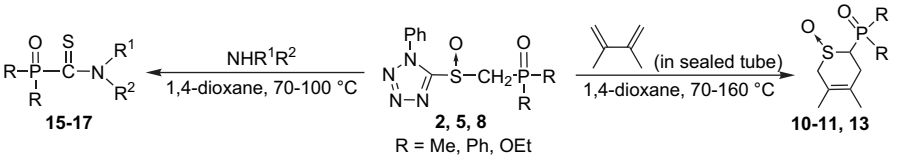

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