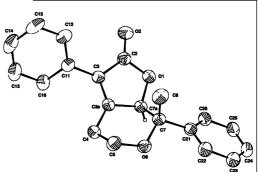
Reaction of nucleophiles with alkoxycarbene complexes of chromium: a general access to polycyclic substituted butenolides

Henri Rudler,^{a,*} Andrée Parlier,^a Victor Certal,^a Nadège Humbert^a and Jacqueline Vaissermann^b

^aLaboratoire de Synthèse Organique et Organométallique, UMR 7611 Tour 44-45, 4 place Jussieu, 75252 Paris Cedex 5, France ^bLaboratoire de Chimie Inorganique et Matériaux Moléculaires, UA 7071 Bat F, 4 place Jussieu, 75252 Paris Cedex 5, France

Not only dihydropyridines but also a large variety of nucleophiles trigger the transformation of very simple to more elaborate carbene complexes of chromium into butenolides. Tetrahedron Letters 43 (2002) 5897



Tetrahedron Letters 43 (2002) 5901

Tetrahedron Letters 43 (2002) 5905

Electrochemical vinylation of aryl and vinyl halides with acrylate esters catalyzed by cobalt bromide

Paulo Gomes, Corinne Gosmini,* Jean-Yves Nédélec and Jacques Périchon

Laboratoire d'Electrochimie, Catalyse et Synthèse Organique, UMR 7582, Université Paris 12, CNRS, 2, Rue Henri Dunant, 94320 Thiais, France

$$RX \qquad + \qquad \underbrace{ \begin{array}{c} \text{CH}_3\text{CN/NEt}_3\text{/pyridine}}_{\text{e, CoBr}_2\text{: }0.75\text{ mmol}} \\ \text{Bpy: }10\text{ mmols} \\ \text{COOR'} \qquad \text{Iron anode} \\ \text{7.5 mmols} \qquad 20\text{ mmols} \qquad 70^\circ\text{C, }I=0.2\text{ A} \\ \end{array}} \qquad \text{COOR'} \qquad \text{RH}$$

New studies of Rh-catalyzed addition of boronic acids under basic conditions in aqueous medium

Rémi Amengual, Véronique Michelet* and Jean-Pierre Genêt*

Laboratoire de Synthèse Sélective Organique et Produits Naturels, E.N.S.C.P., UMR 7573, 11 rue P. et M. Curie, F-75231 Paris Cedex 05, France

L = water-soluble ligand TPPTS, *m*-TPPTC

Diastereoselective synthesis of 4-alkylidene-2-amino-4-phosphonobutanoic acids

Tetrahedron Letters 43 (2002) 5909

M. Carmen Fernández, María Ruiz,* Vicente Ojea* and José M. Quintela

Departamento de Química Fundamental, Universidade da Coruña, Campus da Zapateira s/n, 15071 A Coruña, Spain

Olefination of carbonyl compounds using α -silyl-, α -phosphoryl- and α -stannyl-stabilised phosphonate carbanions derived from cyclo-[L-AP4-D-Val] allow a (Z)-selective access to 4-alkylidene AP4 derivatives in enantiomerically pure form.

$$\begin{array}{c} R \\ NH_2 \\ Et_2O_3P \end{array} \xrightarrow{NH_2} \begin{array}{c} OEt \\ N \\ N \\ N \end{array}$$

$$CO_2H \xrightarrow{R} + Et_2O_3P \xrightarrow{N} \begin{array}{c} N \\ N \\ N \\ OEt \end{array}$$

$$R = i \cdot Pr, Ph, 2 \cdot (C_4H_3S), PhCH=CH; X = SiMe_3, PO_3Et_2, SnPh_3$$

Improved synthesis and preparative scale resolution of racemic monastrol

Tetrahedron Letters 43 (2002) 5913

Alessandro Dondoni,* Alessandro Massi and Simona Sabbatini

Dipartimento di Chimica, Laboratorio di Chimica Organica, Università di Ferrara, Via L. Borsari 46, I-44100 Ferrara, Italy

A simple route to novel 2,5-dihydro-1,5,2-diazaphosphinines from primary enamine phosphonates

Tetrahedron Letters 43 (2002) 5917

Francisco Palacios,* Ana M. Ochoa de Retana, Sergio Pascual and Rafael López de Munain

Departamento de Química Orgánica I, Facultad de Farmacia, Universidad del País Vasco, Apartado 450, 01080 Vitoria, Spain

A simple method for the preparation of phosphorus-containing pyrimidine analogues 2,5-dihydro-1,5,2-diazaphosphinine 2-oxides 5 and 8 from primary enamine phosphonates and nitriles is described.

Radical deoxygenation of alcohols and vicinal diols with N-ethylpiperidine hypophosphite in water

Tetrahedron Letters 43 (2002) 5921

Doo Ok Jang* and Dae Hyan Cho

Department of Chemistry, Yonsei University, Wonju 220-710, Republic of Korea

R-O-C-SMe
$$\xrightarrow{\text{EPHP, CTAB}}$$
 R-H ABCVA, H₂O, 80 °C

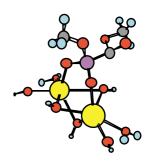
Phosphonoformate diester hydrolysis mediated by lanthanide cations

Robert A. Moss,* Barbara A. McKernan and Ronald R. Sauers*

Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, New Brunswick, NJ 08903, USA

Eu(III) and La(III) cations, and their bis-tris propane complexes, mediate the hydrolysis of dimethyl phosphonoformate with C-OMe regiospecificity and substantial rate enhancement.

Tetrahedron Letters 43 (2002) 5925



Chiral catalyst enhancement of diastereocontrol for O-H insertion reactions of styryl- and phenyldiazoacetate esters of pantolactone

Michael P. Doyle* and Ming Yan

Department of Chemistry, University of Arizona, Tucson, AZ 85721-0041, USA

Studying monolayer/solvent interactions with a photochromic compound in a self-assembled monolayer

Kinnari Patel, Aminta Castillo-Muzquiz and Michael C. Biewer* *University of Texas at Dallas, Department of Chemistry, Box 830688, Richardson, TX 75083-0688, USA*

Photochromic materials were incorporated within a structured self-assembled monolayer and the decay rate of the photomerocyanine was determined with different monolayer–solute interactions.

Tetrahedron Letters 43 (2002) 5933

Two new cembrane diterpenes from a Madagascan soft coral of the genus Sarcophyton

Tetrahedron Letters 43 (2002) 5937

Arlette Longeon, Marie-Lise Bourguet-Kondracki* and Michèle Guyot

Laboratoire de Chimie, associé au CNRS, Muséum National d'Histoire Naturelle, 63 rue Buffon, 75005 Paris, France

Pure acetonitrile as solvent for the efficient electrochemical conversion of aryl bromides in organozinc species and their coupling reaction with acetyl chloride

Tetrahedron Letters 43 (2002) 5941

Hyacinthe Fillon, Erwan Le Gall, Corinne Gosmini* and Jacques Périchon Laboratoire d'Electrochimie, Catalyse et Synthèse Organique, UMR 7582, Université Paris 12, CNRS 2, Rue Henri Dunant, 94320 Thiais, France

e,
$$CoBr_2$$
 0.15eq
$$ZnBr_2$$
 1.2eq
$$Zn anode$$

$$RT, CH_3CN$$

$$Zn anode$$

$$RT, CH_3CN$$

$$RT = COCH_3$$

$$CH_3COCI$$

$$RT = COCH_3$$

Deprotection of *t*-butyldimethylsilyl ethers promoted by cerium(IV) triflate

Giuseppe Bartoli,^a Giovanna Cupone,^b Renato Dalpozzo,^b Antonio De Nino,^b Loredana Maiuolo,^b Antonio Procopio,^{b,*} Letizia Sambri^a and Antonio Tagarelli^b

^aDipartimento di Chimica Organica 'A. Mangini', Università di Bologna, viale Risorgimanto 4, I-40136 Bologna, Italy ^bDipartimento di Chimica, Università della Calabria, ponte Bucci cubo 15/c, I-87030 Arcavacata di Rende, Italy

t-Butyldimetylsilyl ethers are mildly cleaved by catalytic amounts of cerium(IV) triflate without special precautions.

Electrosynthesis of dibenzonaphthyridine derivatives from 2,2-(2-nitrobenzyl)-2-substituted-acetonitriles

Tetrahedron Letters 43 (2002) 5949

Thierry Jan, Béatrice Dupas, Didier Floner and Claude Moinet*

Laboratoire d'Electrochimie et Organométalliques, UMR CNRS 6509, Institut de Chimie de Rennes, Université de Rennes 1, Campus de Beaulieu, 35042 Rennes Cedex, France

Regioselective and diastereoselective phosphine-catalysed [3+2] cycloadditions to 5-methylenehydantoins: reversal of regioselectivity using chiral N-2-butynovl-(4S)-benzyloxazolidinone

Tetrahedron Letters 43 (2002) 5953

Tien Q. Pham, a Stephen G. Pyne, a.* Brian W. Skelton and Allan H. White a Department of Chemistry, University of Wollongong, Wollongong, NSW 2522, Australia

^bDepartment of Chemistry, University of Western Australia, Crawley, WA 6009, Australia.

A short stereoselective synthesis of disubstituted cyclic amino acids

Tetrahedron Letters 43 (2002) 5957

Wolfgang Maison^{a,*} and Gunadi Adiwidjaja^b

^aInstitut für Organische Chemie der Universität Hamburg, Martin-Luther-King-Platz 6, 20146 Hamburg, Germany ^bMineralogisch-Petrographisches Institut der Universität Hamburg, Grindelallee 48, 20146 Hamburg, Germany

A convenient procedure for the synthesis of disubstituted proline and pipecolic acid derivatives via aza-Diels-Alder reaction and an oxidative cleavage of intermediate azabicycloalkenes is described.

The base-catalyzed oxygenation of quinoline derivatives

Miklós Czaun^a and Gábor Speier^{a,b,*}

^aDepartment of Organic Chemistry, University of Veszprém, Veszprém 8201, Hungary

^bResearch Group for Petrochemistry, Hungarian Academy of Sciences, 8200 Veszprém, Hungary

Pinacolyl boronic esters as components in the Petasis reaction

Tetrahedron Letters 43 (2002) 5965

Tobias Koolmeister, Mikael Södergren and Martin Scobie*

Biovitrum AB, Rapsgatan 7, SE-751 82 Uppsala, Sweden

The Petasis reaction of pinacolyl boronic esters with imines has been studied. Pinacolyl boronic esters were found to react under standard conditions with imines derived from glyoxylic acid and secondary amines but not primary amines.

The first example of chiral induction using homochiral boronic esters in the Petasis reaction

Tetrahedron Letters 43 (2002) 5969

Tobias Koolmeister, Mikael Södergren and Martin Scobie*

Biovitrum AB, Rapsgatan 7, SE-751 82 Uppsala, Sweden

Homochiral boronic esters derived by condensation of boronic acids with commercially available chiral 1,2-diols participate in the Petasis reaction with glyoxylic acid and morpholine. Unnatural amino acid derivatives are formed in high yield with modest enantioselectivity.

Intramolecular electrophilic aromatic substitution reactions with methyl vinyl ethers for the synthesis of dihydronaphthalenes

Tetrahedron Letters 43 (2002) 5971

David C. Harrowven* and Melloney J. Tyte

Department of Chemistry, The University of Southampton, Southampton SO17 1BJ, UK

$$\begin{array}{c|c} \text{MeO} & & & \text{MeO} \\ \hline \text{MeO} & & & & \\ \hline \text{MeO} & & & \\ \hline \hline \text{ρ-TsOH, PhMe} \\ \text{SO °C, 4h, 86\%} \\ \end{array}$$

Low dilution procedures in solid-phase organic synthesis: Diels-Alder and Heck reactions

J. Richard Morphy,* Zoran Rankovic and Mark York

Medicinal Chemistry Department, Organon Laboratories Ltd., Newhouse, ML1 5SH, Scotland, UK

The use of extremely low solvent volumes in solid-phase organic synthesis (2 μ L or less per mg resin) results in significant increases in yield for both the Diels-Alder and Heck reactions compared to standard high dilution techniques.

Synthesis of chiral *trans*-fused pyrano[3,2-c][2]benzoxocines from D-mannose by regioselective 8-endo-aryl radical cyclization

Tetrahedron Letters 43 (2002) 5977

Aniruddha Nandi and Partha Chattopadhyay*

Indian Institute of Chemical Biology, 4, Raja S. C. Mullick Road, Calcutta 700 032, India

D-Mannose
$$R^1$$
 R^2 R^2 R^3 R^4 R^2 R^4 R^4 R^2 R^4 R^4

An efficient and novel stereoselective protocol for the construction of *syn*-facially bridged norbornane frameworks

Tetrahedron Letters 43 (2002) 5981

Sengodagounder Muthusamy,* Srinivasarao Arulananda Babu and Chidambaram Gunanathan

Silicates and Catalysis Discipline, Central Salt and Marine Chemicals Research Institute, Bhavnagar 364 002, India

Novel syn-facially bridged norbornane frameworks were produced via tandem cyclization—cycloaddition reactions of rhodium carbenoids generated from α -diazo ketones.

Determination of the extent to which an S_E2' reaction of a propargylsilane is *anti*

Tetrahedron Letters 43 (2002) 5985

Ian Fleming* and Kah Ling Christine Pang

Department of Chemistry, Lensfield Road, Cambridge CB2 1EW, UK

A propargylsilane reacts with aldehydes stereospecifically *anti*, but the degree of stereospecificity is markedly lower than in the corresponding reactions of allylsilanes and allenylsilanes.

Proton-catalysed *E-Z* isomerisation and Pd(II) assisted carbon–carbon cleavage on 3-phenyl-4-(2,4,6-trimethoxyphenyl)-methyleneisoxazolin-5-one

Tetrahedron Letters 43 (2002) 5989

Enrico Rotondo, ^{a,*} Archimede Rotondo, ^a Giuseppe Bruschetta, ^a Francesco Risitano ^b and Francesco Foti ^b ^aDipartimento di Chimica Inorganica, Chimica Fisica e Chimica Analitica, Facoltà di Scienze dell'Università, Via Sperone, 31, 98166 Messina, Italy

^bDipartimento di Chimica Organica e Biologica, Facoltà di Scienze dell'Università, Salita Sperone 31, 98166 Messina, Italy

X= OMe

Reduction of trihalomethyl carbinols and their acetates, mesylates and tosylates by indium metal

Tetrahedron Letters 43 (2002) 5993

Brindaban C. Ranu,* Sampak Samanta and Arijit Das

Department of Organic Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta 700 032, India

Rh^{II}-catalyzed cycloadditions of carbomethoxy iodonium ylides

Tetrahedron Letters 43 (2002) 5997

Christina Batsila, George Kostakis and Lazaros P. Hadjiarapoglou*

Section of Organic Chemistry and Biochemistry, Department of Chemistry, University of Ioannina, 45110 Ioannina, Greece Carbomethoxy iodonium ylides, generated from methyl acetoacetate and methyl malonate, respectively, are exploited in synthesis of cyclopropanes, cyclopropenes as well as various heterocycles.

A simple and effective synthetic approach to chiral 4-pyridinyl proline derivatives

Tetrahedron Letters 43 (2002) 6001

Ghislaine Priem, Mike S. Anson, Simon J. F. Macdonald, Béatrice Pelotier and Ian B. Campbell^{a,*} GlaxoSmithKline, Medicines Research Centre, Medicinal Chemistry, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK GlaxoSmithKline, Medicines Research Centre, Chemical Development, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK A rapid approach has been developed to provide a novel series of 4-pyridinyl proline derivatives 1 as potential stereoselective catalysts.

$$R^{1}$$
 H R^{2} R^{1} R^{2} R^{1} R^{2} R^{2} R^{2} R^{2} R^{2} R^{2}

Studies in marine macrolide synthesis: stereocontrolled synthesis of a C21-C34 subunit of the aplyronines

Ian Paterson,* Simon B. Blakey and Cameron J. Cowden University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, UK

New preparation of stereodefined α,α -unsaturated ketones by carbomagnesiation of α -allenyl ketones

Tetrahedron Letters 43 (2002) 6009

Nicka Chinkov, Natalia Morlender-Vais and Ilan Marek*

Department of Chemistry and Institute of Catalysis Science and Technology, Technion-Israel Institute of Technology, Technion City, Haifa 32 000 Israel

Towards a total synthesis of (-)-cephalotaxine: construction of the BCDE-tetracyclic core

Tetrahedron Letters 43 (2002) 6011

Stephen M. Worden, Renameditswe Mapitse and Christopher J. Hayes*

The School of Chemistry, The University of Nottingham, University Park, Nottingham NG7 2RD, UK

Synthesis of pyridine derivatives using aza Diels-Alder methodology

Tetrahedron Letters 43 (2002) 6015

Stephen P. Stanforth, a,* Brian Tarbitb and Michael D. Watsona

^aSchool of Applied and Molecular Sciences, University of Northumbria, Newcastle-upon-Tyne NE1 8ST, UK ^bSeal Sands Chemicals Ltd., Seal Sands Road, Seal Sands, Middlesbrough TS2 1UB, UK

Application of olefin metathesis to the synthesis of ABE ring analogues of methyllycaconitine

Tetrahedron Letters 43 (2002) 6019

David Barker, Malcolm D. McLeod, Margaret A. Brimbleb, and G. Paul Savagec

^aSchool of Chemistry, F11, University of Sydney, Camperdown, NSW 2006, Australia

^bDepartment of Chemistry, University of Auckland, 23 Symonds Street, Auckland, New Zealand

°CSIRO Molecular Science, Bag 10, Clayton South, Victoria 3169, Australia

Novel silyl linkers for solid-phase synthesis

Tetrahedron Letters 43 (2002) 6023

Marco M. Meloni,^a R. C. D. Brown,^{a,*} Peter D. White^b and Duncan Armour^c

^aCentre for Combinatorial Chemistry, Department of Chemistry, University of Southampton, Highfield, Southampton SO17 1BJ, UK ^bNovabiochem, CN Biosciences (UK) Ltd, Padge Road, Beeston NG9 2JR, UK

^cPfizer Global Research & Development, Ramsgate Road, Sandwich, Kent CT13 9NJ, UK

A concise and straightforward synthesis of two new silyl chloride resins is described. Between them, the two resins allow attachment of 1°, 2° and 3° alcohols and phenols to the solid-phase.

Approaches to the γ-lactone unit of CP-225,917 and CP-263,114

Tetrahedron Letters 43 (2002) 6027

Alan Armstrong, a,b,* Trevor J. Critchley, Marie-Edith Gourdel-Martin, Richard D. Kelsey and Andrew A. Mortlock D. Kelsey and Andrew A. Mortlock

^aSchool of Chemistry, University of Nottingham, Nottingham NG7 2RD, UK ^bDepartment of Chemistry, Imperial College, London SW7 2AY, UK

^cAstraZeneca Pharmaceuticals, Mereside, Alderley Park, Macclesfield, Cheshire SK10 4TG, UK

Synthesis of the γ -lactone unit of CP-225,917 and CP-263,114 is reported by differentiation of a diester at C14 using either selective monohydrolysis or lactonisation of a C26-alcohol.

A convenient oxidative demasking of 1,3-dithiolanes and dithianes to carbonyl compounds with TBHP

Tetrahedron Letters 43 (2002) 6031

Nivrutti B. Barhate, Popat D. Shinde, Vishal A. Mahajan and Radhika D. Wakharkar* Division of Organic Chemistry: Technology National Chemical Laboratory, Pune 411 008, India

Regeneration of carbonyl compounds from their 1,3-dithiolanes and dithianes was achieved using *tert*-butyl hydroperoxide (TBHP, aq. 70%) in high yields. Thus, an efficient, economical and experimentally simple protocol for dethioacetalization has been demonstrated.

$$\begin{array}{c|c}
R1 & S & C \\
R2 & S & Methanol \\
n = 0 \text{ or } 1 & reflux
\end{array}$$

Straightforward synthesis of 11*H*-indolo[3,2-*c*]isoquinoline and benzofuro[3,2-*c*]isoquinoline by ring transformation

Mariann Béres, Géza Timári* and György Hajós

Institute of Chemistry, Chemical Research Center, Hungarian Academy of Sciences, PO Box 17, H-1525 Budapest, Hungary

A useful acylation method using trichloroacetonitrile and triphenylphosphine for solid phase organic synthesis

Tetrahedron Letters 43 (2002) 6039

István Vágó* and István Greiner

Chemical Works of Gedeon Richter Ltd, Gyömroi út 19-21, H-1103 Budapest, Hungary

A new solid phase acylation method with in situ generated acyl chloride is described.

The basicity of 1,8-bis(dimethylamino)naphthalene and the hybrid state of the nitrogen atoms of its dimethylamino groups

Tetrahedron Letters 43 (2002) 6043

Nadiya G. Korzhenevska, a,* Volodymyr I. Rybachenko and Grzegorz Schroederb

^aInstitute of Physical Organic and Coal Chemistry, National Academy of Sciences, R. Luxemburg 70, Donetsk, Ukraine ^bFaculty of Chemistry, Adam Mickiewicz University, Grunwaldzka 6, 60-780 Poznan, Poland

$$(CH_3)_2$$
 N $N(CH_3)_2$ N $N(CH_3)_2$ N $N(CH_3)_2$ N $N(CH_3)_2$ N $N(CH_3)_2$ N $N(CH_3)_2$ N N

Synthesis of (±) epipentenomycin I and III

Tetrahedron Letters 43 (2002) 6047

Weerachai Phutdhawong, a,b Stephen G. Pyne, c,* Apiwat Baramee, Duang Buddhasukh, Brian W. Skeltond and Allan H. Whited

^aDepartment of Chemistry, Mae Jo University, Chiang Mai 50290, Thailand

^bDepartment of Chemistry, Chiang Mai University, Chiang Mai 50202, Thailand

^cDepartment of Chemistry, University of Wollongong, Wollongong, NSW, 2522, Australia

^dDepartment of Chemistry, University of Western Australia, Crawley, WA, 6009, Australia

Reactivity of the alkene component in the ruthenium-catalyzed [2+2] cycloaddition between an alkene and an alkyne. Part 2

Robert W. Jordan and William Tam*

Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry, Department of Chemistry and Biochemistry, University of Guelph, Guelph, Ontario, Canada N1G 2W1

Chemoselectivity: 100% Stereoselectivity: 100% Regioselectivity: up to 80:20

Jolkinolide D pharmacophore: synthesis and reaction with amino acids, nucleosides, and DNA

Tetrahedron Letters 43 (2002) 6055

Akira Sakakura, Yui Takayanagi and Hideo Kigoshi*

Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305-8571, Japan

Jolkinolide D Pharmacophore

Chemoselective oxidation of primary alcohols to aldehydes with *Gluconobacter oxydans*

Jolkinolide D

Tetrahedron Letters 43 (2002) 6059

Raffaella Villa,^a Andrea Romano,^a Raffaella Gandolfi,^a José V. Sinisterra Gago^b and Francesco Molinari^{a,*}
^aDipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Sezione Microbiologia Industriale, Università degli Studi di Milano,

via Celoria 2, 20133 Milan, Italy
^bDepartamento de Química Orgánica y Farmacéutica, Facultad de Farmacia, Universidad Complutense de Madrid, Plaza Ramon y Cajal, 28040 Madrid, Spain

Gluconobacter oxydans DSM 2343
RCHO RCH₂OH 1a = ethanol 1 g = 2-methyl-1-butanol 1 h = 3-methyl-1-butanol 1 m =2-phenyl-1-ethanol 1 n = 2-(4-hydroxy)-1-phenylethanol 1b = propanol 1c = butanol 1 i = benzyl alcohol 1 p = 2-phenylthioethanol 1d = 1,3 butar1 j = 2-hydroxy-benzyl alcohol 1 q = 2-phenyl-1-propanol 1e = pentanol 1 k = 4-hydroxy-3-methoxy-benzyl alcohol 1 r = 3-phenyl-1-propanoi 1 f = hexanol 11 = 3,4-dimethoxy-benzyl alcohol 1 s = 3-phenyl-1-butanol

An efficient approach to the synthesis of LTB_4 and ω -substituted LTB_4 metabolites

Tetrahedron Letters 43 (2002) 6063

Subhash P. Khanapure,^a Seongjin Kim,^a John F. Penrose,^b K. Frank Austen,^b William S. Powell^c and Joshua Rokach^a,*

^aClaude Pepper Institute and Department of Chemistry, Florida Institute of Technology 150 West University Boulevard, Melbourne, FL 32901, USA

^bDivision of Rheumatology and Immunology, Brigham and Women's Hospital, Department of Medicine, Harvard Medical School, Boston, MA 02115, USA

^cMeakins-Christie Laboratories, Department of Medicine, McGill University, Montreal, Quebec, Canada H2X, 2P2

RO COOME Introduction RO COOME Introduction of C15 to C20
$$R_1$$
 of C1 to C6 R_1 o

The hetero Diels-Alder reaction featuring 2-phenyl-4-dimethylamino-1-thia-3-azabuta-1,3-diene as diene component: a clear example of a thermodynamically-controlled process

Tetrahedron Letters 43 (2002) 6067

Gaëlle Trippé,^a Julien Perron,^a Anne Harrison-Marchand,^a Virginie Dupont,^a André Guingant,^{a,*} Jean-Paul Pradère^a and Loïc Toupet^b

^aLaboratoire de Synthèse Organique, Faculté des Sciences et des Techniques, 2 rue de la Houssinière, BP 92208, 44322 Nantes Cedex 03, France

^bGroupe Matière Condensée et Matériaux, Université de Rennes 1, Beaulieu, 35042 Rennes, France

The establishment of a rapid reactant–product equilibrium explains the formation of the more stable *trans* Diels–Alder adducts.

Substrate-promoted ortho-metallation in hydrocarbon solvents

Tetrahedron Letters 43 (2002) 6071

D. W. Slocum,* Jonathan Ray and Phillip Shelton

Department of Chemistry, Western Kentucky University, Bowling Green, KY 42101, USA

Certain o- and m-disubstituted aromatics where both substituents are directing metallation groups (DMG's) should, in contrast to singly substituted DMG-containing arenes, undergo metallation in hydrocarbon solvents. It is proposed that the activation of such systems towards ortho-metallation is a synergistic generation of the appropriate bis-chelated alkyllithium dimer structure as well as complexed stabilization of the transition state.

The surprise synthesis of α-GlcNAc 1-C-sulfonates

Tetrahedron Letters 43 (2002) 6075

Spencer Knapp* and Etzer Darout

Department of Chemistry and Chemical Biology, Rutgers—The State University of New Jersey, 610 Taylor Road, Piscataway, NJ 08854-8087, USA

Inclusion by \(\beta\)-cyclodextrin of a pyrene-labeled dipeptide photoprobe

Tetrahedron Letters 43 (2002) 6079

Guilford Jones, II,* Xin Zhou and Lily N. Lu

Department of Chemistry and the Photonics Center, Boston University, Boston, MA 02215, USA

The Pyr-Ala-TrpOEt (carbon atoms in blue):β-CD-(carbon atoms in gray) complex.

