



The following Communications have been judged by at least two referees to be “very important papers” and will be published online at www.angewandte.org soon:

L. Alaerts, C. E. A. Kirschhock, M. Maes, M. A. v. d. Veen, V. Finsy, A. Depla, J. A. Martens, G. V. Baron, P. A. Jacobs, J. F. M. Denayer, D. E. De Vos*

Selective Adsorption and Separation of Xylene Isomers and Ethylbenzene with the Microporous Vanadium(IV) Terephthalate MIL-47

Z. Chen, M. Waje, W. Li, Y. Yan*

Supportless Pt and PtPd Nanotubes as Electrocatalysts for Oxygen Reduction Reactions

M. Movassaghi,* M. A. Schmidt

Concise Total Synthesis of (-)-Calycanthine, (+)-Chimonanthine, and (+)-Folicanthine

N. Agrawal, Y. A. Hassan, V. M. Ugaz*

A Pocket-Sized Convective PCR Thermocycler

K. Beckerle, R. Manivannan, B. Lian, G.-J. M. Meppelder, G. Raabe, T. P. Spaniol, H. Ebeling, F. Pelascini, R. Mülhaupt, J. Okuda*
Stereospecific Styrene Enchainment at a Titanium Site within a Helical Ligand Framework: Evidence for the Formation of Homochiral Polystyrene

O. Shoji, T. Fujishiro, H. Nakajima, M. Kim, S. Nagano, Y. Shiro, Y. Watanabe*

Hydrogen Peroxide Dependent Monooxygenations by Tricking the Substrate Recognition of Cytochrome P450_{BSJ}

News

Supramolecular Chemistry:

J.-M. Lehn honored _____ **2976**

Organic Chemistry:

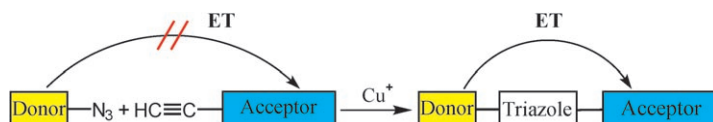
D. Leigh and M. Shibasaki Receive Prizes _____ **2976**

Books

Domino Reactions in Organic Synthesis

Lutz F. Tietze, Gordon Brasche, Kersten M. Gericke

reviewed by T. J. J. Müller _____ **2977**



Copper concentrations at a click: The copper(I)-catalyzed Huisgen cycloaddition (the “click reaction”) enables micro-molar concentrations of physiologically

active Cu⁺ ions to be sensed through photonic energy transfer (ET, see scheme), and offers great potential in terms of labeling methods.

Highlights

Click Chemistry

O. S. Wolfbeis* _____ **2980 – 2982**

The Click Reaction in the Luminescent Probing of Metal Ions, and Its Implications on Biolabeling Techniques

Correspondence

Carbodiphosphoranes

H. Schmidbaur* _____ **2984 – 2985**

Réplique: A New Concept for Bonding in Carbodiphosphoranes?

Carbodiphosphoranes

G. Frenking,* B. Neumüller,* W. Petz,*
R. Tonner, F. Öxler ————— 2986–2987

Reply to Réplique: A New Concept for
Bonding in Carbodiphosphoranes?

Neither is the synthesis of a molecule a mere technical conformation of a theoretical prediction, nor is a quantum chemical investigation a mere supplement to experimental work—the two sides rather

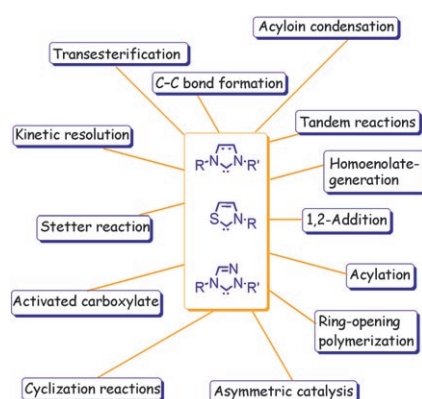
complement each other. The theoretical study in question has shown that more compounds of the general formula EL_2 with donor–acceptor bonds may exist which await synthesis.

Minireviews

Organocatalysis

N. Marion, S. Díez-González,*
S. P. Nolan* ————— 2988–3000

N-Heterocyclic Carbenes as
Organocatalysts



Gifted NHCs: The scope of N-heterocyclic carbenes (NHCs) as organocatalysts has been broadened tremendously in the last few years (see picture). The numerous novel reactions catalyzed by NHCs, as well as their mechanistic implications, are reviewed.

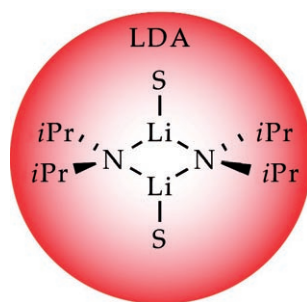
Reviews

Lithium Reagents

D. B. Collum,* A. J. McNeil,
A. Ramirez ————— 3002–3017



Lithium Diisopropylamide: Solution
Kinetics and Implications for Organic
Synthesis



Lessons learned: Lithium diisopropylamide metalates organic substrates through a variety of mechanisms. Although the mechanistic complexity can be daunting, this Review attempts to distill mechanistic studies down to a collection of simple maxims, with particular attention paid to the influence of solvation and aggregation on reactivity.

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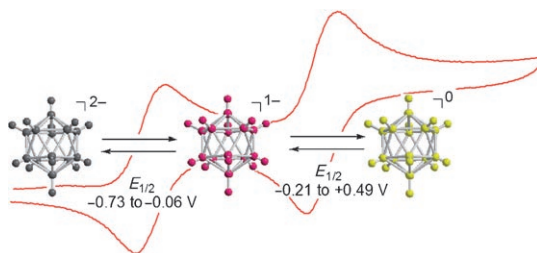
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Communications

Polyhedral Boranes

M. W. Lee, O. K. Farha, M. F. Hawthorne,*
C. H. Hansch ——— 3018–3022

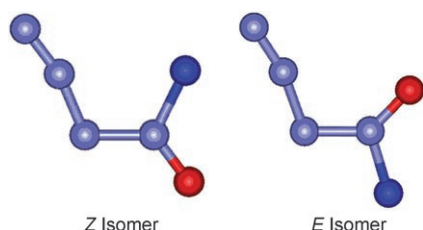
Alkoxy Derivatives of Dodecaborate:
Discrete Nanomolecular Ions with
Tunable Pseudometallic Properties



Twelve of one, a dozen of the other:

Synthetic pseudometallic molecules were prepared by fully substituting the $[B_{12}H_{12}]^{2-}$ ion with 12 alkoxy groups. Reversible redox reactions reveal substi-

tuent-dependent potentials varying over 1.2 V (see picture) which were characterized and correlated using Hammett and QSAR linear free-energy relationships.



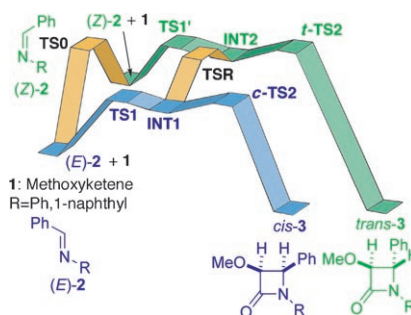
A new stable polynitrogen ion: The second known example of a stable nitrogen fluoride oxide ion, $[N_3NFO]^+$, was prepared as its $[SbF_6]^-$ salt and characterized by multinuclear NMR and vibrational spectroscopy and electronic-structure calculations. The cation is planar and exists as two stereoisomers (see picture; N blue, O red, F dark blue).

Inorganic Cations

W. W. Wilson, R. Haiges, J. A. Boatz,
K. O. Christe* ——— 3023–3027

Synthesis and Characterization of
(Z)- $[N_3NFO]^+$ and (E)- $[N_3NFO]^+$

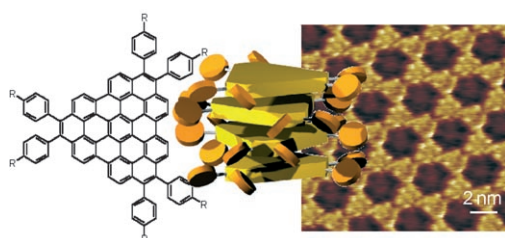
The answer is out there: Detailed calculations on the Staudinger reaction between methoxyketene and imines derived from aromatic amines show that the stereochemistry of the reaction is determined by an isomerization barrier that does not belong to the cycloaddition stages (see picture).



Staudinger Reaction

B. K. Banik, B. Lecea, A. Arrieta,
A. de Cózar, F. P. Cossío* — 3028–3032

On the Stereodivergent Behavior
Observed in the Staudinger Reaction
between Methoxyketene and
(E)-N-Benzylidenearyl Amines



Triangles and zigzags: Large triangle-shaped C_3 -symmetrical polycyclic aromatic hydrocarbons with multiple zigzag peripheries were synthesized. The molecules display mesophase stability over a

wide temperature range as a result of helical packing. Moreover, a 2D honeycomb pattern was observed for one of the larger structures (see picture).

Polycyclic Hydrocarbons

X. Feng, J. Wu, M. Ai, W. Pisula, L. Zhi,
J. P. Rabe, K. Müllen* ——— 3033–3036

Triangle-Shaped Polycyclic Aromatic
Hydrocarbons

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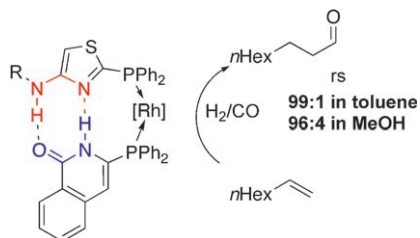


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Complementary partners: A combinatorial library of self-assembled ligand systems has been designed by analogy to the A–T base pair. When these ligand systems are applied in the rhodium-catalyzed hydroformylation of 1-octene (see scheme), high regioselectivities (rs) are obtained, even in the protic solvent methanol.

Combinatorial Catalysis

C. Waloch, J. Wieland, M. Keller, B. Breit* 3037–3039

Self-Assembly of Bidentate Ligands for Combinatorial Homogeneous Catalysis: Methanol-Stable Platforms Analogous to the Adenine–Thymine Base Pair

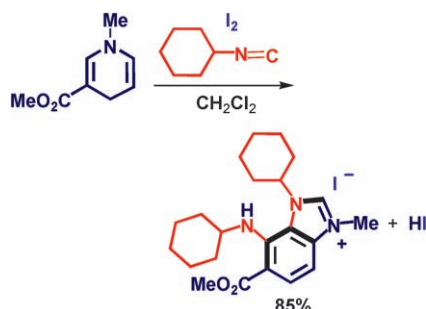


Sugar snap P: An N,P heterobidentate supramolecular ligand was synthesized in water by mixing a monoamino- β -cyclodextrin with an appropriate phosphine. The resultant assembly was used with a platinum(II) salt in aqueous medium to catalyze the hydrogenation of an allylic alcohol (see picture).

Host–Guest Systems

C. Machut, J. Patriceon, S. Tilloy, H. Bricout, F. Hapiot, E. Monflier* 3040–3042

Self-Assembled Supramolecular Bidentate Ligands for Aqueous Organometallic Catalysis

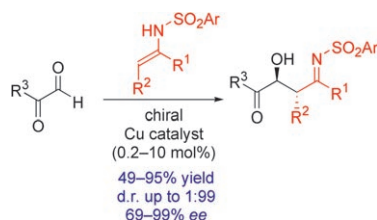


Double agent: The insertion of two isocyanide molecules into the dihydropyridine ring in the presence of iodine results in the formation of a benzimidazole core (see scheme). Four bonds are generated (bold lines) in a highly efficient and atom-economical manner. Access to a range of benzimidazolium derivatives is possible through a cascade reaction.

Synthetic Methods

C. Masdeu, E. Gómez, N. A. O. Williams, R. Lavilla* 3043–3046

Double Insertion of Isocyanides into Dihydropyridines: Direct Access to Substituted Benzimidazolium Salts



A biased copper-coin toss: Highly diastereo- and enantioselective copper-catalyzed addition reactions of enesulfonamides to α -keto aldehydes and azodicarboxylates have been developed. Low loadings of the chiral copper catalyst efficiently promoted the reaction (see scheme). The product sulfonylimines could be reduced diastereoselectively to the biologically important chiral sulfonamide compounds.

Synthetic Methods

R. Matsubara, T. Doko, R. Uetake, S. Kobayashi* 3047–3050

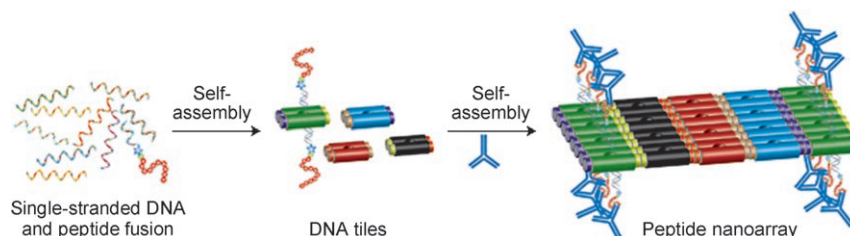
Enesulfonamides as Nucleophiles in Catalytic Asymmetric Reactions

Peptide–Antibody Nanoarrays

B. A. R. Williams, K. Lund, Y. Liu, H. Yan,*
J. C. Chaput* ————— 3051 – 3054



Self-Assembled Peptide Nanoarrays: An Approach to Studying Protein–Protein Interactions



On show: High-density peptide arrays capable of displaying many different amino acid sequences at well-defined and addressable locations on the same DNA nanostructure have been produced. The

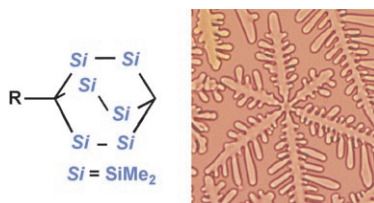
strategy used relies on the genetic information encoded in the nucleic acid portion of a DNA-tagged peptide to position the amino acid sequence at a predetermined location on the array.

Liquid Crystals

M. Shimizu,* M. Nata, K. Mochida,
T. Hiyama, S. Ujiie,* M. Yoshio,
T. Kato* ————— 3055 – 3058



1-Alkyl-2,3,5,6,7,8-hexasilabicyclo-[2.2.2]octanes: Unconventional Class of Mesomorphic Columnar Compounds



Phasing up to matters: Hexagonal columnar mesophases have been formed by polysilacage compounds based on 1-alkyl-2,3,5,6,7,8-hexasilabicyclo-[2.2.2]octanes that contain neither aromatic rings nor long alkyl chains. These mesophases have been characterized by polarizing optical photomicroscopy (see picture), differential scanning calorimetry, and diffraction studies.

Molecular Recognition

M. Waki, H. Abe,*
M. Inouye* ————— 3059 – 3061



Translation of Mutarotation into Induced Circular Dichroism Signals through Helix Inversion of Host Polymers

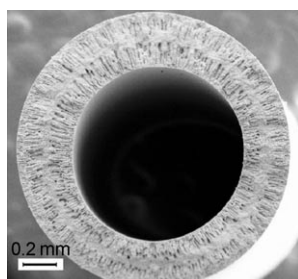


About turn: The preferred helical sense of the complex formed between glucose and the *meta*-ethynylpyridine polymer in aqueous methanol is inverted by mutarotation (see picture). The strong circular dichroism effects induced by pure α - and β -D-glucose weakened with time because the diastereomer excess decreased through mutarotation. The transition curve of the ellipticity closely reflected that of the anomer ratio.

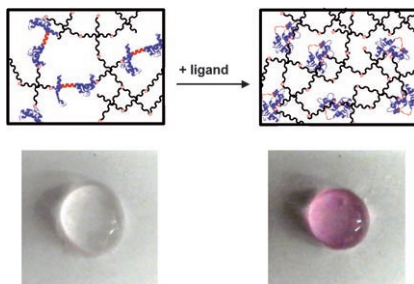
Zirconia Macrocapsules

S. Liu, L. Liu, Z. P. Xu, A. Yu, G. Q. Lu,*
J. C. Diniz da Costa ————— 3062 – 3065

Bioceramic Macrocapsules for Cell Immunoisolation



A bone to pick: Tailor-made zirconia macrocapsules are biocompatible and friendly to MC3T3-E1 cells and can facilitate osteoblast cell differentiation. Cells encapsulated within such capsular chambers are viable and grow well by absorbing the nutrients permeated through the capsule micropores from the outside environment. These capsules are promising as immunoisolation medical templates for bone-tissue engineering.

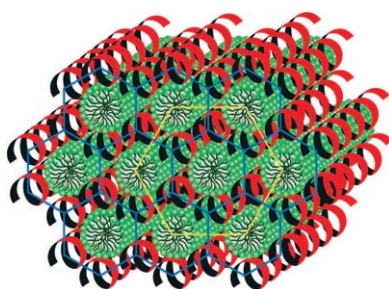


Natural inspiration: A bioinspired functional material in the form of a hydrogel created by cross-linking an engineered version of calmodulin, a protein which undergoes a conformational change in response to ligand binding (see schematic representation), with a four-armed poly-(ethylene glycol) molecule terminated with acrylate groups decreased in volume by 20% when treated with the ligand trifluoperazine. Multiple cycles of gel swelling and shrinkage were possible.

Dynamic Hydrogels

W. L. Murphy, W. S. Dillmore, J. Modica, M. Mrksich* — 3066–3069

Dynamic Hydrogels: Translating a Protein Conformational Change into Macroscopic Motion



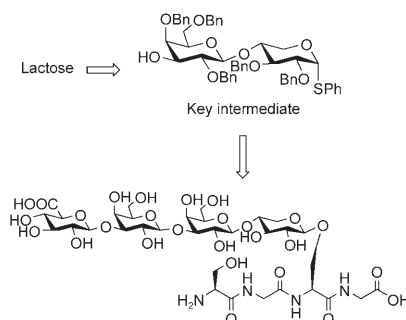
Ordered interactions: Selective supra-molecular association of oligonucleotides with like-charged amphiphilic self-assemblies in aqueous solution, in the absence of divalent cations, is reported. A structural model of the nucleolipoplex, the ordered mesophase formed upon interaction of DNA (red) with anionic nucleolipid assemblies (green), is shown. The hexagonal arrangement is templated by the complementary polynucleotide.

Molecular Recognition

M. Banchelli, D. Berti,*
P. Baglioni* — 3070–3073

Molecular Recognition Drives Oligonucleotide Binding to Nucleolipid Self-Assemblies

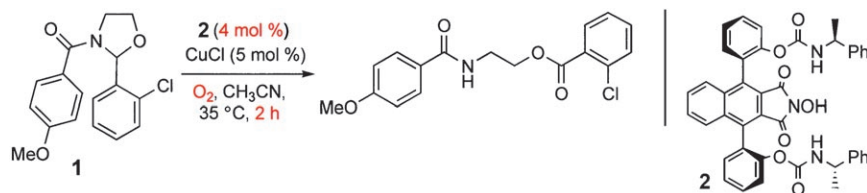
Versatile building blocks in the form of novel derivatives of 1,6-anhydro- β -lactose have been used for the rapid and highly efficient synthesis of various proteoglycan core structures (see example). The resulting oligosaccharide–tetrapeptide conjugates can be used to investigate the mechanism of biosynthesis of glycosaminoglycans in human cartilage cells. Bn = benzyl.



Oligosaccharide Synthesis

K. Shimawaki, Y. Fujisawa, F. Sato, N. Fujitani, M. Kurogochi, H. Hoshi, H. Hinou, S.-I. Nishimura* — 3074–3079

Highly Efficient and Versatile Synthesis of Proteoglycan Core Structures from 1,6-Anhydro- β -lactose as a Key Starting Material



Fast and selective: The aerobic oxidative ring opening of oxazolidine **1** in the presence of a catalytic amount of the chiral *N*-hydroxyphthalimide analogue **2** was accompanied by efficient kinetic

resolution of the oxazolidine. Thus, 50.5% conversion was attained within 2 h, and the remaining **1** had an *ee* value of 89%. The corresponding stereoselectivity factor, $s = k_{\text{rel(fast/slow)}}$, is very high at around 40.

Asymmetric Catalysis

M. Nechab, D. N. Kumar, C. Philouze, C. Einhorn, J. Einhorn* — 3080–3083

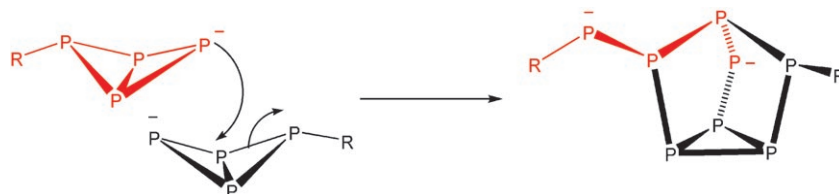
Variable C_2 -Symmetric Analogues of *N*-Hydroxyphthalimide as Enantioselective Catalysts for Aerobic Oxidation: Kinetic Resolution of Oxazolidines

P₄ activation

W. T. K. Chan, F. García, A. D. Hopkins,*
L. C. Martin, M. McPartlin,
D. S. Wright* 3084–3086



An Unexpected Pathway in the Cage
Opening and Aggregation of P₄



Graceful degradation: The reaction of the [(Me₃Si)₃Si][−] ion with white phosphorus results in a new phosphorus-based dianion (see scheme; R = Si(SiMe₃)₃), apparently arising from the unexpected aggregation of two [RP₄][−] units into a P₇

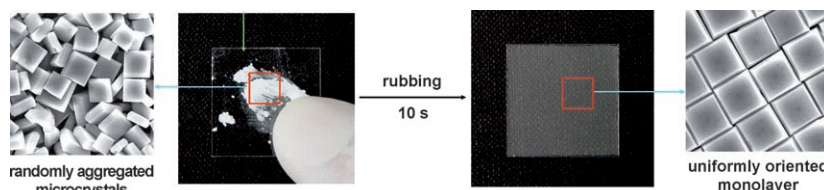
nortricyclic core with an *exo* anionic P atom. The formation of this dianion sheds new light on the mechanism(s) of P₄ degradation by nucleophiles and the ability of silyl substituents to direct product formation.

Monolayers

J. S. Lee, J. H. Kim, Y. J. Lee, N. C. Jeong,
K. B. Yoon* 3087–3090



Manual Assembly of Microcrystal
Monolayers on Substrates



Do-it-yourself: Monolayers of molecules and nanoparticles should be prepared on substrates only by self-assembly, but monolayers of microparticles can be produced by both self-assembly and direct

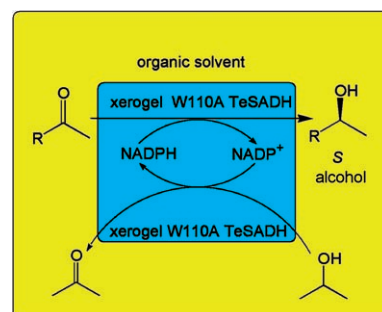
manual attachment as if they are tiles (see picture). The quality of the monolayers is better when they are assembled by hand than by self-assembly.

Sol–Gel Processes

M. M. Musa, K. I. Ziegelmann-Fjeld,
C. Vieille, J. G. Zeikus,
R. S. Phillips* 3091–3094

Xerogel-Encapsulated W110A Secondary
Alcohol Dehydrogenase from
Thermoanaerobacter ethanolicus Performs
Asymmetric Reduction of Hydrophobic
Ketones in Organic Solvents

To gel well: The asymmetric reduction of hydrophobic ketones by xerogel-immobilized W110A secondary alcohol dehydrogenase from *Thermoanaerobacter ethanolicus* (TeSADH) in organic solvents affords their *S*-configured alcohols in yields comparable with those achieved by using the free enzyme, and, in some cases, with higher enantioselectivities. R = phenyl-ring-containing substituent.

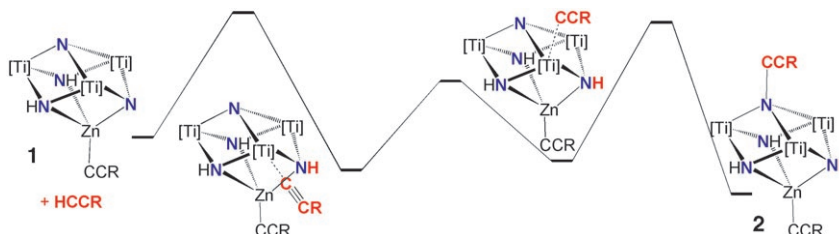


Heterometallic Cubes

J. J. Carbó, A. Martín, M. Mena,*
A. Pérez-Redondo, J.-M. Poblet,
C. Yélamos 3095–3098



Addition of Terminal Alkynes to a
Molecular Titanium–Zinc Nitride



Cubic cages: The alkynylimido clusters **2** ([Ti] = Ti(η⁵-C₅Me₅); R = SiMe₃, Ph) are formed upon reaction of **1** with terminal alkynes. Density functional calculations show that the process involves a two-

electron reduction of the Ti₃ fragment. A concerted C–H activation, which leads to an alkynyl titanium complex, is followed by alkynyl migration to the apical nitrido ligand (see picture).



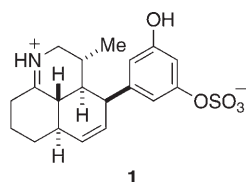
A good place for rafting: Bovine serum albumin (BSA) was site-specifically modified with a reversible addition fragmentation chain transfer (RAFT) agent and used in γ -radiation-initiated polymeri-

zation of oligo(ethylene glycol) acrylate. Well-defined polymer chains were formed at the RAFT agent conjugation site of BSA leading to the generation of BSA-polymer conjugates in situ.

Polymer-Protein Conjugates

J. Liu, V. Bulmus,* D. L. Herlambang, C. Barner-Kowollik, M. H. Stenzel, T. P. Davis* — 3099–3103

In Situ Formation of Protein-Polymer Conjugates through Reversible Addition Fragmentation Chain Transfer Polymerization

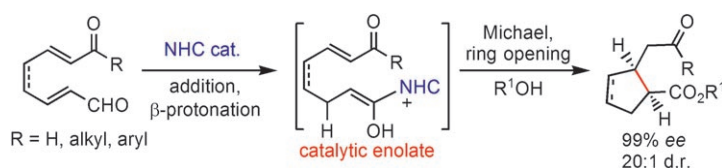


No bones about it: The first enantioselective total synthesis of the osteoclastogenesis inhibitor (+)-symbioimine (**1**) has been achieved. The synthesis features a convergent enol silane addition to a dimethyl acetal and a key, possibly biomimetic, intramolecular Diels-Alder reaction promoted by a dihydropyridinium ion to build four of the five requisite stereocenters in one step.

Biomimetic Synthesis

J. Kim, R. J. Thomson* — 3104–3106

Enantioselective Total Synthesis of the Osteoclastogenesis Inhibitor (+)-Symbioimine



Metal-less Michael: A highly diastereo- and enantioselective intramolecular Michael addition of α,β -unsaturated aldehydes to enones catalyzed by an N-heterocyclic carbene (NHC) has been

developed. The reaction is tolerant of alkyl and aromatic substituents, as well as saturated and unsaturated tethers between the enal and conjugate acceptor (see scheme).

Asymmetric Catalysis

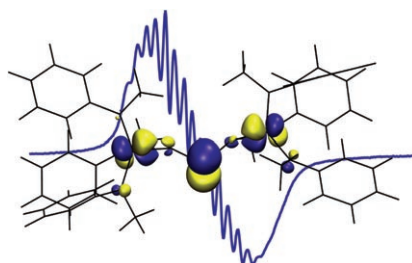
E. M. Phillips, M. Wadamoto, A. Chan, K. A. Scheidt* — 3107–3110

A Highly Enantioselective Intramolecular Michael Reaction Catalyzed by N-Heterocyclic Carbenes



Aiding and abetting a wanted radical:

The neutral phosphorus radical $[\text{P}\{\text{NV}[\text{N}(\text{Np})\text{Ar}]_3\}_2]$ (Np = neopentyl, Ar = 3,5-Me₂C₆H₃) exists as a monomer in the solid state and is resonance-stabilized by two nitridovanadium trisanilide metal-ligands through the V^{IV}/V^V redox couple (see EPR trace and calculated SOMO of $[\text{P}\{\text{NV}[\text{N}(\text{Me})\text{Ph}]_3\}_2]$). The compound undergoes radical reactions at its phosphorus center to form diamagnetic compounds.



Phosphorus Radicals

P. Agarwal, N. A. Piro, K. Meyer, P. Müller, C. C. Cummins* — 3111–3114

An Isolable and Monomeric Phosphorus Radical That Is Resonance-Stabilized by the Vanadium(IV/V) Redox Couple



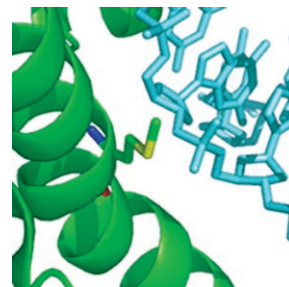
DNA Lesions

C. Gloeckner, K. B. M. Sauter,
A. Marx* ————— 3115–3117



Evolving a Thermostable DNA Polymerase
That Amplifies from Highly Damaged
Templates

The foreign lesion: DNAs with damage generated, for example, by UV light are not good targets for standard replicative DNA polymerases. A DNA polymerase has been derived by directed evolution that faithfully amplifies light-damaged DNA. Interestingly, a single mutation is sufficient for this property (see picture).

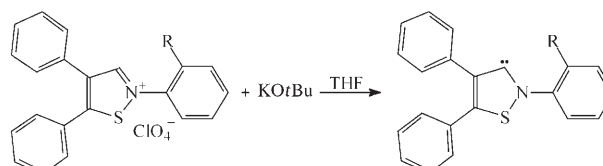


Stable Carbenes

J. Wolf,* W. Böhlmann, M. Findeisen,
T. Gelbrich, H.-J. Hofmann,
B. Schulze* ————— 3118–3121



Synthesis of Stable Isothiazole Carbenes



Through deprotonation of isothiazolium salts, stable substituted singlet carbenes of isothiazol-3-ylidenes (see scheme) could be synthesized for the first time. The carbenes, which were characterized by solid-state and solution NMR spectroscopy,

undergo typical carbene reactions, such as dimerization and insertion into polarized X–H bonds, and might be important for a number of further reactions.

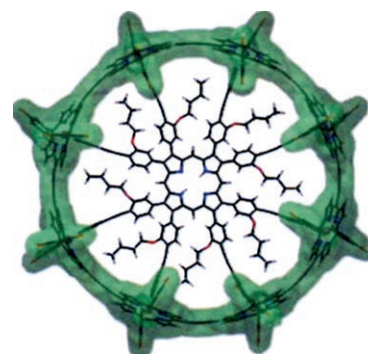
Bending Molecular Wires

M. Hoffmann, C. J. Wilson, B. Odell,
H. L. Anderson* ————— 3122–3125



Template-Directed Synthesis of a
 π -Conjugated Porphyrin Nanoring

Round the bend: Bending a molecular wire round an eight-spoked template leads to the formation of a highly symmetric belt-shaped π system (green in picture). Addition of a large excess of pyridine releases the corresponding cyclic octamer from the template.



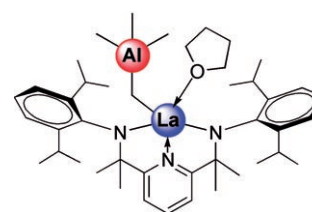
Lanthanide Complexes

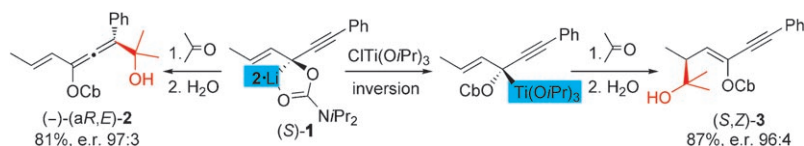
M. Zimmermann, K. W. Törnroos,
R. Anwander* ————— 3126–3130



Alkyl Migration and an Unusual
Tetramethylaluminum Coordination
Mode: Unexpected Reactivity of
Organolanthanide Imino–Amido–Pyridine
Complexes

Remove-Al: Organolanthanide complexes with anionic ligands derived from bis-(imino)pyridine give insight into organo-aluminum-mediated alkylation of the ligand backbone and self-complexation. In addition, they provide structural evidence of the elusive η^1 coordination mode in $\{Ln(\mu-Me)AlMe_3\}$ (see picture).





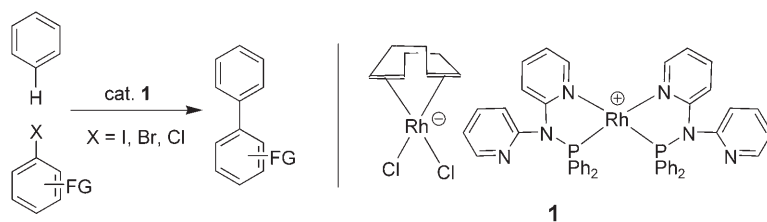
Alternative outcomes. The regio- and stereoselectivity of the hydroxyalkylation of a lithiated alk-1-en-3-yn-2-yl carbamate such as (S)-1 can be controlled simply for the synthesis of highly enantioenriched vinylallenes **2**. Alternatively, lithium–tita-

nium exchange proceeds with inversion of configuration, and addition of carbonyl electrophiles produces enantioenriched homoaldol products such as (S,Z)-3 (see scheme, Cb = carbamoyl).

Asymmetric Synthesis

R. Bou Chedid, M. Brümmer, B. Wibbeling, R. Fröhlich, D. Hoppe* — 3131–3134

Stereo- and Regiochemical Divergence in the Substitution of a Lithiated Alk-1-en-3-yn-2-yl Carbamate: Synthesis of Highly Enantioenriched Vinylallenes or Alk-3-en-5-yn-1-ols



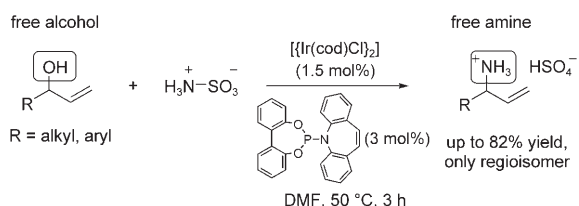
Together we stand: A novel N,P-ligand-stabilized bimetallic rhodium complex **1** accomplishes an efficient nondirected arylation of unactivated arenes. Aryl halides with several functional

groups (FG) undergo these direct coupling reactions. The key to the catalytic efficiency is the bimetallic nature of the catalyst.

Cross-Coupling Reactions

S. Proch, R. Kempe* — 3135–3138

An Efficient Bimetallic Rhodium Catalyst for the Direct Arylation of Unactivated Arenes



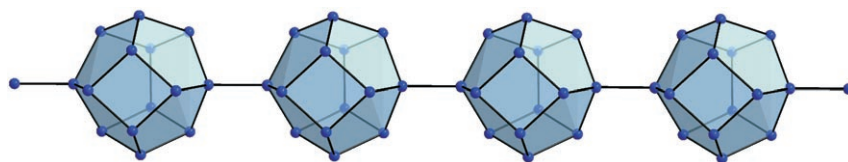
Two for the price of one: Sulfamic acid serves not only as a nitrogen source but also as an in situ activator of hydroxy groups in the first direct iridium-catalyzed synthesis of primary allylic amines from

allylic alcohols (see scheme; cod = cyclo-octa-1,5-diene). The reaction is catalyzed by a commercially available iridium complex and a phosphoramidite-based bidentate phosphorus–olefin ligand.

Allylic Amination

C. Defieber, M. A. Ariger, P. Moriel, E. M. Carreira* — 3139–3143

Iridium-Catalyzed Synthesis of Primary Allylic Amines from Allylic Alcohols: Sulfamic Acid as Ammonia Equivalent



A new type of polyhedron: An {Sn₁₄} enneahedron, which can be derived from a trigonal bipyramid by truncating the three equatorial vertices, occurs in linear chains in Na₂₉Zn₂₄Sn₃₂ (see picture; Sn blue). A pseudorotation of the {Sn₁₄} enneahedron

allows the number of covalent interactions within the complex three-dimensional atom arrangement to be adjusted, so that an electron-precise Zintl phase is attained.

Zintl Phases

S.-J. Kim, S. D. Hoffman, T. F. Fässler* — 3144–3148

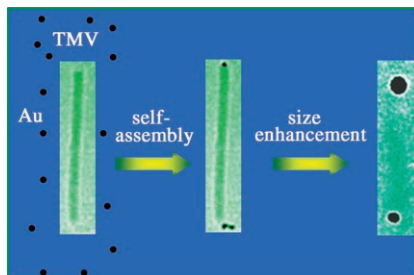
Na₂₉Zn₂₄Sn₃₂: A Zintl Phase Containing a Novel Type of {Sn₁₄} Enneahedra and Heteroatomic {Zn₈Sn₄} Icosahedra

Nanodumbbells

S. Balci, K. Noda, A. M. Bittner,* A. Kadri,
C. Wege, H. Jeske, K. Kern – 3149–3151



Self-Assembly of Metal–Virus
Nanodumbbells



Golden viruses: The rodlike tobacco mosaic virus and citrate-covered gold nanoparticles of 6-nm diameter self-assemble into a metal-virus nanodumbbell. The gold nanoparticles selectively bind to the ends of the rods, and can be enlarged by electroless deposition to yield gold-virus-gold dumbbells (see picture).



Supporting information is available on the WWW
(see article for access details).



A video clip is available as Supporting Information
on the WWW (see article for access details).

The issues for April 2007 appeared online on the following dates
Issue 13: March 9. • Issue 14: March 16. • Issue 15: March 23. • Issue 16: April 5

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Corrigendum

Towards Biological Supramolecular
Chemistry: A Variety of Pocket-
Templated, Individual Metal Oxide
Cluster Nucleations in the Cavity of a
Mo/W-Storage Protein

J. Schemberg, K. Schneider, U. Demmer,
E. Warkentin, A. Müller,*
U. Ermler* _____ 2408–2413

Angew. Chem. Int. Ed. 2007, 46

DOI 10.1002/anie.200604858

The authors of this recent Communication would like to clarify some points with respect to the trinuclear tungsten cluster shown in Figure 3 therein: The cluster shows a central classical $W_3O_{10}N_3$ unit with the characteristic coordination number 6 for the three metal atoms, while each of these has a “dominant” contact to a His139 group. Whether terminal oxygen atoms are protonated cannot be decided as mentioned in the paper (this also because of the limited accuracy of the WO bond lengths). In any case, the charge of the W_3 -type cluster was wrongly formulated (see text and legend to Figure 3) and cannot be given because of the protonation problem.

Corrigendum

The authors of this Communication inadvertently omitted citation of a parallel report discussing a non-enantioselective variant of the presented reaction. This report should be included as reference [11c]. The authors apologize for their oversight.

- [11] a) P. R. Schreiner, A. Wittkopp, *Org. Lett.* **2002**, *4*, 217–220; b) A. Wittkopp, P. R. Schreiner, *Chem. Eur. J.* **2003**, *9*, 407–414; c) for a non-enantioselective thiourea-catalyzed variant, see: S. C. Pan, J. Zhou, B. List, *Synlett* **2006**, 3275–3276.

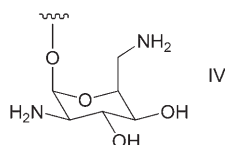
Catalytic Asymmetric Acylcyanation of Imines

S. C. Pan, J. Zhou, B. List* — **612–614**

Angew. Chem. Int. Ed. **2007**, *46*

DOI 10.1002/anie.200603630

The configuration of ring IV in paromomycin (**1**) and subsequent structures depicted in this Communication should be corrected as shown below.



Antibacterial Aminoglycosides with a Modified Mode of Binding to the Ribosomal-RNA Decoding Site

B. François, J. Szychowski, S. S. Adhikari, K. Pachamuthu, E. E. Swayze, R. H. Griffey, M. T. Migawa, E. Westhof,* S. Hanessian* — **6735–6738**

Angew. Chem. Int. Ed. **2004**, *48*

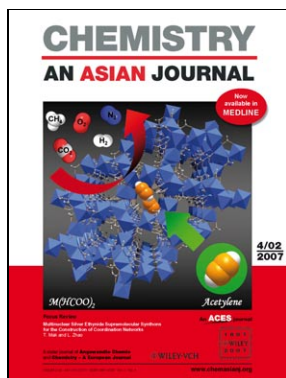
DOI 10.1002/anie.200462092

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