MINIREVIEWS

Asymmetric Synthesis

*E. Meggers** .... 752 – 758

Chiral Auxiliaries as Emerging Tools for the Asymmetric Synthesis of Octahedral Metal Complexes

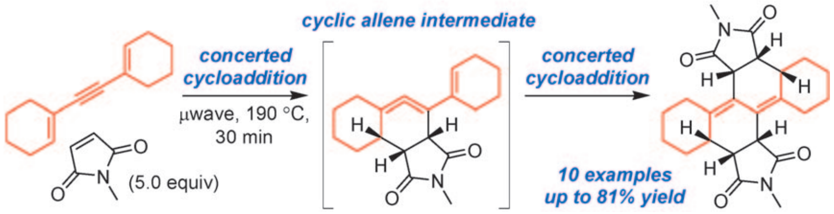
Complicated octahedron: New methods for the stereocontrolled synthesis of octahedral metal complexes are urgently needed in order to fully exploit the stereochemical richness of the octahedral coordination sphere. This short review discusses reported examples of chiral auxiliaries applied to the asymmetric synthesis of octahedral metal complexes (see scheme).

COMMUNICATIONS

Cycloaddition Reactions

T. Fallon, D. E. J. E. Robinson, A. C. Willis, M. N. Paddon-Row, M. S. Sherburn** .... 760 – 765

Double Dehydro-Diels–Alder Reactions of 1,5-Dien-3-ynes



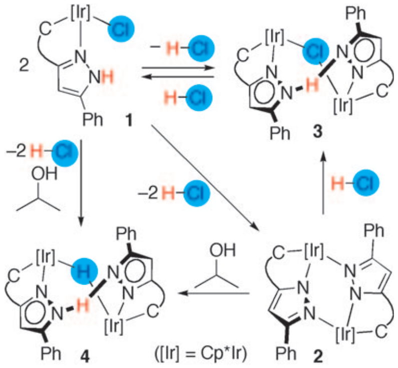
Allene towards efficiency: Two new rings, six stereocentres and four C–C bonds are generated in synthetically useful yields by double dehydro-Diels–Alder reactions of readily available 1,5-dien-3-ynes and alkenic dienophiles. Computational studies support a mechanism for this often highly stereoselective process involving two concerted cycloaddition events and a 1,2-cyclohexadiene intermediate (see scheme).

Bifunctional Catalysts

Y. Kashiwame, S. Kuwata, T. Ikariya** .... 766 – 770

Metal–Pyrazole Bifunction in Half-Sandwich C–N Chelate Iridium Complexes: Pyrazole–Pyrazolato Interconversion and Application to Catalytic Intramolecular Hydroamination of Aminoalkene

Metal–pyrazole concerto: Protic pyrazole complex **1** underwent reversible dehydrochlorination to give pyrazolato complexes **2** and **3**. Hydrido complex **4** was obtained by transfer hydrogenation of **1** and **2**. The metal–ligand bifunction evidenced by these transformations was successfully applied to catalytic intramolecular hydroamination of unactivated, ω-alkenic primary and secondary amines.

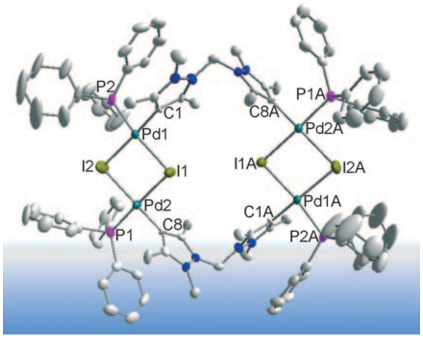


N-Heterocyclic Carbenes

*Y. Han, L. J. Lee, H. V. Huynh** .... 771 – 773

Pyrazole-Derived Remote Dicarbenes: Versatile Ligands for Di- and Tetranuclear Complexes

Influence your neighbor: The first examples of pyrazole-based dicarbene complexes are described (for an example see figure). Remote changes in the ligand topology four bonds away from the carbon donor have substantial influences on the nuclearity of the resulting complexes.



Homogeneous Catalysis

*S. Simaan, A. F. G. Goldberg, S. Rosset, I. Marek** .... 774 – 778

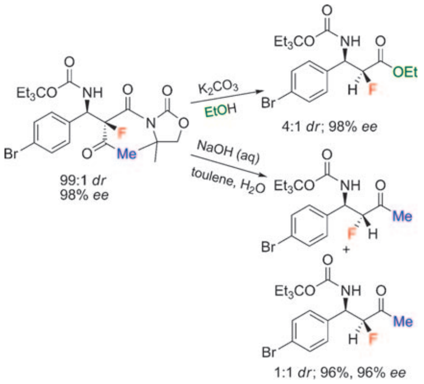
Metal-Catalyzed Ring-Opening of Alkylidenecyclopropanes: New Access to Building Blocks with an Acyclic Quaternary Stereogenic Center

Open sesame! A selective metal-catalyzed ring opening of alkylidenecyclopropane derivatives leads to various functionalized acyclic derivatives possessing challenging quaternary stereocenters. The key feature of this transformation is that the ring opening is faster than the reductive elimination and is highly regioselective; a single ring-opened product was always observed and the stereointegrity of the quaternary stereogenic center remains unaffected in the process.

Asymmetric Synthesis

Y. Pan, Y. Zhao, T. Ma, Y. Yang, H. Liu, Z. Jiang, C.-H. Tan** 779 – 782

Enantioselective Synthesis of α-Fluorinated β-Amino Acid Derivatives by an Asymmetric Mannich Reaction and Selective Deacylation/Decarboxylation Reactions



Useful degradation: A highly enantio- and diastereoselective guanidine-catalyzed Mannich reaction was developed with α-fluoro-β-keto acyloxazolidinone as the fluorocarbon nucleophile (see scheme). α-Fluoro-β-amino ester and α-fluoro-β-amino ketones with chiral fluorinated carbon were obtained by selective deacylation and decarboxylation reactions, respectively.

Ionic Liquids

*O. Zech, S. Thomaier, A. Kolodziejski, D. Touraud, I. Grillo, W. Kunz** .... 783 – 786

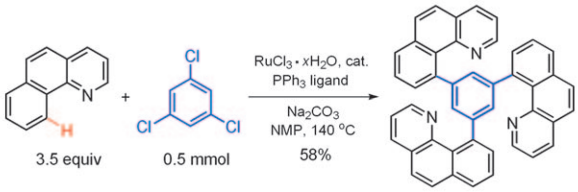
Ionic Liquids in Microemulsions—A Concept To Extend the Conventional Thermal Stability Range of Microemulsions

High-temperature microemulsions: By replacing water in microemulsions by a room-temperature ionic liquid, the thermal stability range of microemulsions can be enlarged. Microemulsions with ethylammonium nitrate as polar phase exhibit a thermal stability ranging from 30 up to 150 °C at ambient pressure.

C−H Activation

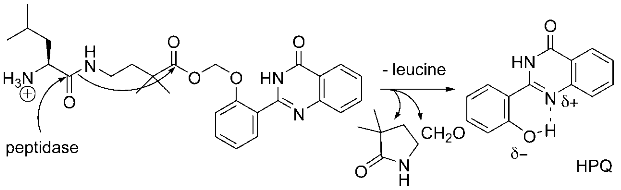
*N. Luo, Z. K. Yu** .... 787 – 791

$RuCl_3 \cdot xH_2O$-Catalyzed Direct Arylation of Arenes with Aryl Chlorides in the Presence of Triphenylphosphine



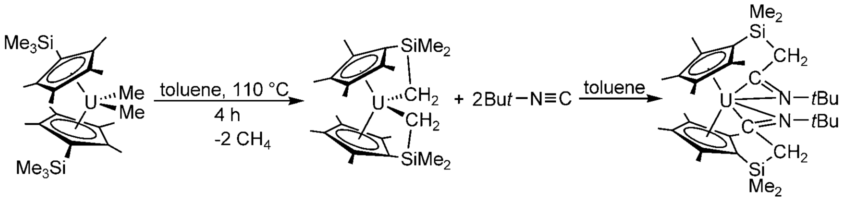
A simple, efficient, and economically attractive catalytic system has been developed for the direct arylation of arenes with aryl chlorides with the $RuCl_3 \cdot xH_2O/PPh_3/Na_2CO_3$/*N*-methyl-2-pyrrolidone system (see scheme). A remarkable effect of the nature of the base was observed, with Na_2CO_3 giving the best results.

Fluorogenic Probes



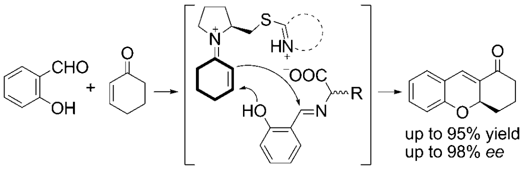
Mind your HPQs: A probe to detect specific peptidases based on the unique solid-state fluorophore HPQ has been developed by the use of an autoimmolative cyclization spacer in conjunction with an acylated O,O-acetal linked to HPQ (see scheme). Under our assay conditions this probe detected the enzyme with a minimum half-time of only 560 s.

Metallocenes



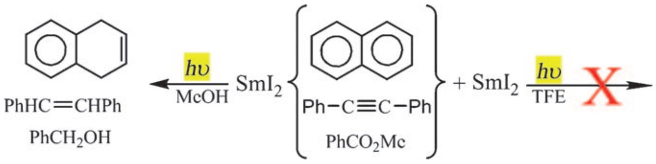
Tuck in! C–H bond activation involving two methyl groups in $[(C_5Me_4SiMe_3)_2UMe_2]$ generates a double tuck-in uranium metallocene that allows U–C bond reactivity to be studied in a tethered environment as shown here with isocyanide to make a bis(tethered iminoacyl) complex (see scheme).

Organocatalysis



Better in pairs: A highly efficient asymmetric reaction of salicylic aldehydes with cyclohexenones by means of a domino oxa-Michael–Mannich pathway has been achieved by using novel dual organocatalytic ion-pair assemblies from pyrrolidines and readily available primary amino acids (see scheme).

Photochemistry



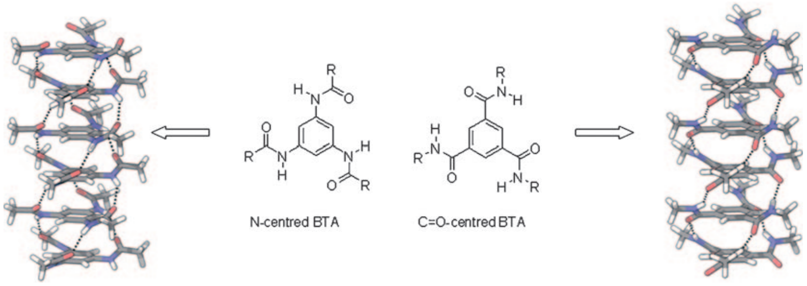
New horizons: We have shown that the scope of photostimulated SmI_2 reactions could be vastly extended by converting the bimolecular protonation step to a unimolecular one. This was achieved by using a proton donor, such as MeOH, which complexes to SmI_2 (see scheme). Protonation within the ion pair prevents rapid back electron transfer, which limited the applicability of photostimulated SmI_2 reductions.

FULL PAPERS

Supramolecular Polymers

P. J. M. Stals, J. C. Everts, R. de Bruijn, I. A. W. Filot, M. M. J. Smulders, R. Martín-Rapún, E. A. Pidko, T. F. A. de Greef, A. R. A. Palmans, E. W. Meijer** 810–821

Dynamic Supramolecular Polymers Based on Benzene-1,3,5-tricarboxamides: The Influence of Amide Connectivity on Aggregate Stability and Amplification of Chirality

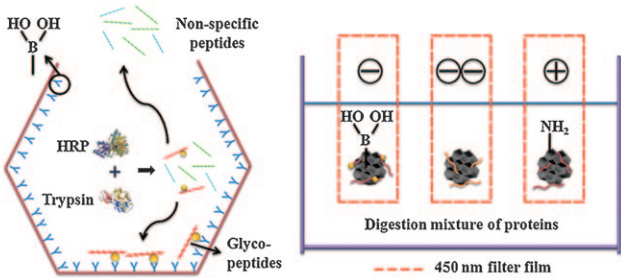


The chain gang! N-Centred benzene-1,3,5-tricarboxamides were synthesised and their self-assembly into dynamic supramolecular polymers was investigated with a combined experimental and theoretical approach. The dynamic aggregates show similar behaviour compared to their C=O-centred counterparts although the self-assembly is weaker and less cooperative and amplification of chirality is less pronounced.

Nanotechnology

K. Qian, J. Wan, X. Huang, P. Yang, B. Liu, C. Yu** 822–828

A Smart Glycol-Directed Nanodevice from Rationally Designed Macroporous Materials

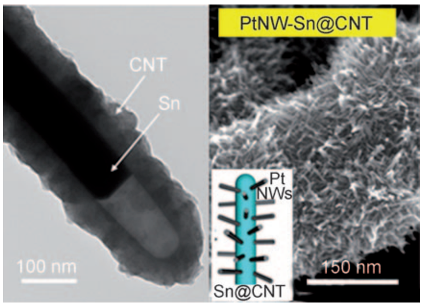


Smarten up: A smart glycol-directed nanodevice is fabricated through the functionalization of macroporous silica foams with boron species and amino groups, and subsequent integration of the three materials can achieve fast digestion, targeted glycopeptides enrichment and non-specific peptides purification in one design (see figure).

Nanomaterials

*S. Sun, G. Zhang, D. Geng, Y. Chen, M. N. Banis, R. Li, M. Cai, X. Sun** 829–835

Direct Growth of Single-Crystal Pt Nanowires on Sn@CNT Nanocable: 3D Electrodes for Highly Active Electrocatalysts



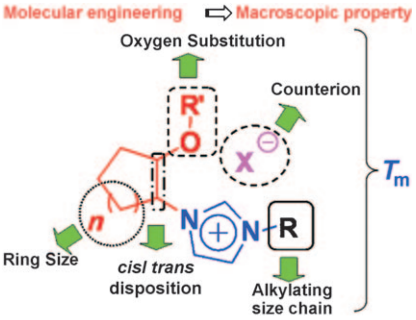
Better than cable TV: Single-crystal Pt nanowires are directly grown on Sn@CNT nanocable supports (see figure), forming 3D electrodes, by means of a "green" aqueous solution method at room temperature. This novel PtNW–Sn@CNT 3D electrode exhibits a superior electrochemical performance than the state of the art commercial catalyst.

Ionic Liquids

N. Ríos-Lombardía, E. Busto, V. Gotor-Fernández, V. Gotor, R. Porcar, E. García-Verdugo, S. V. Luis,* I. Alfonso, S. García-Granda, A. Menéndez-Velázquez* ...... 836 – 847

From Salts to Ionic Liquids by Systematic Structural Modifications: A Rational Approach Towards the Efficient Modular Synthesis of Enantiopure Imidazolium Salts

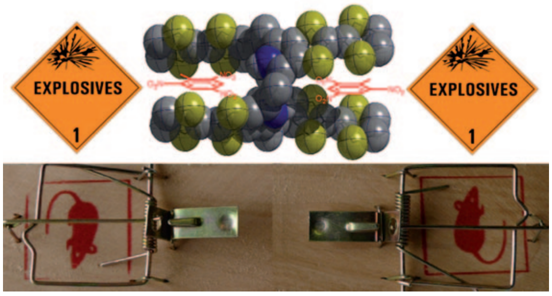
From salt to liquid through hydrogen bonds: The chirality of imidazolium salts is used as a design vector in the preparation of ionic liquids with specifically desired properties (see figure). More than 30 enantiopure imidazolium salts are reported enabling the systematic mapping of all the possible structural variables within the chiral molecules.



Chemosensors

J. S. Park, F. Le Derf, C. M. Bejger, V. M. Lynch, J. L. Sessler, K. A. Nielsen, C. Johnsen, J. O. Jeppesen** .... 848 – 854

Positive Homotropic Allosteric Receptors for Neutral Guests: Annulated Tetrathiafulvalene–Calix[4]pyrroles as Colorimetric Chemosensors for Nitroaromatic Explosives



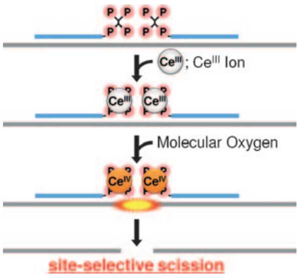
Killing two rats with one trap provides the inspiration for a new class of aromatic-fused tetrathiafulvalene–calix[4]-pyrroles that act as positive homotropic allosteric receptors for nitroaromatic explosives. The use of annulated tetrathiafulvalene subunits in these new systems leads to a greater efficiency in binding and colorimetric nitroaromatic "sensing", relative to simple tetrathiafulvalene-containing derivatives.

DNA Cleavage

*T. Lönnberg, Y. Aiba, Y. Hamano, Y. Miyajima, J. Sumaoka, M. Komiyama** .... 855 – 859

Oxidation of an Oligonucleotide-Bound Ce^{III}/Multiphosphonate Complex for Site-Selective DNA Scission

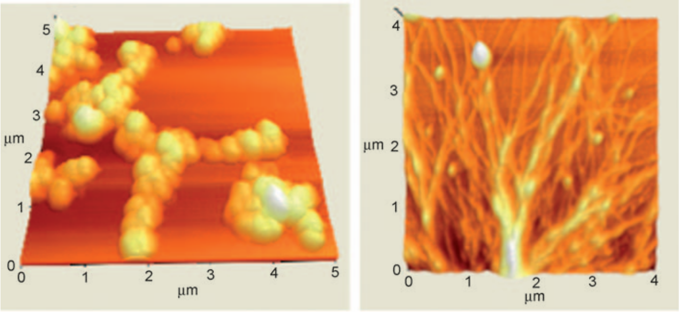
Cutting edge: A Ce^{III} complex of a multiphosphonate ligand, bound to an oligodeoxyribonucleotide, was oxidized with molecular oxygen to the catalytically active Ce^{IV} complex, providing an unprecedentedly well-characterized site-selective DNA cutter.



Supramolecular Chemistry

D. Monti, M. De Rossi, A. Sorrenti, G. Laguzzi,* E. Gatto, M. Stefanelli, M. Venanzi, L. Luvidi, G. Mancini, R. Paolesse* 860–870

Supramolecular Chirality in Solvent-Promoted Aggregation of Amphiphilic Porphyrin Derivatives: Kinetic Studies and Comparison between Solution Behavior and Solid-State Morphology by AFM Topography

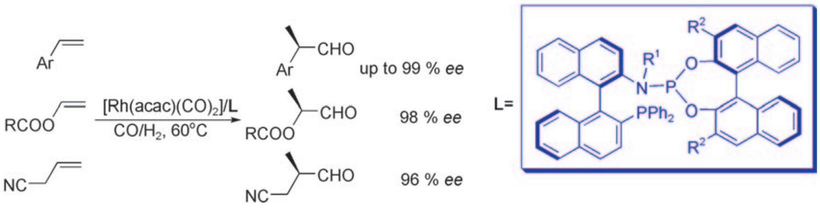


Chiral porphyrin aggregation: Solvent-promoted aggregation of some amphiphilic porphyrin derivatives bearing a charged chiral functional group occurs with formation of chiral supramolecular architectures. Spectroscopic and kinetic studies, as well as topographic AFM imaging (see picture), reveal that the morphology of the aggregated species are strongly dependent on the intimate nature of the appended chiral group.

Asymmetric Catalysis

*X. Zhang, B. Cao, Y. Yan, S. Yu, B. Ji, X. Zhang** 871–877

Synthesis and Application of Modular Phosphine–Phosphoramidite Ligands in Asymmetric Hydroformylation: Structure–Selectivity Relationship

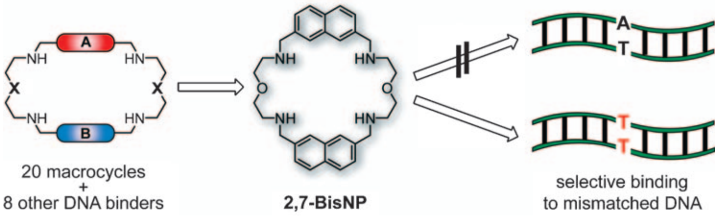


Structure–selectivity relationship: A series of modular phosphine–phosphoramidite ligands were synthesized and applied in Rh-catalyzed asymmetric hydroformylations of styrene derivatives, vinyl acetate derivatives, and allyl cyanide affording highly regio- and enantioselectivities (see picture). Systematic variation of ligand structure revealed the influence of the substituents on the selectivities of ligands.

DNA Recognition

*A. Granzhan, E. Largy, N. Saettel, M.-P. Teulade-Fichou** 878–889

Macrocyclic DNA-Mismatch-Binding Ligands: Structural Determinants of Selectivity

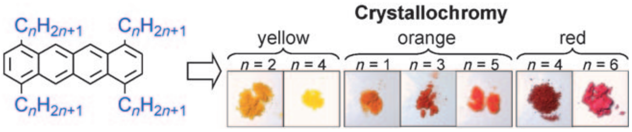


Shape matters: In a series of 20 homo- (**A**=**B**) and heterodimeric (**A**≠**B**) macrocycles, the 2,7-substituted bis-naphthalene macrocycles (**2,7-BisNP**; see schematic representation) selectively bind to TX-mismatched base pairs in DNA, whereas their isomers and other macrocycles, along with many conventional DNA binders, show little or no mismatch selectivity.

Crystallochromy

C. Kitamura, Y. Abe, T. Ohara, A. Yoneda, T. Kawase, T. Kobayashi, H. Naito, T. Komatsu* 890–898

Synthesis and Crystallochromy of 1,4,7,10-Tetraalkyltetracenes: Tuning of Solid-State Optical Properties of Tetracenes by Alkyl Side-Chain Length



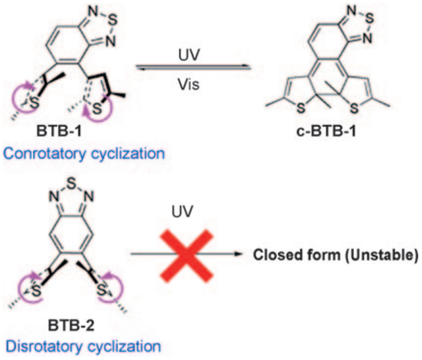
Color tuning by varying the alkyl side-chain length: Tetraalkyl-substituted tetracenes have been synthesized and isolated as yellow, orange, and red solids (see figure), depending on the length of the alkyl side chain. The effects of molecular structure, crystal packing, and exciton coupling on the color were investigated.

Photochromism

W. Zhu, X. Meng, Y. Yang, Q. Zhang, Y. Xie, H. Tian** .... 899 – 906

Bisthienylethenes Containing a Benzothiadiazole Unit as a Bridge: Photochromic Performance Dependence on Substitution Position

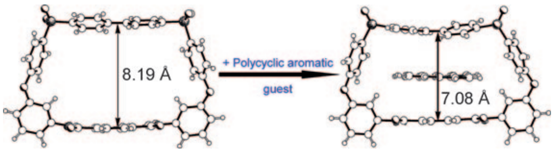
Bridge to photochromic performance: Photochromic compounds, such as BTB-1, containing an unprecedented six-membered 2,1,3-benzothiadiazole unit as the center ethene bridge, are conveniently synthesized. The difference in their photochromism is interpreted by using resonance structures, theoretical calculations of the ground-state potential-energy surfaces (PES), and the Woodward–Hoffman rule (see scheme).



Induced-Fit Complexes

H. M. Colquhoun, Z. Zhu,* D. J. Williams, M. G. B. Drew, C. J. Cardin, Y. Gan, A. G. Crawford, T. B. Marder* .... 907 – 918

Induced-Fit Binding of π-Electron-Donor Substrates to Macrocyclic Aromatic Ether Imide Sulfones: A Versatile Approach to Molecular Assembly

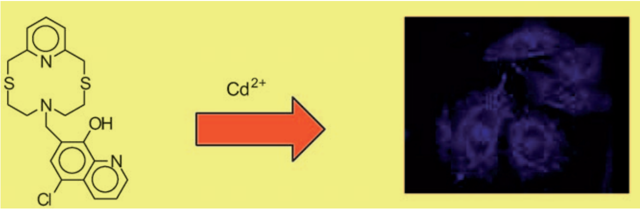


Flex and twist to fit! Ultra-stable macrocyclic receptors, based on aromatic diimide and arylene sulfone subunits, are versatile components for supramolecular assembly with π-electron-donating polycyclic aromatics. The resulting complexes have been investigated in solution and in the solid state and show high association constants and large induced-fit distortions of the macrocycles (see figure), which demonstrate the existence of strong attractive forces between electronically complementary aromatic π-systems.

Fluorescent Probes

M. Mameli, M. C. Aragoni, M. Arca, C. Caltagirone, F. Demartin, G. Farruggia, G. De Filippo, F. A. Devillanova, A. Garau, F. Isaia, V. Lippolis, S. Murgia, L. Prodi, A. Pintus, N. Zaccheroni* ...... 919 – 930

A Selective, Nontoxic, OFF–ON Fluorescent Molecular Sensor Based on 8-Hydroxyquinoline for Probing Cd^{2+} in Living Cells



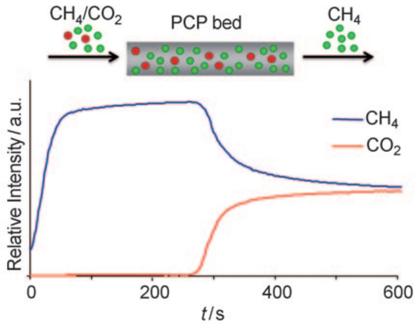
The living daylights: A simple conjugated fluorescent chemosensor based on 8-hydroxyquinoline allows the in vitro imaging of Cd^{2+} in living cells through the chelation enhancement of fluorescence (CHEF) effect (see picture). The structural and physical–chemical properties of the complex species responsible are reported.

Coordination Networks

E. Barea, G. Tagliabue, W.-G. Wang, M. Pérez-Mendoza, L. Mendez-Liñan, F. J. López-Garzon, S. Galli, N. Masciocchi, J. A. R. Navarro** .... 931 – 937

A Flexible Pro-porous Coordination Polymer: Non-conventional Synthesis and Separation Properties Towards CO_2/CH_4 Mixtures

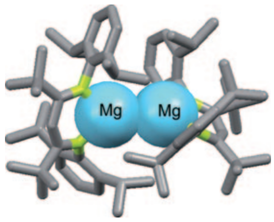
Flexible MOFs: The unusual adsorption behaviour and guest selectivity of a pro-porous flexible copper(II) coordination network have been rationalised on the basis of thermal XRPD and variable-temperature adsorption experiments of probe gases (N_2, CH_4, CO_2) of environmental interest (see figure).



Metal–Metal Interactions

*S. J. Bonyhady, C. Jones,**
*S. Nembenna, A. Stasch,**
A. J. Edwards, G. J. McIntyre 938–955

β-Diketiminate-Stabilized Magnesium(I) Dimers and Magnesium(II) Hydride Complexes: Synthesis, Characterization, Adduct Formation, and Reactivity Studies

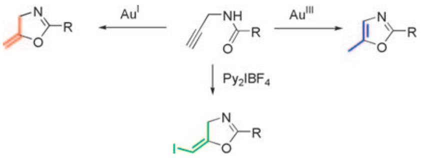


The ties that bind: The potassium reduction of β-diketiminato magnesium(II) iodide complexes of varying steric bulk has led to two new magnesium(I) dimers (see figure). The reactivity of these (and a previously reported complex) towards Lewis bases, unsaturated organic substrates, and dihydrogen have been compared. The first structurally authenticated terminal magnesium hydride complex is also reported.

Cyclization Reactions

*J. P. Weyrauch, A. S. K. Hashmi,**
A. Schuster, T. Hengst, S. Schetter,
A. Littmann, M. Rudolph, M. Hamzic,
J. Visus, F. Rominger, W. Frey,
J. W. Bats 956–963

Cyclization of Propargylic Amides: Mild Access to Oxazole Derivatives

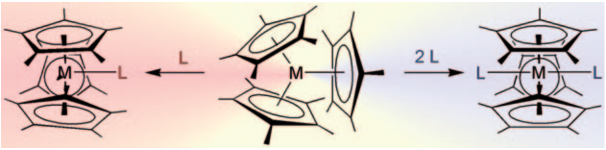


Broad access: The easily available *N*-propargylcarboxamides (see scheme) readily deliver a range of functionalized oxazole-based heterocycles in catalytic and stoichiometric reactions. Even extended conjugated systems with interesting fluorescence properties are obtained that way, and additional mechanistic insight was achieved (Py = pyridyl, R = alkyl, vinyl, aryl, heteroaryl).

Metallocenes

W. J. Evans, T. J. Mueller,*
J. W. Ziller 964–975

Lanthanide versus Actinide Reactivity in the Formation of Sterically Crowded $[(C_5Me_5)_3ML_n]$ Nitrile and Isocyanide Complexes

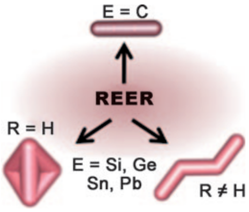


Size matters! The coordination of additional ligands to sterically crowded $[(C_5Me_5)_3M]$ complexes depends upon the size of the metal and whether it is a lanthanide or actinide (see scheme).

Bond Theory

*H. Jacobsen** 976–987

Shifting Paradigms: Electrostatic Interactions and Covalent Bonding

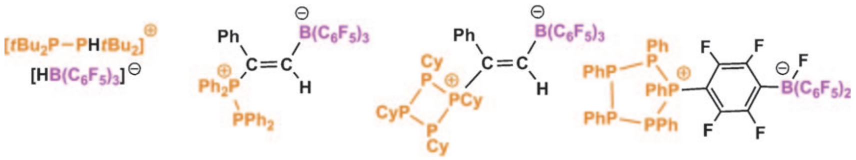


Refining and redefining: A new look at an old problem as to "Why do the heavy-atom analogues of acetylene E_2H_2(E) Si–Pb) exhibit unusual structures?" investigates the role of electrostatic interactions in covalent bonding, and follows current developments in the field of chemical bonding (see figure).

Main Group Chemistry

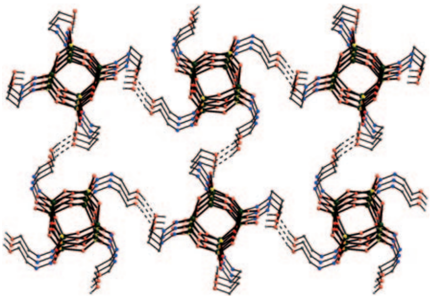
S. J. Geier, M. A. Dureen,
E. Y. Ouyang,
*D. W. Stephan** 988–993

New Strategies to Phosphino–Phosphonium Cations and Zwitterions



P−P positive: Diphosphines and cyclic polyphosphines, P_2R_4 (R = *t*Bu, Ph), P_4Cy_4, and P_5Ph_5 react with the Lewis acid $B(C_6F_5)_3$ and either H_2 or alkyne, or with $B(C_6F_5)_3$ alone under thermolysis conditions to provide new synthetic routes to functionalized phosphino–phosphonium salts and zwitterions (see picture).

A noncovalent glue: "Sticking together" double-four-ring (D4R) building units composed of a tetrameric zinc phosphate by modulating noncovalent interactions yielded extended structures (see figure). This approach also provides insight into building linked frameworks of D4R secondary building units (SBUs) to realize designer zeolitic solids.



Extended Structures

R. Murugavel, S. Kuppuswamy, N. Gogoi, R. Boomishankar, A. Steiner* 994–1009

Noncovalent Synthesis of Hierarchical Zinc Phosphates from a Single $Zn_4O_{12}P_4$ Double-Four-Ring Building Block: Dimensionality Control through the Choice of Auxiliary Ligands

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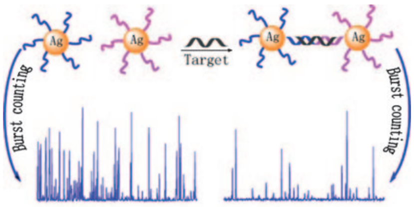
Photon-burst counting of single-silver-nanoparticles is a technique that has enabled the development an ultrasensitive and highly selective homogeneous assay of DNA and microRNA, involving a sandwich hybridization strategy and silver nanoparticles as probes (see schematic representation). The detection limits are at about the 1 fM level, which is 2–5 orders of magnitude more sensitive than current homogeneous methods.



Nucleic Acid Detection

*F. Xu, C. Dong, C. Xie, J. Ren** 1010–1016

Ultrahighly Sensitive Homogeneous Detection of DNA and MicroRNA by Using Single-Silver-Nanoparticle Counting

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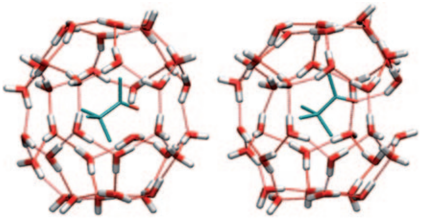
Hydrate guest–host hydrogen bonds: Single-crystal X-ray crystallography has been used for the first time to detect guest–host hydrogen bonding in structure II (*tert*-butylamine (*t*BA) with H_2S/Xe help gases) and structure H (pinacolone + H_2S help gas) clathrate hydrates. X-ray analysis shows the *t*BA nitrogen at a distance of 2.64 Å from the closest water oxygen atom and the pinacolone oxygen atom at a distance of 2.96 Å. Molecular dynamics are used to determine radical distribution functions, hydrogen-bond lifetimes and guest rotational dynamics.



Host–Guest Systems

S. Alavi, K. Udachin, J. A. Ripmeester** 1017–1025

Effect of Guest–Host Hydrogen Bonding on the Structures and Properties of Clathrate Hydrates

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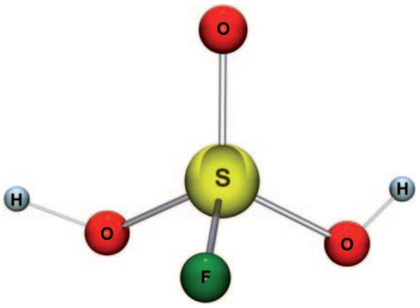
Protonated magic acid: Fluorodihydroxyoxosulfonium hexafluoroantimonate, $[H_2SO_3F]^+[SbF_6]^-$, is formed when SO_3 reacts at −35 °C with the superacid HF/SbF_5. The in situ formed HSO_3F (see graphic) is protonated by HF/SbF_5, which is conclusive evidence that the superacidic HF/SbF_5 system is more acidic than magic acid (HSO_3F/SbF_5).



Superacidic Systems

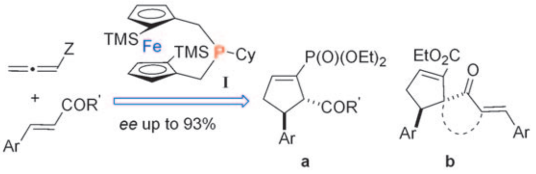
*R. Seelbinder, N. R. Goetz, J. Weber, R. Minkwitz, A. J. Kornath** 1026–1032

The Protonation of HSO_3F: Preparation and Characterization of Fluorodihydroxyoxosulfonium Hexafluoroantimonate $[H_2SO_3F]^+[SbF_6]^-$

Organocatalysis

*N. Pinto, M. Neel, A. Panossian, P. Retailleau, G. Frison, A. Voituriez, A. Marinetti** .... 1033 – 1045

Expanding the Scope of Enantioselective FerroPHANE-Promoted [3+2] Annulations with α,β-Unsaturated Ketones

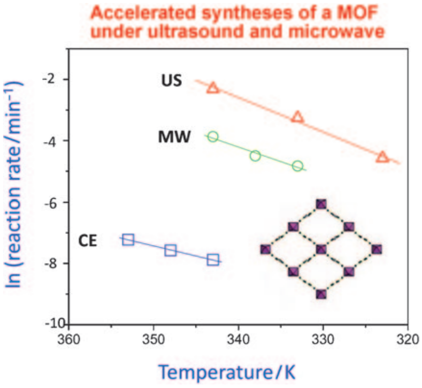


Chiral cyclopentenes: FerroPHANE **I** has been used as an organocatalyst for the enantioselective synthesis of cyclopentenyl phosphonates (**a**) and esters (**b**) through [3+2] cyclizations between α,β-unsaturated ketones and allenyl phosphonates or esters, respectively (see graphic). *ee* values in the 85–95 % range have been obtained.

Nanoporous Materials

*E. Haque, N. A. Khan, J. H. Park, S. H. Jhung** .... 1046 – 1052

Synthesis of a Metal–Organic Framework Material, Iron Terephthalate, by Ultrasound, Microwave, and Conventional Electric Heating: A Kinetic Study

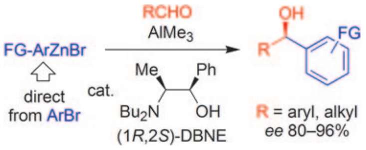


Accelerated synthesis: A metal–organic framework material, iron terephthalate, has been synthesized by the use of ultrasound (US) and microwave (MW) irradiation under various conditions at low temperatures. The reaction rates decrease in the order US > MW ≫ conventional method (see figure).

Asymmetric Catalysis

*D. Glynn, J. Shannon, S. Woodward** .... 1053 – 1060

On the Scope of Trimethylaluminium-Promoted 1,2-Additions of ArZnX Reagents to Aldehydes

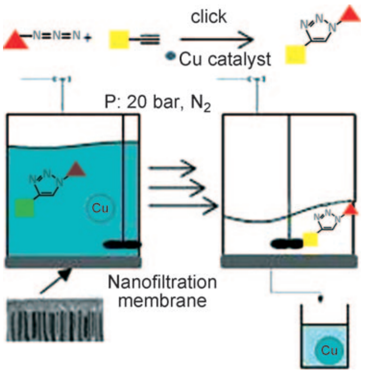


A wide range of commercial ArZnBr reagents were added to prochiral aldehydes with good enantioselectivity. Functionalised organozinc reagents (e.g., CO_2R and CN) are tolerated and the latter species can be easily prepared from ArBr and Zn dust.

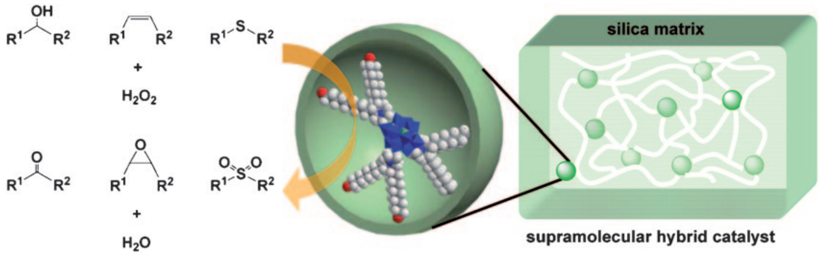
Solvent-Resistant Nanofiltration

*A. Cano-Odena, P. Vandezande, D. Fournier, W. Van Camp, F. E. Du Prez, I. F. J. Vankelecom** .... 1061 – 1067

Solvent-Resistant Nanofiltration for Product Purification and Catalyst Recovery in Click Chemistry Reactions



Nanofiltration product separation: Diafiltration of a “click” chemistry product mixture by using solvent-resistant nanofiltration membranes (see graphic) has enabled the almost complete removal of the copper catalyst and, therefore, the purification of click chemistry products. For the first time, the homogeneous catalyst permeates through a nanofiltration membrane, whereas the purified product is retained.



Supramolecular synergy catalysis: Supramolecular catalysts based on surfactant-encapsulated polyoxometalates have been developed for the oxidation of alcohols, alkenes, and sulfides with high efficiency and selectivity (see picture). Supramolecular synergy during the reaction process has been found to play a very important role in influencing the kinetics of the reaction and improving the catalytic activity.

Supramolecular Catalysis

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* Author to whom correspondence should be addressed

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

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G. Zucchi, O. Maury, P. Thuéry, F. Gumy, J.-C. G. Bünzli, M. Ephritikhine* …………… 9686–9696

2,2′-Bipyrimidine as Efficient Sensitizer of the Solid-State Luminescence of Lanthanide and Uranyl Ions from Visible to Near-Infrared

Chem. Eur. J., **2009**, *15*

DOI: 10.1002/chem.200901517

We would like to make the following addition to the Acknowledgment Section: We also wish to thank Antoine Boulay for the crystallization of complexes $[Ln(NO_3)_3(bpm)(MeOH)_2]\cdot MeOH$ (Ln = Ce, Sm), $[Sm(NO_3)_3(bpm)_2]\cdot THF$, and $[Ce(NO_3)_2(bpm)(H_2O)_4]^+[Ce(NO_3)_4(bpm)(H_2O)_2]^-$. The authors apologize for this oversight.

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*L. Hong, W. Sun, C. Liu, L. Wang, R. Wang** …………………… 440–444

Asymmetric Organocatalytic N-Alkylation of Indole-2-carbaldehydes with α,β-Unsaturated Aldehydes: One-Pot Synthesis of Chiral Pyrrolo[1,2-*a*]indole-2-carbaldehydes

Chem. Eur. J., **2010**, *16*

DOI: 10.1002/chem.200902638

During the preparation of the manuscript, a previous report on domino aza-Michael/aldol condensation discussing the iminium/enamine activation mechanism was inattentively omitted, which should have been included as reference [17c]. The authors sincerely apologize for this oversight.

[17] For interesting structural insights into enamine and iminium salt formation, see: a) D. Seebach, A. K. Beck, D. M. Badine, M. Limbach, A. Eschenmoser, A. M. Treasurywala, R. Hobi, *Helv. Chim. Acta* **2007**, *90*, 1999; b) U. Groselj, W. B. Schweizer, M.-O. Ebert, D. Seebach, *Helv. Chim. Acta* **2009**, *92*, 1; c) H. Sundén, R. Rios, I. Ibrahem, G.-L. Zhao, L. Eriksson, A. Córdova, *Adv. Synth. Catal.* **2007**, *349*, 827.