

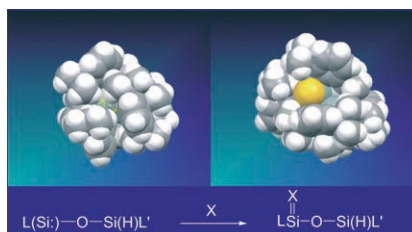
# SPOTLIGHTS ...

## Silanoic Acid Derivatives

S. Yao, Y. Xiong, M. Brym,  
M. Driess\*

**A Series of Isolable Silanoic Thio-, Seleno-, and Telluroesters (LSi(=X)OR) with Donor-Supported Si=X Double Bonds (L =  $\beta$ -Diketiminato; X = S, Se, Te)**

*Chem. Asian J.*  
DOI: 10.1002/asia.200700285



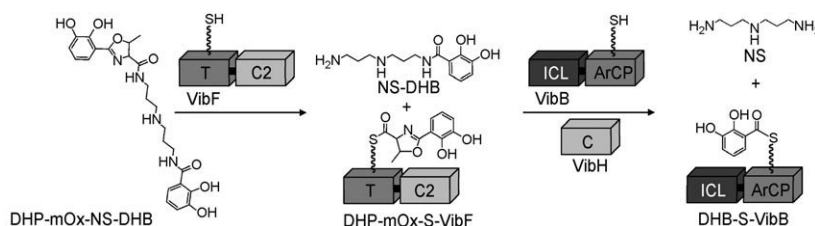
**Pocket a chalcogen:** Gentle oxidation of the siloxysilylene  $L(Si)OSi(H)L'$  ( $L = HC(CMe)_2[N(aryl)_2]$ ,  $L' = CH-[(C=CH_2)CMe][N(aryl)_2]$ ; aryl = 2,6- $iPr_2C_6H_3$ ) with chalcogens (S, Se, Te) affords the respective silanoic silyl esters in high yield. These silicon analogues of carbonic esters contain intramolecular  $N \rightarrow Si$  donor-acceptor-supported  $Si=X$  systems and relatively strong  $Si=X$   $\pi$ -bonding interactions.

## Biosynthesis

C. J. Balibar, C. T. Walsh\*

**From Thioesters to Amides and Back: Condensation Domain Reversibility in the Biosynthesis of Vibriobactin**

*ChemBioChem*  
DOI: 10.1002/cbic.200700485



**Reloaded.** In the biosynthesis of vibriobactin, the two condensation domains responsible for catalyzing amide bond formation between three catechol-containing moieties and norspermidine (NS in scheme) to yield the

mature siderophore, were found to be reversible, and both were capable of reloading their cognate thiolation domains with the acyl components of their amide products.

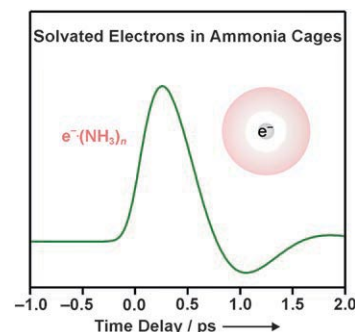
## Solvated Electrons

I.-R. Lee, W. Lee, A. H. Zewail\*

**Dynamics of Electrons in Ammonia Cages: The Discovery System of Solvation**

*ChemPhysChem*  
DOI: 10.1002/cphc.200700562

**The dynamics of solvated electrons in ammonia cages,** the two-century old discovery system of solvation, is reported. With femtosecond resolution, mass selection, and photoelectron detection, the relaxation of the cage and its coherent dynamics are captured, and the findings are related to the behavior in bulk solutions.

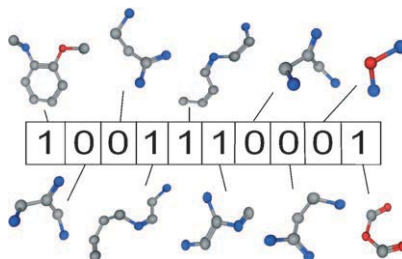


## Drug Discovery

J. Batista, J. Bajorath\*

**Similarity Searching using Compound Class-Specific Combinations of Substructures Found in Randomly Generated Molecular Fragment Populations**

*ChemMedChem*  
DOI: 10.1002/cmdc.200700199

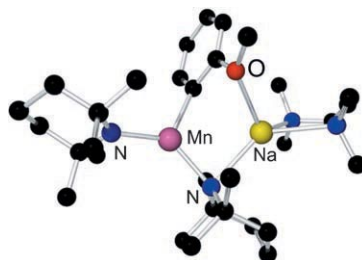


**Fine fingerprints.** Herein, we show that combinations of randomly generated fragments are signatures of active molecules. Small sets of such fragments are encoded as bit string representations and used for similarity searching. These fingerprints are successfully applied to mine high-throughput screening data sets. Shown are randomly generated substructures encoded as a small fingerprint that were extracted from a fragment pathway specific for cathepsin B inhibitors.

## ... ON OUR SISTER JOURNALS

### Manganation

**Direct approach:** Circumventing the need for indirect metathetical syntheses, the first direct manganation(II) reactions of functionalised arenes using the sodium-Mn<sup>II</sup> base [(tmeda)Na-(tmp)(R)Mn(tmp)] (TMEDA = *N,N,N',N'*-tetramethylethylenediamine, TMP = 2,2,6,6-tetramethylpiperidine, R = CH<sub>2</sub>SiMe<sub>3</sub>) are reported together with the conversion of the crystallographically-characterised *ortho*-manganated intermediates (see figure) thus obtained into unsymmetrical biaryls through Pd-catalysed cross-coupling reactions with iodobenzene.



V. L. Blair, W. Clegg, B. Conway, E. Hevia, A. Kennedy, J. Klett, R. E. Mulvey,\* L. Russo

**Alkali-Metal-Mediated Manganation(II) of Functionalized Arenes and Applications of *ortho*-Manganated Products in Pd-Catalyzed Cross-Coupling Reactions with Iodobenzene**

*Chem. Eur. J.*  
DOI: 10.1002/chem.200701597

### Nucleobases



A convenient method for the synthesis of *N*- $\alpha$ , $\beta$ -difluoro- $\beta$ -trifluoromethyl enamines and *N*- $\alpha$ -fluoro- $\beta$ -trifluoromethyl enamines of nucleic acids bases is described. The procedure is based

on a Michael-type addition–elimination reaction and shows high N<sup>9</sup> regioselectivity for purines and N<sup>1</sup> for pyrimidines.

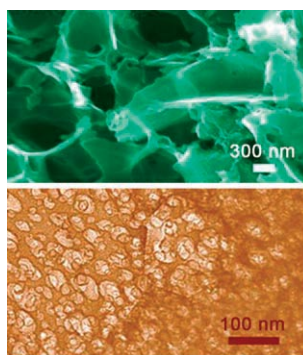
H. Wójtowicz-Rajchel,\* H. Koroniak, A. Katrusiak

**A Convenient Method for the Synthesis of Stable  $\alpha$ -Fluoro Enamines of Nucleobases**

*Eur. J. Org. Chem.*  
DOI: 10.1002/ejoc.200700703

### Energy Storage

**Electrochemical capacitors:** A hierarchical porous graphitic carbon material, composed of macroporous ion-buffering microreservoirs, ion-transporting channels, and localized graphitic wall structures, is presented (see images; top: 3D skeleton, bottom: carbon platelet). The properties of this new material combine to overcome the electrode kinetic problems normally found in electrochemical capacitors, thus resulting in an excellent high-rate energy-storage performance.



D.-W. Wang, F. Li, M. Liu, G. Q. Lu, H.-M. Cheng\*

**3D Aperiodic Hierarchical Porous Graphitic Carbon Material for High-Rate Electrochemical Capacitive Energy Storage**

*Angew. Chem. Int. Ed.*  
DOI: 10.1002/anie.702721



On these pages, we feature a selection of the excellent work that has recently been published in our sister journals. If you are reading these pages on a computer, click on any of

the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.