

## Molecular Rotations

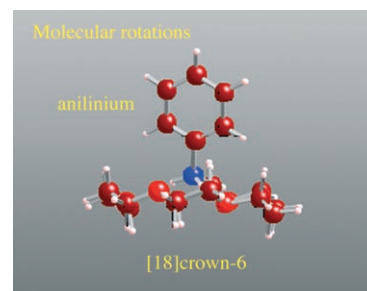
S. Nishihara, T. Akutagawa,\* D. Sato,  
S. Takeda, S.-i. Noro, T. Nakamura\*

Multitrotations of  
(Anilinium) ([18]Crown-6) Supramolecular  
Cation Structure in Magnetic Salt of  
[Ni(dmit)<sub>2</sub>]<sup>−</sup>

*Chem. Asian J.*

DOI: 10.1002/asia.200700010

**Round and round we go:** (Anilinium)-  
([18]crown-6) dynamic supramolecular  
cations undergo different modes of rota-  
tion in the solid state. The 180° flip-flop  
motion of anilinium and the rotation of  
[18]crown-6 were confirmed from solid-  
state NMR spectra. Multimolecular rota-  
tions of different motional freedoms  
were also observed simultaneously.



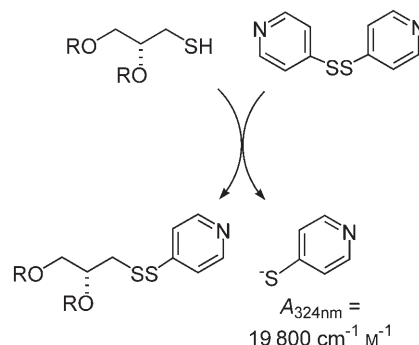
## Enzyme Catalysis

Y. Liu, C. Mihai, R. J. Kubiak,  
M. Rebecchi, K. S. Bruzik\*

Phosphorothiolate Analogues of  
Phosphatidylinositols as Assay  
Substrates for Phospholipase C

*ChemBioChem*

DOI: 10.1002/cbic.200700061



**Unnaturally superior.** Analogues of all  
naturally occurring phosphatidylinositols  
in which the scissile P–O bond is  
replaced by a P–S bond have been syn-  
thesized and shown to be useful assay  
substrates for the determination of phos-  
phatidylinositol-specific phospholipase C  
activity.

## Proton Transfer

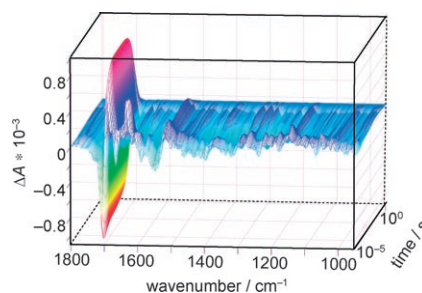
T. Majerus, T. Kottke, W. Laan,  
K. Hellingwerf, J. Heberle\*

Time-Resolved FT-IR Spectroscopy Traces  
Signal Relay within the Blue-Light  
Receptor AppA

*ChemPhysChem*

DOI: 10.1002/cphc.200700248

**Revealing intermediates:** Time-resolved  
step-scan FT-IR difference experiments  
(see figure) on flavin-containing photore-  
ceptors reveal photocycle intermediates  
which have been spectrally silent in pre-  
vious UV/Vis experiments on Appa-  
BLUF. The data indicate blue-light  
induced proton transfer or a change in  
H-bonding in the vicinity of a carboxylic  
side chain which represent an important  
step in signal transfer from the chromo-  
phore to the protein surface.



## Virtual Screening

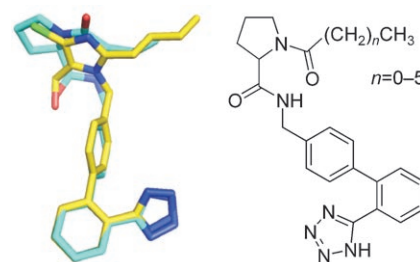
C. Lamanna, A. Catalano, A. Carocci,  
A. Di Mola, C. Franchini,\* V. Tortorella,  
P. M. L. Vanderheyden, M. S. Sinicropi,  
K. A. Watson, S. Sciabola

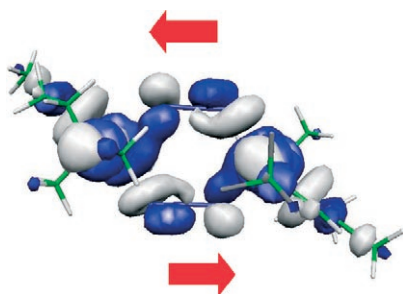
AT<sub>1</sub> Receptor Ligands:  
Virtual-Screening-Based Design with  
TOPP Descriptors, Synthesis, and  
Biological Evaluation of Pyrrolidine  
Derivatives

*ChemMedChem*

DOI: 10.1002/cmdc.200700082

**A virtual approach** that uses TOPP 3D  
descriptors to explore the AT<sub>1</sub> receptor is  
presented. It features a new series of  
sartan analogues (shown), which were  
synthesized and biologically evaluated  
on CHO-hAT<sub>1</sub> cells stably expressing the  
human AT<sub>1</sub> receptor.





Prediction of the magnetic properties of binuclear  $\text{Cu}^{\text{II}}$  compounds containing asymmetric azide bridges remains a challenge. A combination of correlated ab initio calculations and the analysis of the experimental data shows that the asymmetry of the coordination of the azido bridge is a determining factor in the tuning of the coupling constant value.

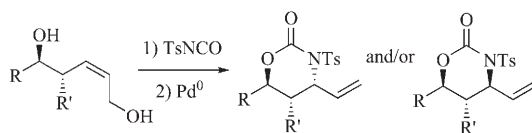
#### Molecular Magnetism

M. Angels Carvajal, C. Aronica,  
D. Luneau,\* V. Robert\*

Shearing-Like Distortion in Binuclear End-to-End  $\text{Cu}^{\text{II}}$  Azido Compounds: An Ab Initio Study of the Magnetic Interactions

*Eur. J. Inorg. Chem.*

DOI: 10.1002/ejic.200700456



The Pd-catalyzed stereoselective cyclization of dicarbamates proceeded with 1,3-asymmetric induction under either thermodynamic or kinetic control to afford

enantioselectively six-membered-ring cyclic carbamates. Calculations enabled us to rationalize the observed stereoselectivity.

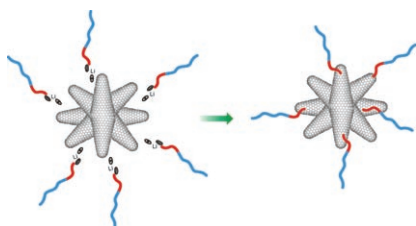
#### Pd-Catalyzed Cyclizations

G. Broustal, X. Ariza, J.-M. Campagne,\*  
J. Garcia,\* Y. Georges, A. Marinetti,  
R. Robiette\*

A Stereoselective Approach to 1,3-Amino Alcohols Protected as Cyclic Carbamates: Kinetic vs. Thermodynamic Control

*Eur. J. Org. Chem.*

DOI: 10.1002/ejoc.200700503



**Taking the nanotube by the horn!** The covalent functionalization of the newly discovered carbon nanohorns with well-defined homopolymers and block copolymers is described (see scheme). The synthesis and the properties of the above hybrid materials are elucidated using complementary techniques.

#### Carbon Nanohorns

G. Mountrichas, S. Pispas,\*  
N. Tagmatarchis\*

Grafting Living Polymers onto Carbon Nanohorns

*Chem. Eur. J.*

DOI: 10.1002/chem.200700770



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 com-

puter, click on any of the items to read the full article. Otherwise please see the DOIs for easy online access through Wiley InterScience.