

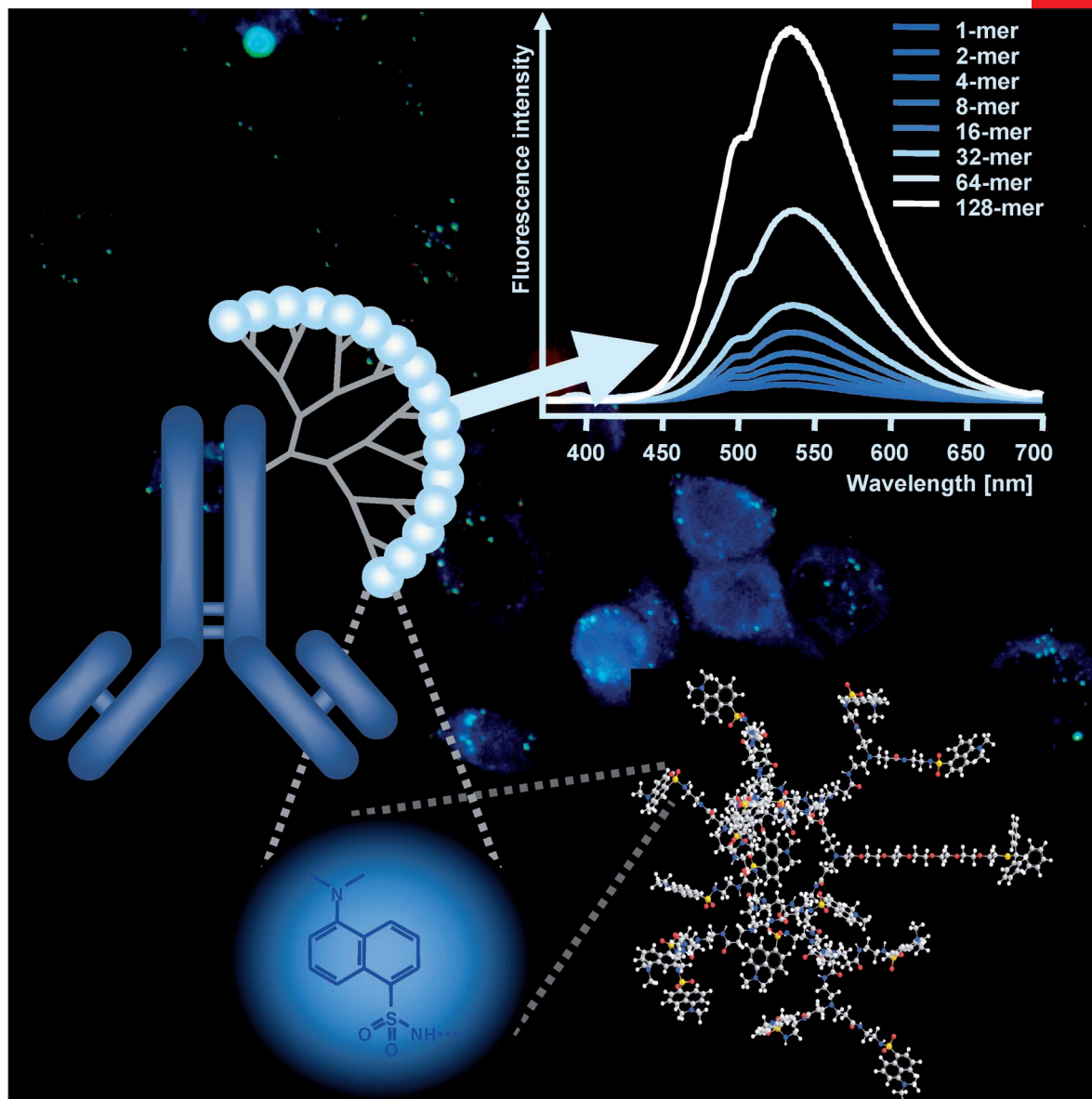
# CHEMISTRY

## A EUROPEAN JOURNAL

14/27

2008

300th  
Issue



### Concept

De-racemization of Enantiomers versus De-epimerization of Diastereomers – Classification of Dynamic Kinetic Asymmetric Transformations (DYKAT)

J. Steinreiber et al.

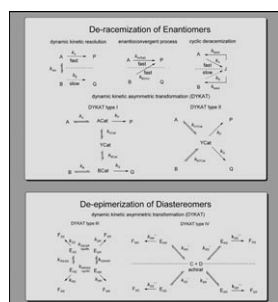
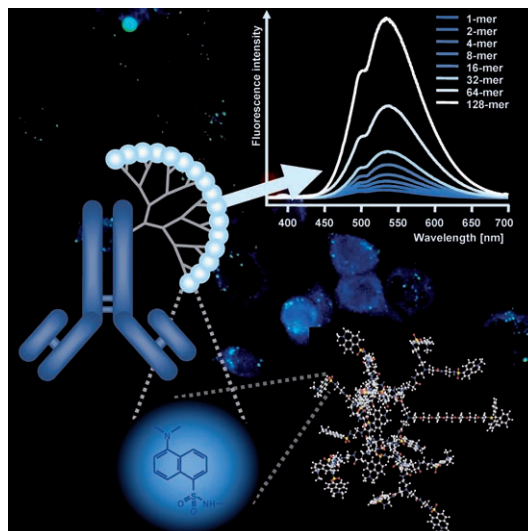
 WILEY-VCH

  
ChemPubSoc  
Europe

Supported by  
**ACES**

# Fluorescent labeling...

... of biomacromolecules with molecules that produce strong fluorescence allows the structures and functions of healthy as well as tumor cells to be investigated. In their Full Paper on page 8116 ff., W. Mier et al. describe the synthesis and characterization of dye oligomers with multiple fluorescent moieties attached to polyamido-amine (PAMAM) dendrimers. These dye oligomers can then be attached to biomacromolecules, such as antibodies, and retain their fluorescent activity.

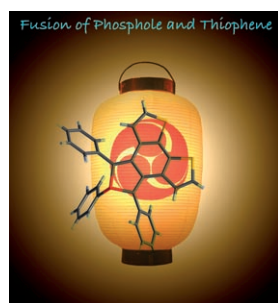
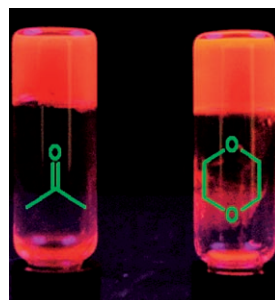


## Dynamic Resolution

In the Concept article on page 8060 ff., J. Steinreiber et al. describe how the dynamic process family is growing. As de-racemization processes, such as dynamic kinetic resolutions, are readily applied in industry, a new generation of kinetically more complex systems emerges: dynamic kinetic asymmetric transformations of enantiomers and diastereomers.

## Fluorescent Dyes

In their Communication on page 8074 ff., F. Würthner et al., describe how they have discovered highly fluorescent PBI J-aggregate-based lyotropic mesophases and gels of organic solvents. The outstanding fluorescent properties of the dye in both J-aggregated viscous lyotropic mesophases and bulkgel phases suggest very promising applications in photonics, photovoltaics, security printing, or as fluorescent sensors.



## Fused-Ring Systems

In their Full Paper on page 8102 ff., Y. Matano et al. describe how the  $Ti^{II}$ -mediated cyclization protocol has proven to be effective for the preparation of three types of bithiophene-fused benzo[c]phospholes. These compounds are the first examples of thermally and kinetically stable benzo[c]phosphole and are promising materials for optoelectronic applications.

|                |             |
|----------------|-------------|
|                |             |
| GERMANY        | NETHERLANDS |
|                |             |
| BELGIUM        | ITALY       |
|                |             |
| FRANCE         | SPAIN       |
|                |             |
| PORTUGAL       | GREECE      |
|                |             |
| CZECH REPUBLIC | POLAND      |
|                |             |
| SWEDEN         | HUNGARY     |
|                |             |
| AUSTRIA        |             |

Supported by  
**ACES**

Chemistry—A European Journal is jointly owned by the 14 Chemical Societies shown above and published by Wiley-VCH. This group of Societies has banded together as Chemistry Publishing Society (ChemPubSoc) Europe for its combined publishing activities. The journal is also supported by the Asian Chemical Editorial Society (ACES).