

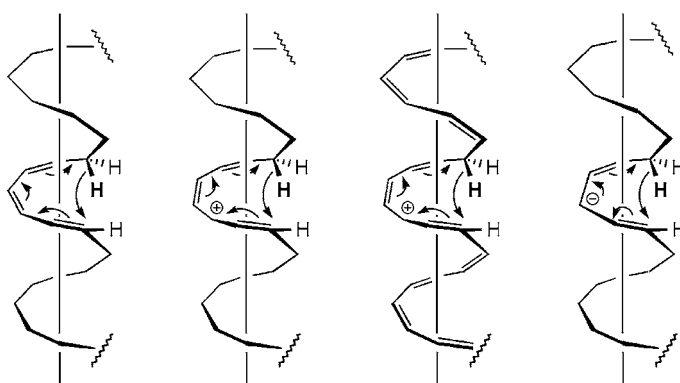
## Contents

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### Helicoid Shiftamers for the Transport of $\pi$ -Clumps and Charges

*D. J. Tantillo, R. Hoffmann\**

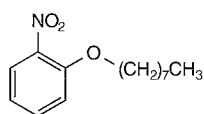
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### Solvatochromic Analysis of Partition Coefficients in the *o*-Nitrophenyl Octyl Ether (*o*-NPOE)/Water System

*X. Liu, G. Bouchard, N. Müller, A. Galland, H. Girault, B. Testa, P.-A. Carrupt\**

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$$\log P_{\text{npoe}} = 2.54 \cdot 10^{-2} (\pm 0.28 \cdot 10^{-2}) \cdot V_w - 2.66 (\pm 0.43) \cdot \beta \\ - 1.88 (\pm 0.43) \cdot \alpha - 0.18 (\pm 0.33)$$

$$n = 85; q^2 = 0.83; r^2 = 0.85; s = 0.50; F = 149$$

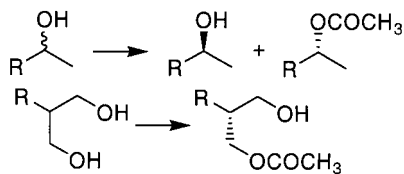
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Chemo- and Enzyme-Catalyzed Reactions Revealing a Common Temperature-Dependent Dynamic Solvent Effect on Enantioselectivity

G. Cainelli\*, P. Galletti, D. Giacomini\*, A. Gualandi, A. Quintavalla

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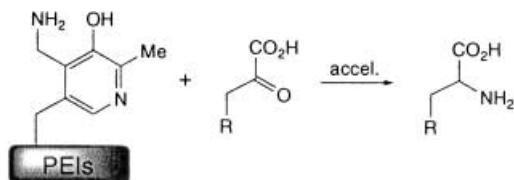
Bio-catalyst: lipase PS (*Amano*) or from *Candida antarctica*;  
chemo-catalyst: L-proline-derived chiral diamines;  
solvent; temperature.

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Transamination by Polymeric Enzyme Mimics

W. Zhou, L. Liu, R. Breslow\*

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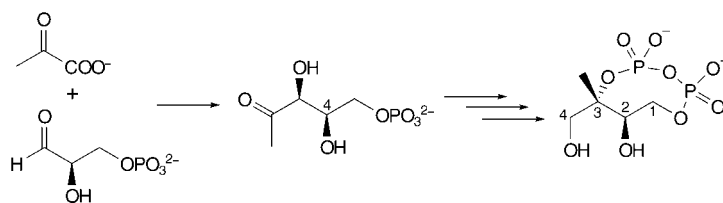


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A Facile Enzymatic Synthesis of Isotopically Labeled 2-Methyl-D-erythritol 2,4-Cyclo-diphosphate by Spinach Chloroplast Stroma

W. Gao, M. Raschke, H. Alpermann, M. H. Zenk\*

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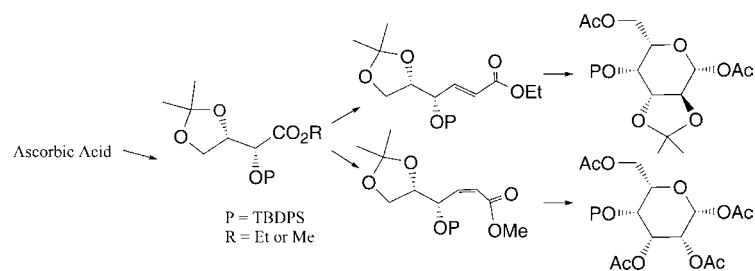


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Novel Route to L-Hexoses from L-Ascorbic Acid: Asymmetric Synthesis of L-Galactopyranose and L-Talopyranose  
Preliminary Communication

L. Ermolenko, N. A. Sasaki\*, P. Potier

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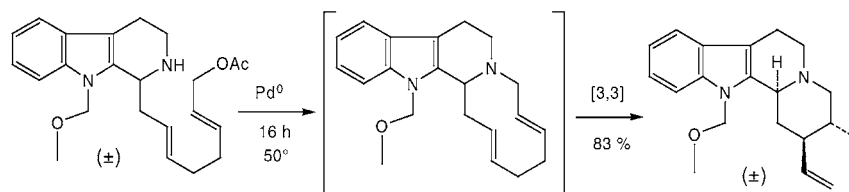


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A Model Study towards a Conceptually New Synthetic Entry into the Seco- and Heteroyohimbine Alkaloid Families

T. Vogelsang, H.-J. Borschberg\*

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Selectivity of Molecular Recognition Displayed by Monoclonal Antibodies as Compared to Receptors – a New Approach to Screen Combinatorial Libraries

O. Lack, W. Huber, W.-D. Woggon\*

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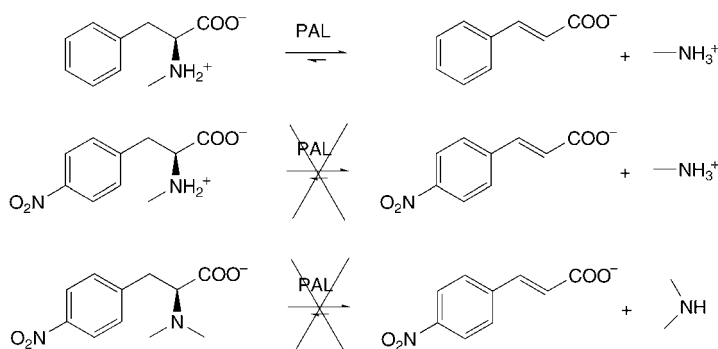


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Mechanistic Investigation of Phenylalanine Ammonia Lyase by Using *N*-Methylated Phenylalanines

*S. Viergutz, L. Poppe\*, A. Tomin, J. Rétey\**

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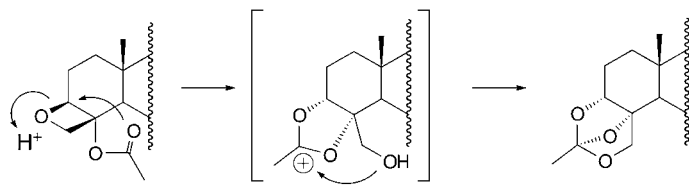


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Facile Orthoester Formation in a Model Compound of the Taxol Oxetane: Are Biologically Active Epoxy Esters, Orthoesters, and Oxetanyl Esters Latent Electrophiles?

*J.-L. Giner\*, J. A. Faraldos*

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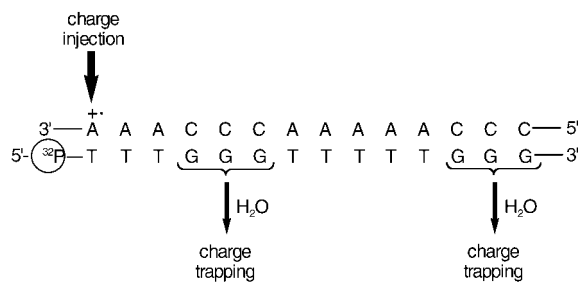


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On the Distance-Independent Hole Transfer over Long (A·T)<sub>n</sub>-Sequences in DNA

*E. Furrer, B. Giese\**

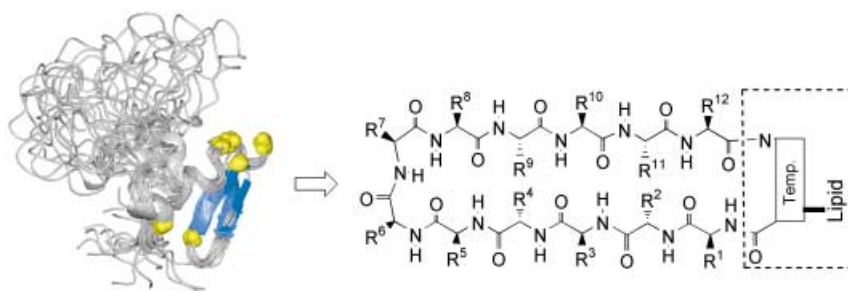
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Cyclic Peptidomimetics Derived from the Apical Membrane Antigen I of *Plasmodium falciparum* and Their Use in Malaria Vaccine Design

A. Renard, M. Mueller, R. Zurbriggen, G. Pluschke, J. A. Robinson\*

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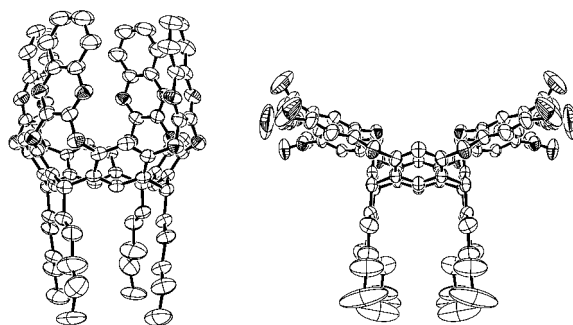


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Functionalized and Partially or Differentially Bridged Resorcin[4]arene Cavitanths: Synthesis and Solid-State Structures

V. A. Azov, P. J. Skinner, Y. Yamakoshi, P. Seiler, V. Gramlich, F. Diederich\*

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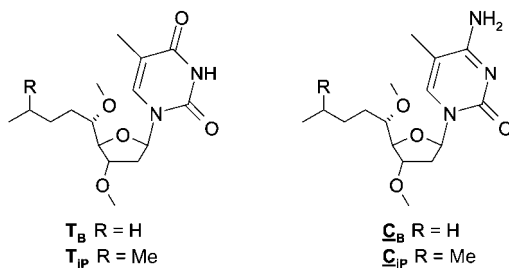


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Oligodeoxynucleotide Duplexes Containing (5'S)-5'-C-Alkyl-Modified 2'-Deoxynucleosides: Can an Alkyl Zipper across the DNA Minor-Groove Enhance Duplex Stability?

H. Trafelet, S. P. Parel, C. J. Leumann\*

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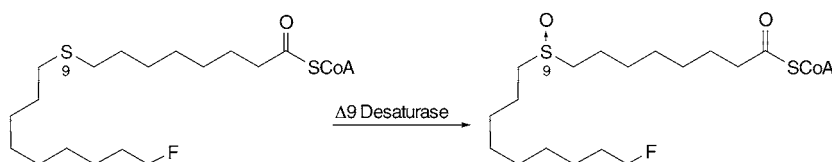


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$\omega$ -Fluoro Thiafatty Acids: New Mechanistic Probes of Desaturase-Mediated Reactions

D. J. Hodgson, K. Y. Y. Lao, B. Dawson, P. H. Buist\*

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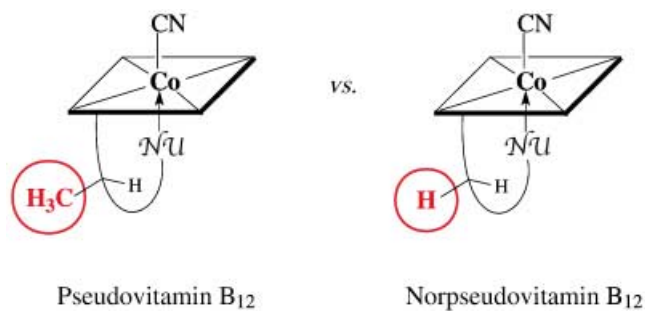


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The Cofactor of Tetrachloroethene Reductive Dehalogenase of *Dehalospirillum multivorans* Is Norpseudovitamin B<sub>12</sub>, a New Type of a Natural Corrinoid

B. Kräutler\*, W. Fieber, S. Ostermann, M. Fasching, K.-H. Ongania, K. Gruber, C. Kratky\*, C. Mikl, A. Siebert, G. Diekert\*

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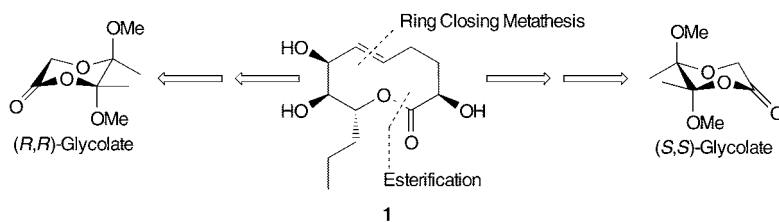


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The Use of Butane Diacetals of Glycolic Acid as Precursors for the Synthesis of the Phytotoxic Calmodulin Inhibitor Herbarumin II

*E. Díez, D. J. Dixon, S. V. Ley\*, A. Polara, F. Rodríguez*

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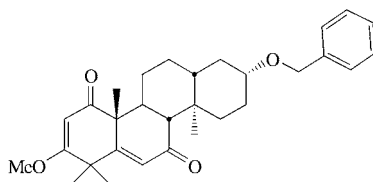


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Enantioselective Synthesis of a Polyfunctionalized Tetracycle Related to Pentacyclic Triterpenes by Using an Anionic Cycloaddition Reaction

*A. Rouillard, M.-A. Bonin, P. Deslongchamps\**

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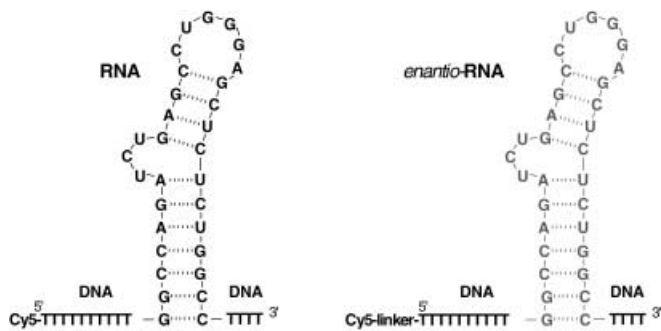


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On Facts and Artefacts: The Difficulty to Evaluate an Artificial Nuclease

*S. Pitsch, U. Scheffer, M. Hey, A. Strick, M. W. Göbel\**

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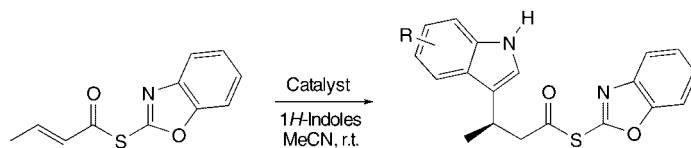


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Designing New  $\alpha,\beta$ -Unsaturated Thioesters for the Catalytic, Enantioselective Friedel–Crafts Alkylation of Indoles

M. Bandini\*, A. Melloni, S. Tommasi, A. Umani-Ronchi\*

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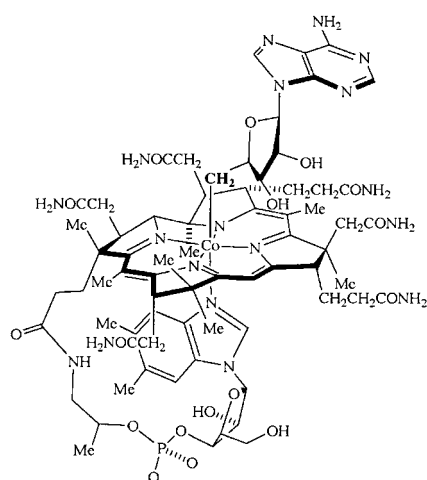


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Suicide Inactivation of Dioldehydrase by 2-Chloroacetaldehyde: Formation of the 'cis-Ethanesemidione' Radical, and the Role of a Monovalent Cation

P. Schwartz, R. LoBrutto, G. H. Reed, P. A. Frey\*

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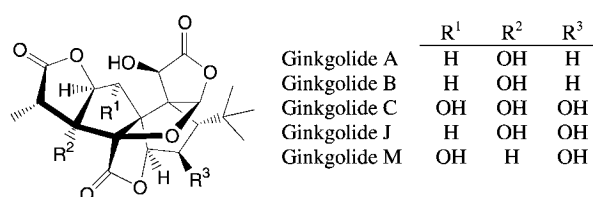


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Microphysiometric Measurement of PAF Receptor Responses to Ginkgolides

S. Krane, S. R. Kim, L. M. Abrell, K. Nakanishi\*

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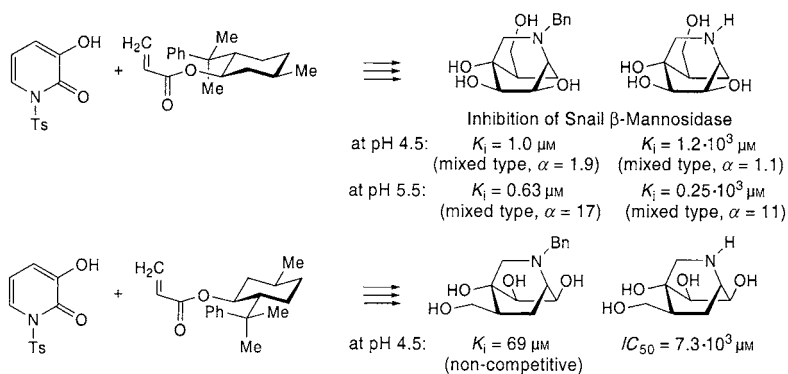




Synthesis and Evaluation as Glycosidase Inhibitors of Isoquinuclidines Mimicking a Distorted  $\beta$ -Mannopyranoside

M. Böhm, E. Lorthiois, M. Meyyappan, A. Vasella\*

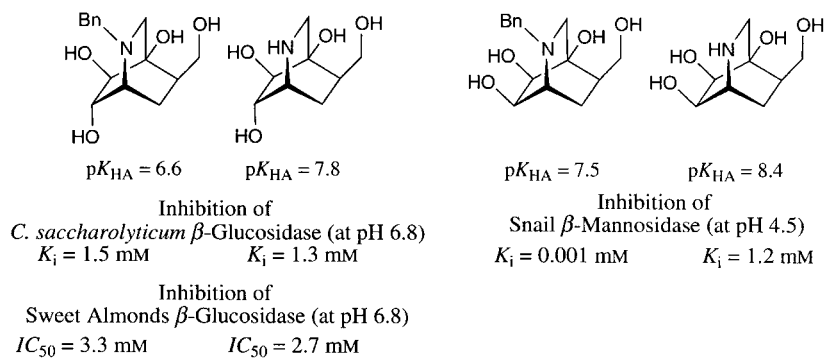
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Isoquinuclidine Mimics of  $\beta$ -D-Glucopyranosides: Differences and Similarities in the Mechanism of Action of some  $\beta$ -D-Glucosidases and a  $\beta$ -D-Mannosidase

M. Böhm, E. Lorthiois, M. Meyyappan, A. Vasella\*

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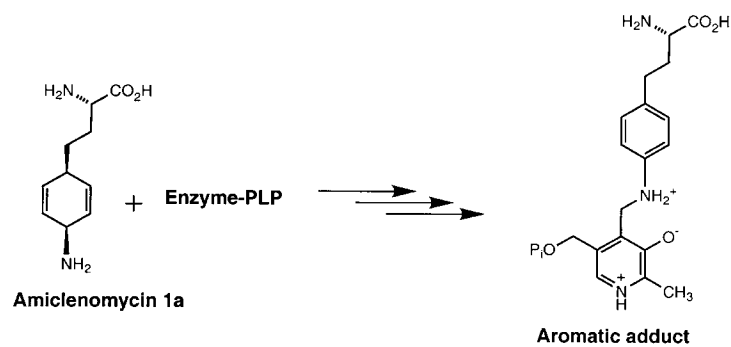


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Inhibition of Diamino Pelargonic Acid Aminotransferase, an Enzyme of the Biotin Biosynthetic Pathway, by Amiclenomycin: A Mechanistic Study

S. Mann, D. Florentin, D. Lesage, T. Drujon, O. Ploux, A. Marquet\*

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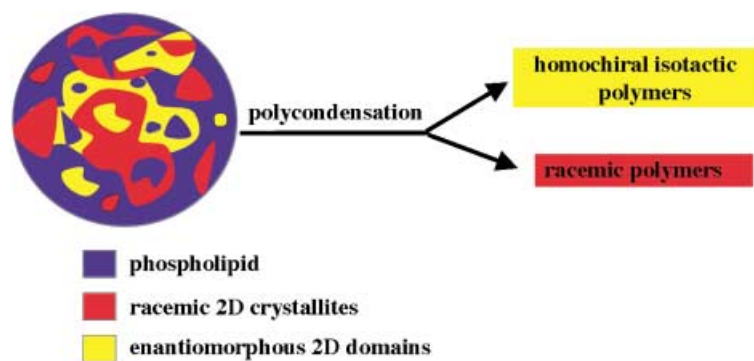


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Amphiphilic Homochiral Oligopeptides Generated *via* Phase Separation of Nonracemic  $\alpha$ -Amino Acid Derivatives and Lattice-Controlled Polycondensation in a Phospholipid Environment

I. Rubinstein, G. Bolbach, M. J. Weygand, K. Kjaer, I. Weissbuch\*, M. Lahav\*

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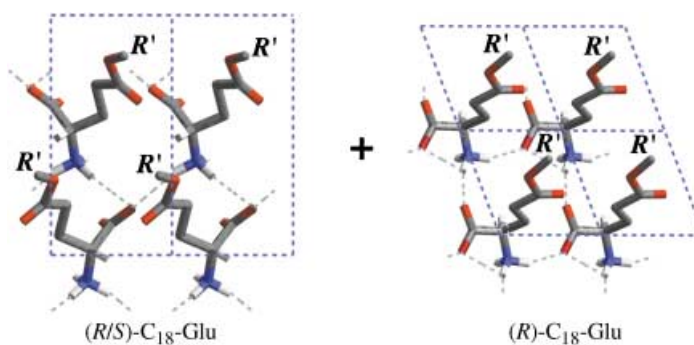


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Crystalline Phase Separation of Racemic and Nonracemic Zwitterionic  $\alpha$ -Amino Acid Amphiphiles in a Phospholipid Environment at the Air/Water Interface: A Grazing-Incidence X-Ray Diffraction Study

*I. Weissbuch\*, I. Rubinstein, M. J. Weygand, K. Kjaer, L. Leiserowitz, M. Lahav\**

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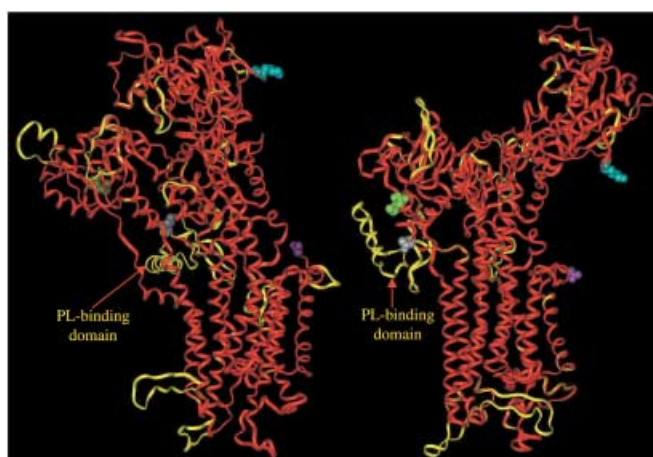
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REVIEW

The Regulation of the Calcium Signal by Membrane Pumps

*J. Krebs, V. Helms, C. Griesinger, E. Carafoli\**

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\* Author to whom correspondence should be addressed  
Korrespondenzautor