

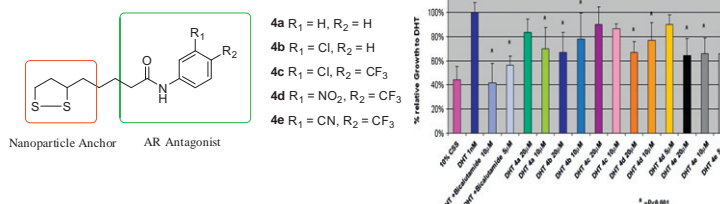
Abstracted/Indexed in SciVerse Scopus®. Full text available on SciVerse ScienceDirect®.

Preliminary Communications

A comparative assessment of α -lipoic acid *N*-phenylamides as non-steroidal androgen receptor antagonists both on and off gold nanoparticles

pp 1–5

Luke C. Henderson,* Jarrad M. Altimari, Gail Dyson, Linden Servinis, Birunthi Niranjan and Gail P. Risbridger

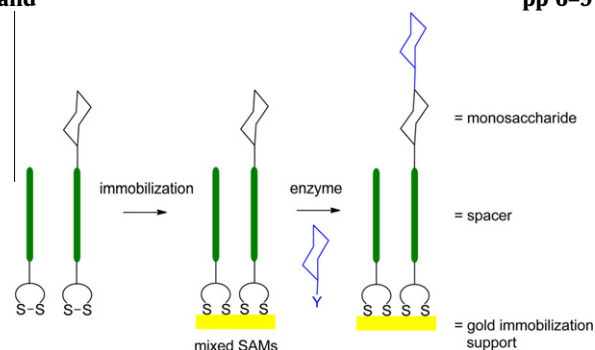


Mixed SAMs and MALDI-ToF MS: Preparation of *N*-glycosylamine derivative and thioctic acid methyl ester bearing 1,2-dithiolane groups and detection of enzymatic reaction on Au

pp 6–9

Hani Mutlak A. Hassan* and Beatrice A. Maltman

Herein, we report an enzymatic galactosylation reaction of β -glucopyranosylamide **4** and thioctic acid methyl ester **5** bearing 1,2-dithiolane groups to form a new system of mixed self-assembled monolayers (SAMs) on gold. Characterization of the enzymatic activity was conveniently achieved by mass spectrometry.

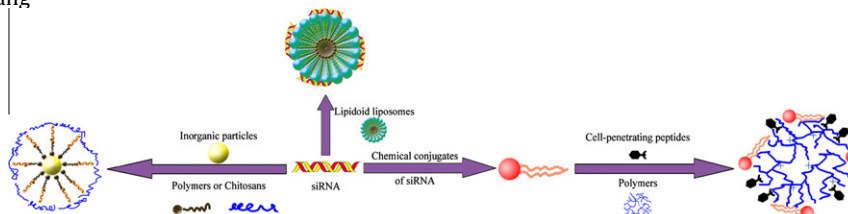


Review Paper

Non-viral vectors for the mediation of RNAi

pp 10–18

Shubiao Zhang,* Yanan Zhao, Defu Zhi and Shufen Zhang*

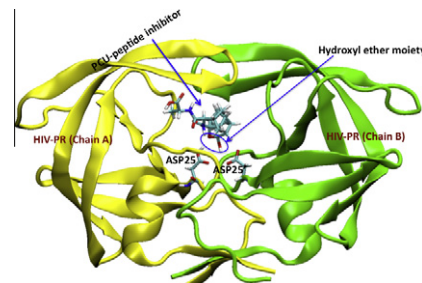


Regular Articles

Pentacycloundecane derived hydroxy acid peptides: A new class of irreversible non-scissile ether bridged type isoster as potential HIV-1 wild type C-SA protease inhibitors

pp 19–29

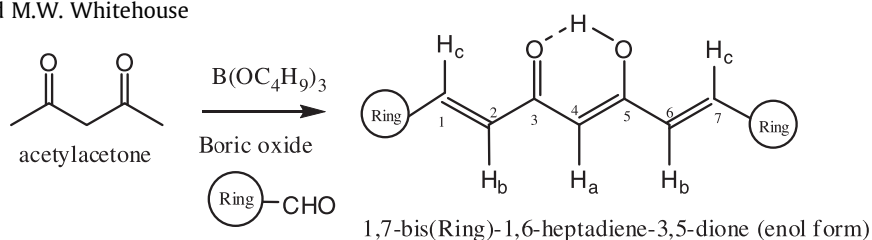
Rajsheshkar Karpoormath, Yasien Sayed, Patrick Govender, Thavendran Govender, Hendrik G. Kruger, Mahmoud E.S. Soliman* and Glenn E.M. Maguire*

**Synthesis and anti-inflammatory properties of some aromatic and heterocyclic aromatic curcuminoids**

pp 30–38

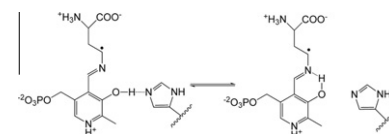
Riyad El-Khatib, M. Akram Khan,* K.D. Rainsford and M.W. Whitehouse

A variety of aromatic and heterocyclic aromatic curcuminoids were synthesised and characterised for their *in vivo* anti-inflammatory activities. Three curcuminoids were found to have quite potent anti-inflammatory activity compared with natural curcumin.

**Role of histidine 225 in adenosylcobalamin-dependent ornithine 4,5-aminomutase**

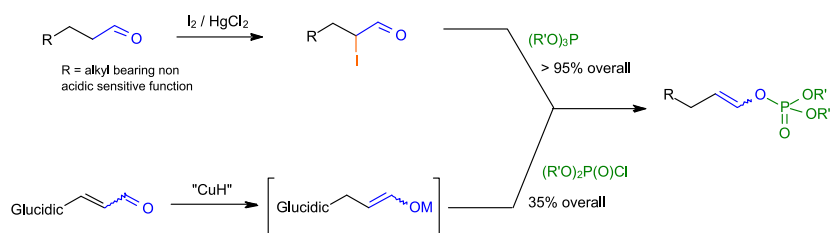
pp 39–47

Caitlyn Makins, François N. Miros, Nigel S. Scrutton and Kirsten R. Wolthers*

**First general methods toward aldehyde enolphosphates**

pp 48–56

Nicolas Barthes* and Claude Grison

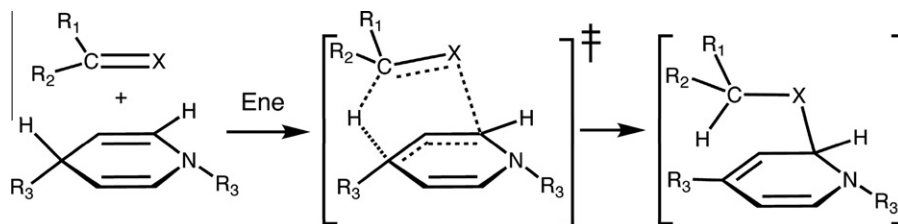


Characterization of covalent Ene adduct intermediates in “hydride equivalent” transfers in a dihydropyridine model for NADH reduction reactions

pp 57–66

R. Daniel Libby* and Ryan A. Mehl

Characterization of a covalent adduct in a dihydropyridine reduction reaction provides a flexible transition state model that could accommodate a range of mechanistic paths for NADH hydride equivalent transfers.

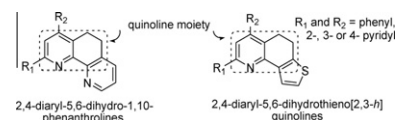


2,4-Diaryl-5,6-dihydro-1,10-phenanthroline and 2,4-diaryl-5,6-dihydrothieno[2,3-*h*] quinoline derivatives for topoisomerase I and II inhibitory activity, cytotoxicity, and structure–activity relationship study

pp 67–78

Pritam Thapa, Radha Karki, Han Young Yoo, Pil-Hoon Park, Eunyoung Lee, Kyung-Hwa Jeon, Younghwa Na, Won-Jea Cho, Youngjoo Kwon* and Eung-Seok Lee*

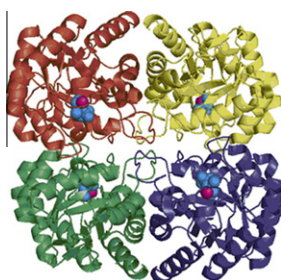
2,4-Diaryl-5,6-dihydro-1,10-phenanthroline and 2,4-diaryl-5,6-dihydrothieno[2,3-*h*] quinoline derivatives as rigid analogs of 2,4,6-trisubstituted pyridines were prepared, and evaluated for topoisomerase I and II inhibitory activities as well as cytotoxicities against several human cancer cell lines. Structure–activity relationship study showed that [2,2';6',2'']-terpyridine skeleton is important for the cytotoxicity against several human cancer cell lines.



Structure and characterization of the 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase from *Aeropyrum pernix*

pp 79–86

Lily Zhou, Jing Wu, Vijayalakshmi Janakiraman, Igor A. Shumilin, Ronald Bauerle, Robert H. Kretsinger and Ronald W. Woodard*

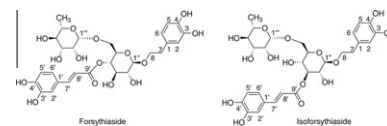


A. pernix DAH7PS
PEP: Cyan Spheres
Mn²⁺: Magenta Sphere

Isoforsythiaside, an antioxidant and antibacterial phenylethanoid glycoside isolated from *Forsythia suspensa*

pp 87–91

Huanhuan Qu, Yongmin Zhang, Xiaoyun Chai and Wenji Sun*

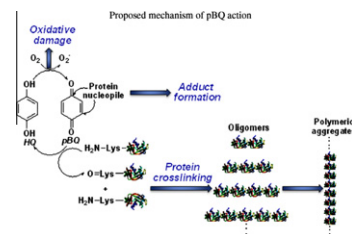


Modifications of ribonuclease A induced by *p*-benzoquinone

pp 92–98

Jisook Kim,* Albert R. Vaughn, Chris Cho, Titus V. Albu and Ethan A. Carver

Proposed mechanism of pBQ action.

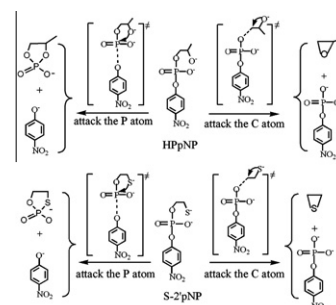


Density functional calculations on the effect of sulfur substitution for 2-hydroxypropyl-*p*-nitrophenyl phosphate: C–O vs. P–O bond cleavage

pp 99–107

Futing Xia and Hua Zhu*

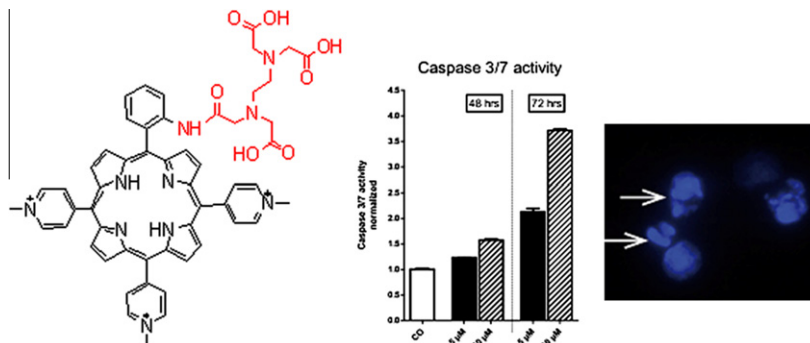
The intra-molecular attack at the phosphorus atom is more accessible for 2'-hydroxypropyl-*p*-nitrophenyl phosphate (HPpNP), while the intra-molecular attack at the beta carbon atom is more accessible for its analogous compound 2-thiouridyl-*p*-nitrophenyl phosphate (S-2'pNP).



A water soluble tri-cationic porphyrin–EDTA conjugate induces apoptosis in human neuroendocrine tumor cell lines

pp 108–113

Gert Schwach, Patchanita Thamyongkit, Lorenz Michael Reith, Bernhard Svejda, Günther Knör, Roswitha Pfragner* and Wolfgang Schoefberger*



Monoamine oxidase inhibition by C4-substituted phthalonitriles

pp 114–124

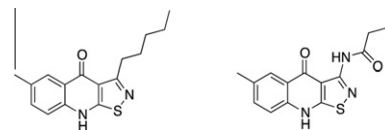
Clarina I. Manley-King, Jacobus J. Bergh and Jacobus P. Petzer*

R = C ₆ H ₅ CH ₂ O–				
IC ₅₀ (MAO-B) = 0.0079 μM	0.249 μM	0.785 μM	6.63 μM	
<div style="display: flex; justify-content: space-between; align-items: center;"> higher potency → lower potency </div>				

3-Alkyl- and 3-amido-isothiazoloquinolin-4-ones as ligands for the benzodiazepine site of GABA_A receptors

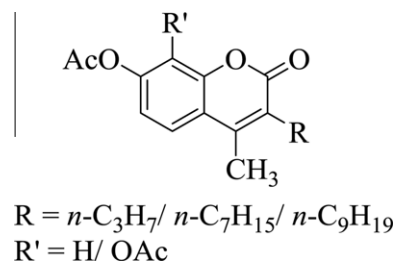
pp 125–130

Jakob Nilsson, Elsebet Østergaard Nielsen, Tommy Liljefors, Mogens Nielsen and Olov Sterner*

**Calreticulin transacetylase: A novel enzyme-mediated protein acetylation by acetoxy derivatives of 3-alkyl-4-methylcoumarins**

pp 131–136

Sarah Jalal, Karam Chand, Abha Kathuria, Prabhjot Singh, Nivedita Priya, Bhavna Gupta, Hanumantharao G. Raj and Sunil K. Sharma*

**Synthesis and evaluation of aryl boronic acids as fluorescent artificial receptors for biological carbohydrates**

pp 137–142

Sandra Craig

