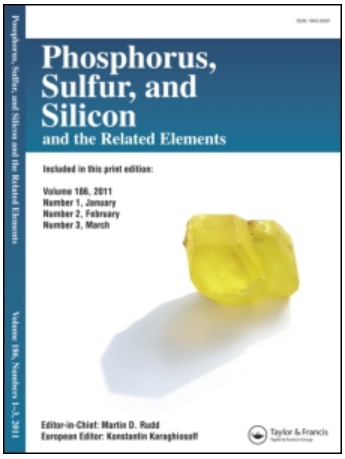


Phosphorus, Sulfur, and Silicon and the Related Elements
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713618290

Topologically Chiral Calix[4]arene Phosphorus Acids

M. A. Tairov[a]; O. I. Kalchenko[a]; V. V. Pirozhenko[a]; V. I. Kalchenko[a]
[a] National Academy of Sciences of Ukraine, Ukraine

Online publication date: 27 October 2010

To cite this Article Tairov, M. A. , Kalchenko, O. I. , Pirozhenko, V. V. and Kalchenko, V. I.(2002) 'Topologically Chiral Calix[4]arene Phosphorus Acids', Phosphorus, Sulfur, and Silicon and the Related Elements, 177: 8, 2061
To link to this Article: DOI: 10.1080/10426500213296
URL: http://dx.doi.org/10.1080/10426500213296

Phosphorus, Sulfur and Silicon, 2002, Vol. 177:2061

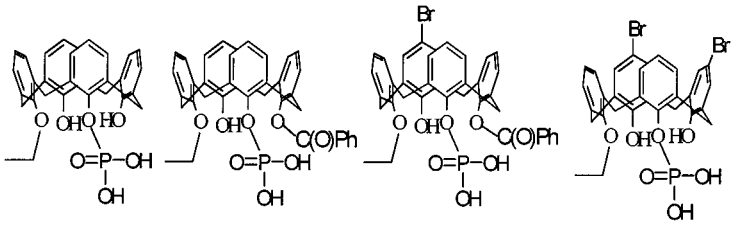
1042-6507/02 $12.00 + .00
DOI: 10.1080/10426500290094387

TOPOLOGICALLY CHIRAL CALIX[4]ARENE PHOSPHORUS ACIDS

M. A. Tairov, O. I. Kalchenko, V. V. Pirozhenko, and V. I. Kalchenko
National Academy of Sciences of Ukraine, Ukraine

(Received July 29, 2001; accepted December 25, 2001)

Topologically chiral calix[4]arenes possessing asymmetrical placement of achiral substituents at the macrocyclic lower rim or the upper rim due to their bowl-shaped architecture are considering as promising Hosts for enantiorecognition or separation of optically active molecules.[1] In this article we present synthesis, properties and RP HPLC enantioseparation[2] of the water-soluble topologically chiral calix[4]arene phosphorus acids, bearing proton-ionisable dihydroxyphosphoryl groups at the macrocyclic lower rim.



SCHEME 1

REFERENCES

[1] M. O. Vysotsky, M. O. Tairov, V. V. Pirozhenko, and V. I. Kalchenko, *Tetrahedron Lett.*, **39,** 6057 (1998).
[2] O. I. Kalchenko, M. O. Tairov, M. O. Vysotsky, J. Lipkowski, and V. I. Kalchenko, *Enantiomer*, **5,** 385 (2000).

Address correspondence to V. I. Kalchenko, Institute of Organic Chemistry, National Academy of Sciences of Ukraine, Murmanskaya, 5, 02094, Kiev-94, Ukraine. E-mail: vik@ukrpack.net