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Tetrahedron Letters

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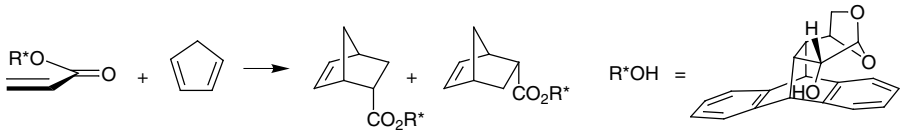
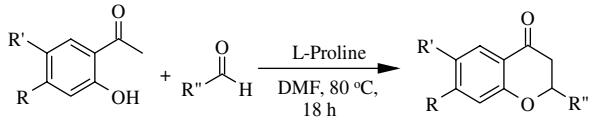
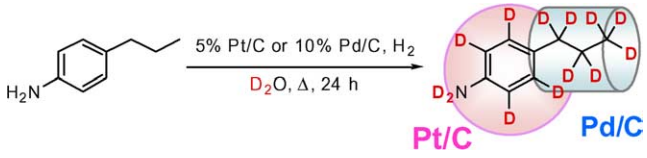
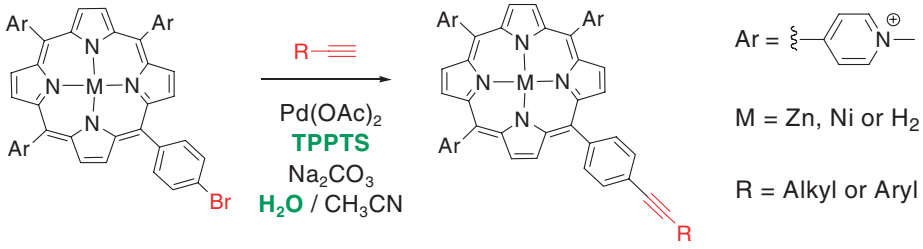
Contents

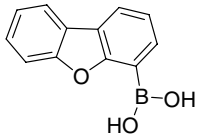
COMMUNICATIONS



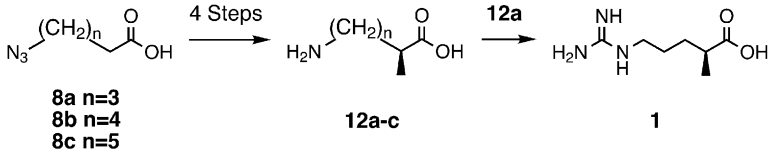


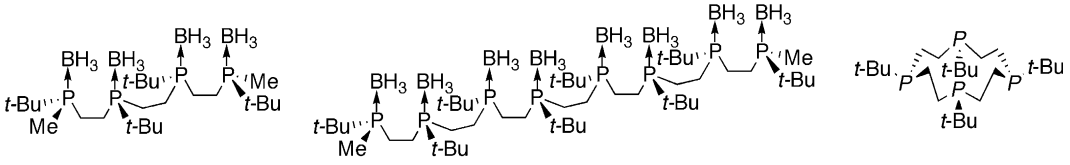




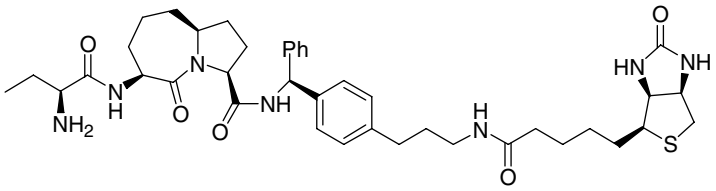


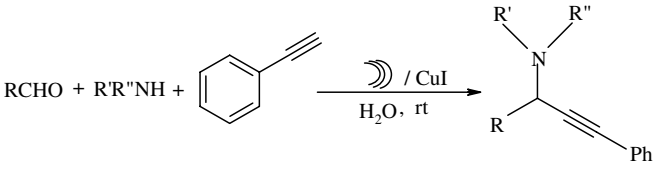
Herein, we report the discovery of a new water-soluble boronic acid (**1**, dibenzofuran-4-boronic acid) that exhibits unique fluorescence changes at three wavelengths upon binding with sugars under near physiological conditions.

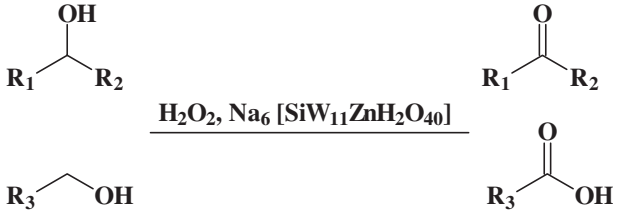




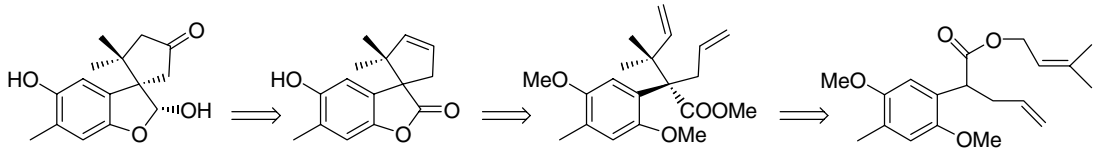
The optically active oligomers, (*S*,*R*,*R*,*S*)-**2**, (*S*,*R*,*S*,*R*,*R*,*S*,*R*,*S*)-**3**, and 12-phosphacrown tetraborane **4**, were synthesized by a stepwise oxidative coupling reaction. The behaviors of these optically active oligomers in the solid state and in solution were investigated in detail.

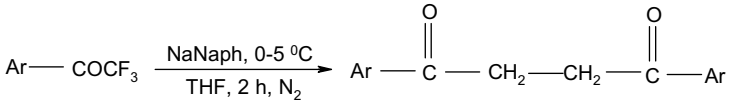


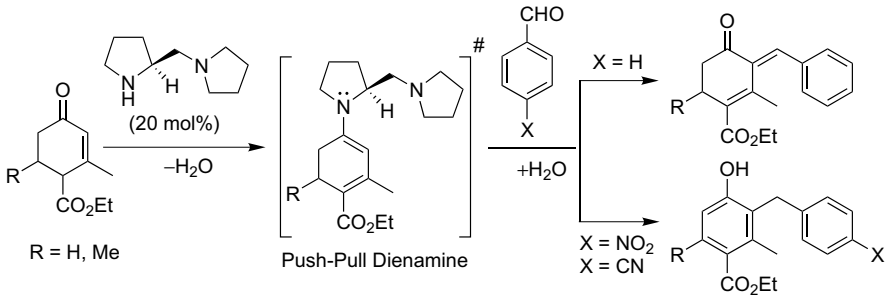


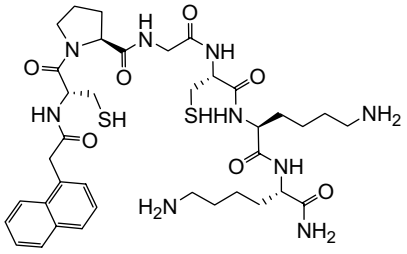


Mono-substituted Kiggen–polyoxymetalate complex $Na_6[SiW_{11}ZnH_2O_{40}]\cdot 12H_2O$ was demonstrated to be an effective water-soluble catalyst for the selective oxidation of alcohols in the presence of hydrogen peroxide as oxidant.

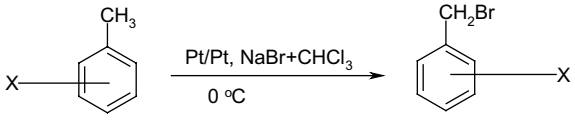


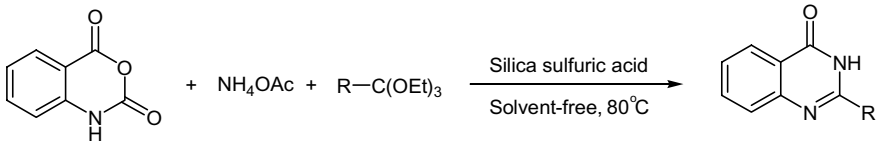


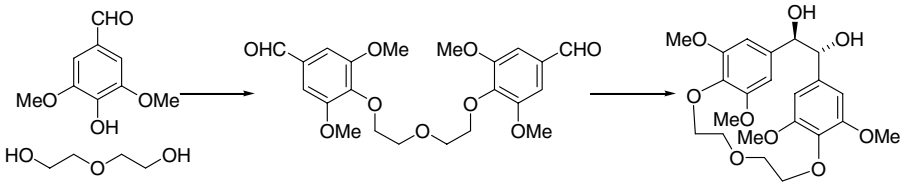


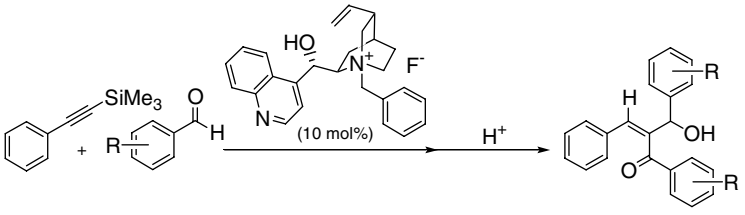


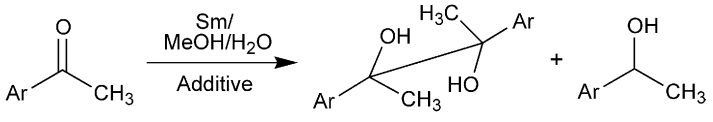
A peptidic motif for the selective recognition and detection of arsenite (As^{III}) has been developed.

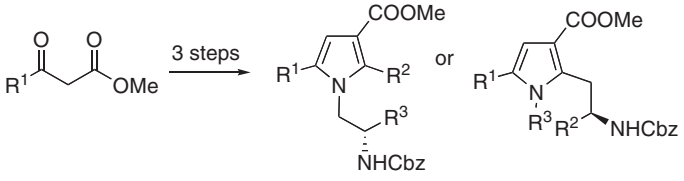


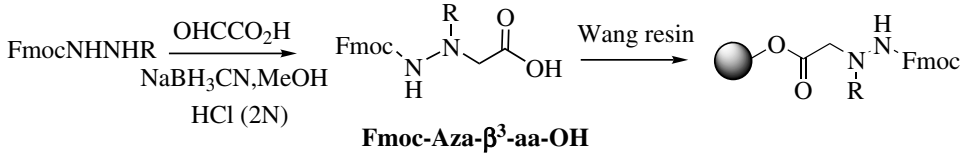




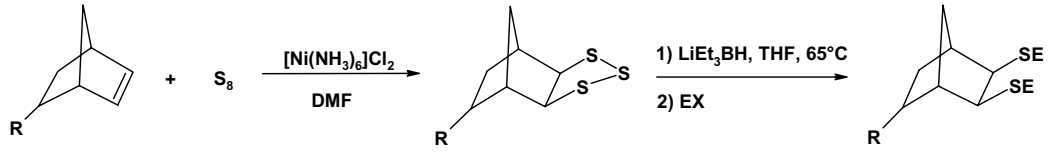






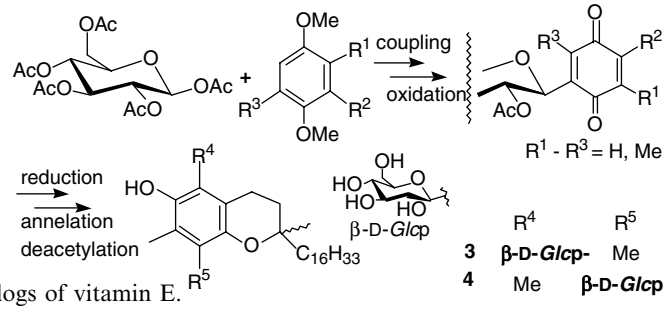


Fmoc-Aza-β³-aa-OH



R = -H, -CH=CH$_2$, -COCH$_3$
E = -H, -Me, -CH$_2$Ph

The nickel-catalysed sulfurisation of norbornene derivatives with elemental sulfur is a chemoselective and stereospecific reaction. The corresponding *exo*-trithiolanes can be reduced, leading to the corresponding vicinal-dithioethers.



Synthesis of *C*-glycosylated analogs of vitamin E.

OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

Optically active oligophosphines (*S*,*R*,*R*,*S*)-**2** and (*S*,*R*,*S*,*R*,*R*,*S*,*R*,*S*)-**3**, possessing four and eight chiral phosphorus atoms, were synthesized from chiral bidentate phosphine (*S*,*S*)-**1**. Octaphosphine (*S*,*R*,*S*,*R*,*R*,*S*,*R*,*S*)-**3** acquired the features of a polymer in contrast to (*S*,*S*)-**1** and (*S*,*R*,*R*,*S*)-**2**. The first access to the construction of the 12-phosphacrown-4 skeleton was also achieved. *Tetrahedron Letters* **2005**, *46*, 7011–7014.

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