

# Synthesis and anion recognitions of 1,3-alternate-tetrathiacalix[4]arene derivatives having urea moieties

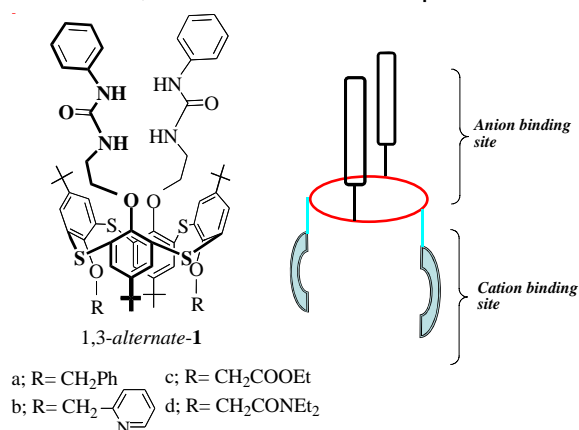
ウレア部位を持つ 1,3-alternate-テトラチアカリックス[4]アレーン  
誘導体の合成とアニオン認識

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A large variety of host-guest systems have been designed as selective cation, anion or neutral molecule receptors and carriers using three-dimensional calix[n]arenes as building blocks. More recently, thiacalix[4]arenes,<sup>1-3</sup> due to their novel features, have been used as potential platforms. It is well known that these kinds of systems are suitable candidates for the allosteric regulation of host-guest interactions with metal cations that play a major role in biological systems.<sup>4</sup>

In this presentation, we report the synthesis and binding studies of novel receptors possessing two complexation sites at the distal positions for the 1,3-alternate-tetrathiacalix[4]arene derivatives bearing 2-pyridyl and urea groups.

The present host molecules serve as heteroditopic receptors which can complex simultaneously with halides (F<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, I<sup>-</sup>) and metal cations (Na<sup>+</sup>, K<sup>+</sup>, Ag<sup>+</sup>). In this presentation we will also discuss allosteric effect arising from the cation binding moieties during the formation of the heterogeneous dinuclear complexes with anions and metal cations.



## <参考文献>

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