

## Versatile Receptor Moieties for Anion Recognition and Structural Features Thereof.

Cuřínová, Petra 2019

Dostupný z http://www.nusl.cz/ntk/nusl-394154

Dílo je chráněno podle autorského zákona č. 121/2000 Sb.

Tento dokument byl stažen z Národního úložiště šedé literatury (NUŠL).

Datum stažení: 11.04.2024

Další dokumenty můžete najít prostřednictvím vyhledávacího rozhraní nusl.cz .

## VERSATILE RECEPTOR MOIETIES FOR ANION RECOGNITION AND STRUCTURAL FEATURES THEREOF

## Petra Cuřínová, Karolína Salvadori

Institute of Chemical Process Fundamentals of the CAS, v. v. i., Rozvojová 135/1, 165 02 Prague 6, Czech Republic

The capability of aromatic-substituted ureas to bind anions or neutral electron rich compounds is generally known [1]. This work is directed towards obtaining of receptor moieties containing a complexation site based on urea moiety, derivatized by sulphonamidic aromatics, which can be attached to a carrier. The derivatization with sulphonamidophenyl group leads to enhanced affinity of given receptor to anions. However, the acidity of sulphonamidic NH proton plays unexpectedly crucial role in the complexation process, as well as in the reactivity and other properties of given compounds. Substituent dependent complexation properties of prepared compounds are discussed and correlated with the length of NH bond in the sulphonamidic group.

Moreover, these compounds offer a possibility of alkylation at the sulphonamidic NH group, useful either for blocking of the acidic proton or to anchoring of the receptor moiety to a carrier of choice. The advantages of thus obtained compounds in connection with complexation properties are also studied.

## References

[1] A. F. Li, J. H. Wang, F. Wang, Y.B. Jiang, Chem. Soc. Rev., 2010, 39, 3729-3745.