

## Molecular receptors and electrochemical sensors based on functionalized calixarenes

Evtugyn G., Stoikova E., Shamagsumova R.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### Abstract

The approaches to the design of molecular receptors based on functionalized calixarenes aimed at recognition of ions and neutral organic compounds are considered; such receptors can serve as the basis for potentiometric and amperometric sensors. The application of the receptors is exemplified and analytical characteristics of the sensors are discussed. Particular attention is paid to the factors affecting the efficiency of recognition and selectivity and sensitivity of the developed sensors. The bibliography includes 173 references. © 2010 Russian Academy of Sciences and Turpion Ltd.

<http://dx.doi.org/10.1070/RC2010v079n12ABEH004107>

---