5th International Conference on

Advances in Chemical Engineering & Technology

October 04-05, 2018 | London, UK

The Realization of Electrochimically Commandable Systems

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Several studies were carried out to develop molecular systems electrochemically controllable capable of modulating the complexation of some metal cations Our work was directed to the synthesis of new organic materials using the tetrathiafulvalene (TTF) as redox unit and propertied of polynitrogen spacer arms (podants) as an acceptor of the cationic species. Podants are acyclic agents with a pseudocavity constituted by complexing arms of various lengths having a high conformational flexibility. Our synthesized podants are nitrogenous derivatives containing a redox unit and tend to coordinner transition metal ions. In order to study for the complexasion transition elements (Ni 2+, Cd2+, Co2+ Cr 2+), we chose the cyclic voltammetry. One of our compounds had a suitable structure and gave better recognition.

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