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## Synthesis and Selective Extractant Properties of a Calixarene Thioether Derivative and its Oligomeric Analogue

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**Abstract:** Herein we report the synthesis of a novel calix[4]arene thioether derivative (4) and its oligomeric analogue (5). The liquid-liquid extraction properties of these compounds towards the selected metal cations were evaluated, and it was concluded, based on our observations, that these compounds demonstrated remarkable affinity towards the selected metal cations. Nevertheless, is a good extractant and very selective for Hg<sup>2+</sup> ions, whereas, in the case of its oligomeric analogue 5, the situation is quiet different. It was observed that 5 could not efficiently retain the parent selective behavior by extracting all of the selected metal ions from the aqueous to the organic phase.

**Key Words:** Calix, calixarene, oligomeric calixarene, liquid-liquid extraction, metal cation.

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