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$[(bmpyr)_2{Zn(OC_6H_3(NO_2)_2)_4}]$: Influence of an Ionic Liquid on Liquid/Liquid Extraction of Metal Ions in a Biphasic System

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Abstract. The compound $[(bmpyr)_2\{Zn(OR)_4\}]$ (OR = 2,4-dinitriphenolate) has been prepared from $Zn(NO_3)_2$ ·6H₂O and sodium 2,4-dinitrophenolate in a biphasic aqueous ionic liquid (Butyl-methyl-pyrrolidinium trifluoromethylsulfonate [bmpyr][OTf]) system. The presence of the anionic zinc complex in [bmpyr][OTf] is made possible by the exchange of the ionic liquid anions into the aqueous phase for the zinc complex. [(bmpyr)₂{Zn(OR)₄}] was characteri-

zed in solution by ¹³C- and ¹H-NMR spectroscopy and in the solid state by crystal structure determination. The zinc complex represents the first type of a zinc complex with more than two phenolate ligands.

Keywords: Ionic liquid; Biphasic system; 2,4-Dinitrophenolate; Zinc; Crystal structures