



Structure and Coordination Behaviour of 1H-1,2,3-Triazole Ligands with a Dithiolene Backbone

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Introduction

Dithiolene complexes are well-known for delocalized electronic states, which involve both metal centres and ligands. In conjunction with a multistep redox variability dithiolene complexes represent versatile building blocks for materials with interesting electronic properties.

However, the most interacting prototype system with NHtriazole is still missing. The latter would allow the formation of neutral coordination polymers by N-deprotonation and subsequent coordination.





Fig. 1: UV/Vis spectroscopy of **9** in dcm at 0 °C, 10 °C and 40 °C.

	S1-M1 [Å]	SCCS [°]	N1-Fe [Å]
5	2.3424(6)	-2.7(3)	-
6-H	2.1897(4)	0.00(17)	-
7	2.2005(11)	-6.8(5)	1.956(3)

protected triazole. [1]

potential vs. Fc/Fc⁺ [V] Fig. 2: Cyclic voltammetry of 5 and 6-H in 0.1 M TBA[PF₆]-dmf-solution.

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