

POLYNUCLEAR Cu(II) COMPLEXES OF 1,4-SUBSTITUTED-1,2,3-TRIAZOLE LIGANDS Pampa Guha and Lei Zhu*, Department of Chemistry and Biochemistry, Florida State University, Tallahassee, FL-32306-4390

Rapid coupling reactions between 2,6-bis(azidomethyl)pyridine or picolyl azide and terminal alkynes in the presence of 5 mol% Cu(OAc)₂·H₂O in the absence of an explicitly added reducing agent afford 1,4-substituted-1,2,3-triazole ligands in excellent yields. We anticipated that substitution at the 1- and 4- positions is likely to influence their steric and electronic characteristics, factors that are of vital importance for their coordination behavior towards transition metals. Hence numerous substituents have been introduced to tune the coordination behavior of these ligands resulting a versatile series of polynuclear Cu(II) complexes. This presentation will describe the synthesis and structural elucidation of the Cu(II) complexes which may have interesting magnetic, spectroscopic and redox properties.