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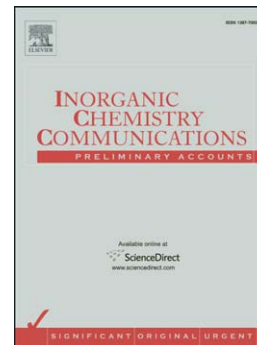
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Crystal structures and biological activities of a symmetrical quinoline thioether ligand and its transition metal complexes

Xun-Zhong Zou ^{a, §}, Jing-An Zhang ^{a, †, *}, Li-Jie Zhang ^{a, §}, Ya-Jie Liu ^{a, §}, Ning Li ^{a, ‡}, Yu Li ^{a, b, *}, Shi-Chao Wei ^c, Mei Pan ^{c, *}

^a School of Pharmacy / College of Traditional Chinese Medicine, Guangdong Pharmaceutical University, Guangzhou 510006, P. R. China, zhangja@126.com

^b Department of Environmental Engineering, Guangdong Industry Technical College, Guangzhou 510300, P. R. China, liyuletter@163.com

^c MOE Laboratory of Bioinorganic and Synthetic Chemistry, State Key Laboratory of Optoelectronic Materials and Technologies, Chemistry and Chemical Engineering College, Sun Yat-Sen University, Guangzhou 510275, P. R. China, panm@mail.sysu.edu.cn

† Author information. These authors equally contributed to this work. Xun-Zhong Zou and Jing-An Zhang.

§ Current Master in Traditional Chinese Medicine of 2013 grade.

‡ The class of 2011 pharmaceutical professional student.

* Corresponding author. Tel: +86 20 84115178. E-mail: zhangja@126.com(J.-A. Zhang); liyuletter@163.com (Y. Li); panm@mail.sysu.edu.cn (M. Pan)

Abstract: The ligand 2, 6-bis (8-quinolinylthiomethyl) pyridine and its four transition metal complexes have been synthesized and characterized by elemental analysis (EA), infrared spectra (IR) and single-crystal diffraction. It was revealed that compounds **1-3** were comprised of discrete mononuclear units and double nuclear structure in compound **4**. The antibacterial activities and pesticide activities of the ligand and the complexes **1-4** were tested. The results showed some compounds had absolute specificity for certain bacteria, and could have good application prospect in pharmaceutical and agricultural use.

Keywords: 2, 6-bis (8-quinolinylthiomethyl) pyridine; transition metal complexes; antibacterial activities; pesticide activities

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