

Copper and Palladium Catalyzed Cross-Coupling Reactions for the Synthesis of *N*-Fused Benzo[4,5]imidazo[2,1-*b*]thiazole Derivatives *via* Substituted *trans*-1,2-Diiodoalkenes, 1*H*-Benzo[*d*]imidazole-2-thiols and Halobenzenes

Guodong Shen,* Bingchuan Yang, Xianqiang Huang, Yaxin Hou, Huan Gao, Jichun Cui, Chuansheng Cui and Tongxin Zhang*

School of Chemistry and Chemical Engineering, School of Pharmacy, Liaocheng University, Liaocheng 252000, Shandong, PR China

Tel & Fax: (+)86-635-8239680; e-mail: shenguodong33@163.com, xintongzhang123@163.com.

Contents

1. X-ray crystallographic structure of 1d	S2
2. Copies of NMR spectra.....	S3

1. X-ray crystallographic structure of **1d**

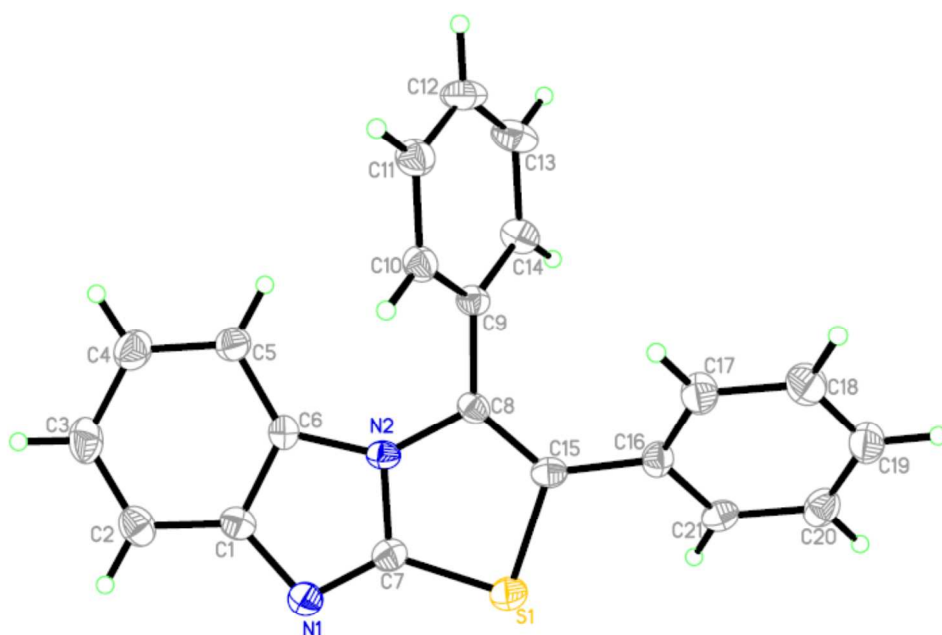


Figure S1 The crystal structure of **1d** with thermal ellipsoid contour at 30% probability level

2. Copies of NMR spectra

