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A copper (II)-thioamide combination as a robust heterogeneous catalytic system for green synthesis of 1,4-disubstituted [1,2,3]-triazoles under click conditions

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Fig. 1S. FT-IR of *N*-phenylbenzothioamide.



Fig. 2S. FT-IR of copper (I)-thioamide catalyst.



Fig. 3S. UV-Visible spectrum of *N*-phenylbenzothioamide and copper (I)-thioamide catalyst.



No.	Pos. [*2Th.]	Height [cts]	FWHM [*2Th.]	d-spacing [?]
	12.0929	4457.72	0.2480	7.31891
3	15.0022	3140.42	0.2834	5.9055
	15.9770	14747.37	0.2834	5.5473
	18.5460	26238.79	0.3188	4.7843
	19.1460	6005.19	0.2125	4.6357
	20.7848	522.48	0.3542	4.2737
	22.0104	4539.75	0.2125	4.0384
	23.4383	9368.22	0.2125	3.7955
	24.5127	12837.50	0.4251	3.6315
1	28.5124	7632.85	0.2834	3.1306
Ť	29.0594	7409.23	0.4251	3.0729
1	32.3362	2286.35	0.4251	2.7686
1	33.7964	1722.05	0.4251	2.6522
1.	37.6957	1265.26	0.3542	2.3863
1	38.8201	1589.91	0.3542	2.3198
1	41.1378	2085.57	0.4251	2.1943
1	42.3974	740.72	0.2834	2.1320
Į.	43.3694	737.72	0.4251	2.0864
1	45.2737	2102.44	0.4251	2.0030
2	46.8087	1226.57	0.4251	1.9408
2	49.8372	1273.08	0.2125	1.8297
2	53.1102	1483.26	0.3542	1.7244

Fig. 4S. XRD of of copper (I)-thioamide catalyst.





Fig. 5S. Representative EI-MS spectra of 1,4-disubstituted [1,2,3]-triazoles.





Fig.6S. Representative ¹H and ¹³CNMR spectra of 1,4-disubstituted [1,2,3]-triazoles.