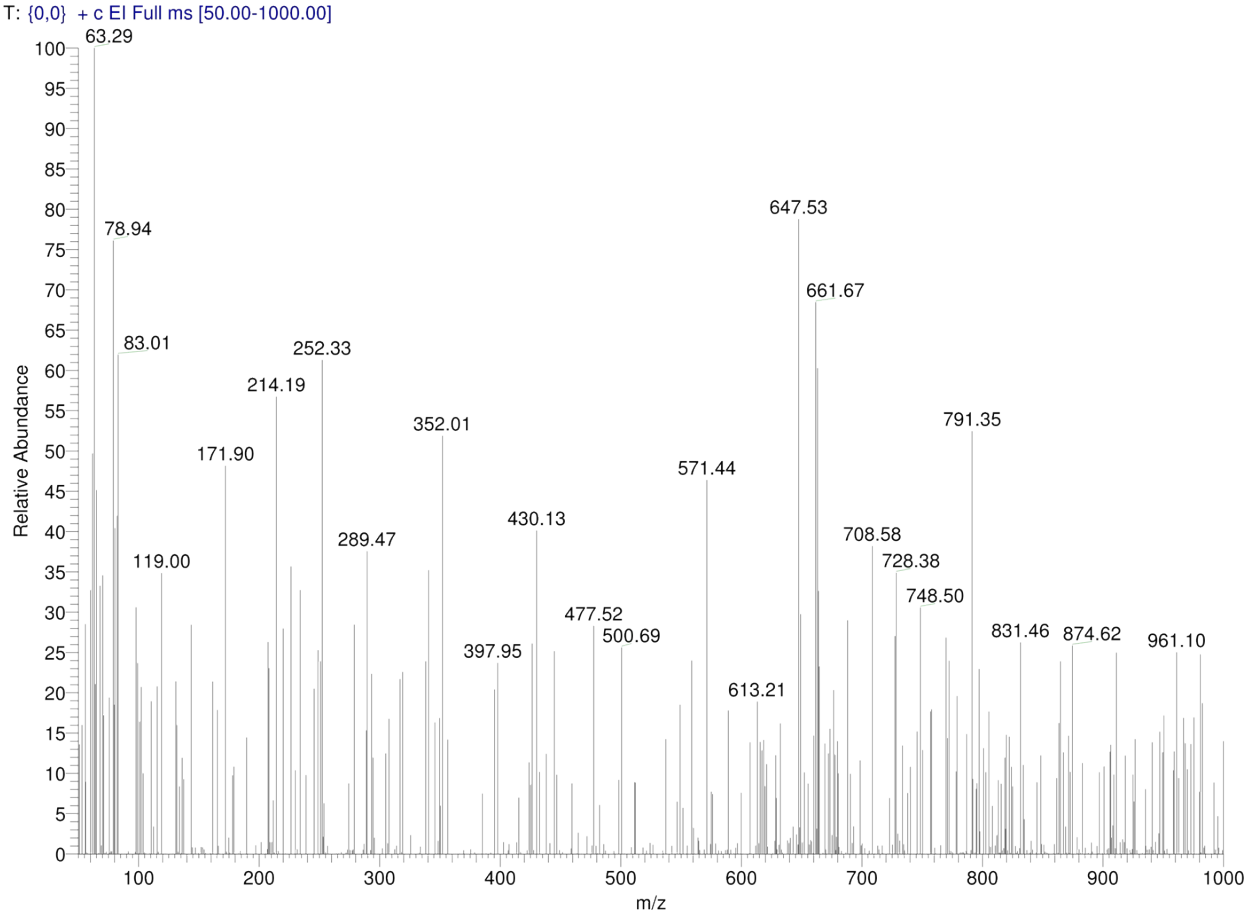
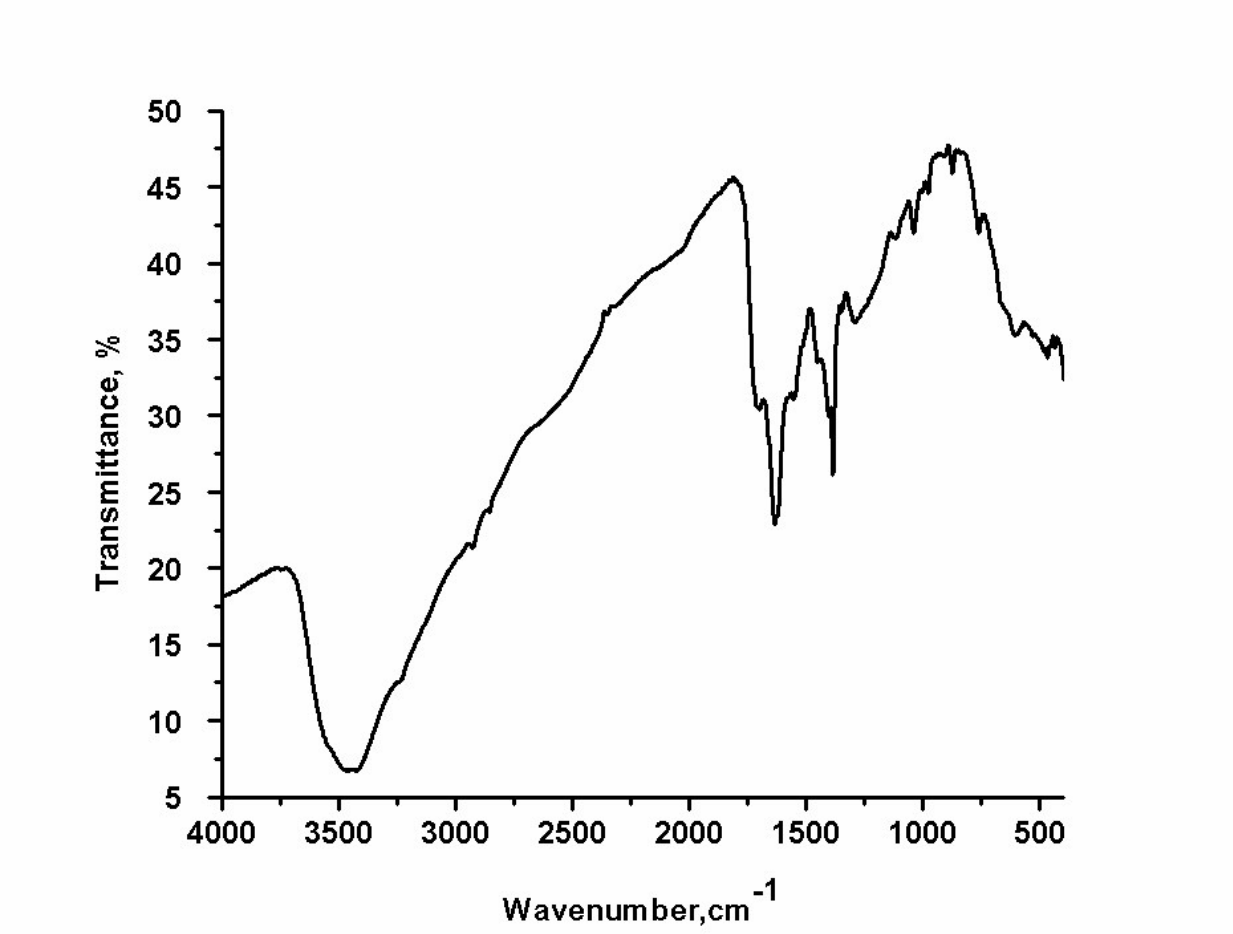
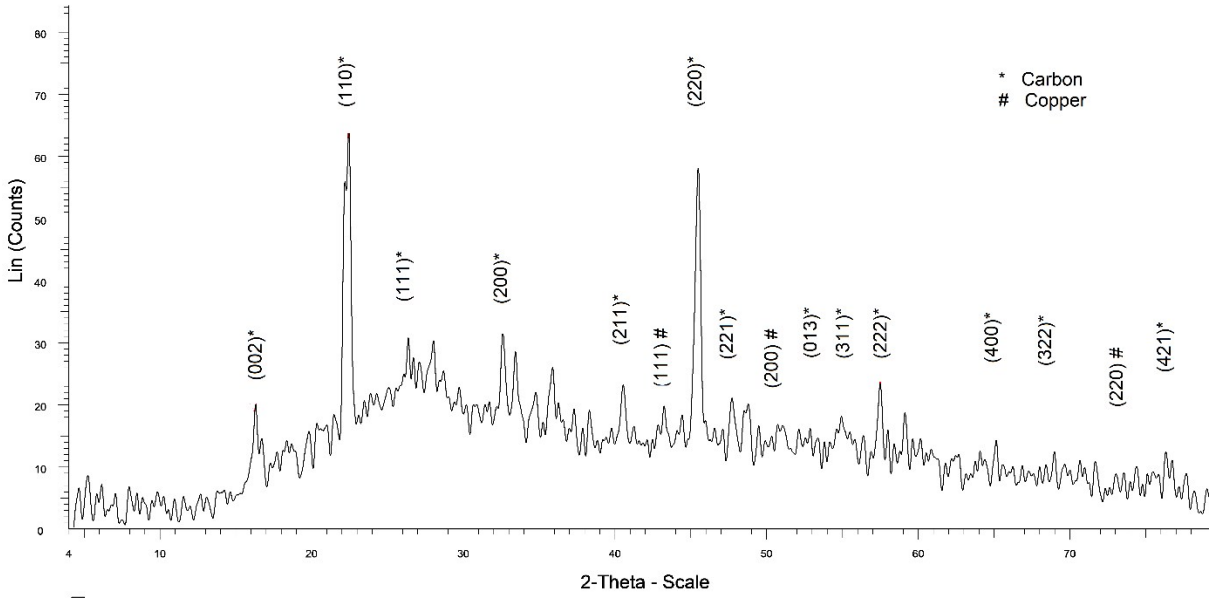
Electronic Supplementary Material (ESI) for Dalton Transactions.



(S1): The mass spectrum of **C1**



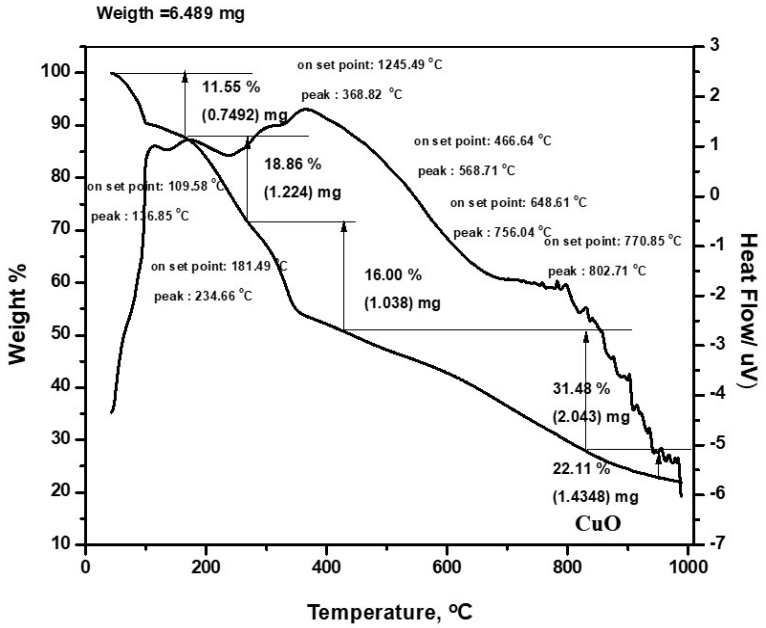
(S2): The IR spectrum of **C1**



(S3): The X-ray diffraction of **C1**

(S4): Table I. Summary of XRD data, Millar indices and interplanar distances of **C1**

Peak No.	2θ	Intensity	Intensity	d value	Θ Radians	Sin θ	Sin 2θ	Ratio 1	Ratio 2	(hkl)
	Å	count	%	Å	Å	Å	Å			
1	16.117	18.9	30.0	5.49492	0.14065	0.14018	0.0197	1	2	002
2	22.329	62.9	100	3.97828	0.19486	0.19363	0.0375	1.9078	3.8156	110
3	26.998	31.2	49.6	3.29994	0.23560	0.23343	0.0545	1.4534	2.9067	111
4	28.108	30.4	48.3	3.17210	0.24529	0.24284	0.0590	1.0822	2.1645	
5	31.759	22.9	36.4	2.81527	0.27715	0.27362	0.0749	1.2696	2.5391	200
6	32.565	31.5	50.0	2.74741	0.28418	0.28037	0.0786	1.0500	2.1000	
7	33.528	28.8	45.8	2.67066	0.29259	0.28843	0.0832	1.0583	2.1166	
8	35.841	26.1	41.5	2.50344	0.31277	0.30770	0.0947	1.1381	2.2761	
9	40.198	23.2	36.9	2.24157	0.350794	0.34364	0.1181	1.2473	2.4946	211
10	43.915	19.8	31.5	2.06007	0.38323	0.37392	0.1398	1.1840	2.3679	111
11	45.499	58.3	92.7	1.99197	0.39705	0.38670	0.1495	1.0695	2.1391	220
12	47.998	21.1	33.6	1.89393	0.41886	0.40672	0.1654	1.1062	2.2124	221
13	50.289	16.5	26.2	1.81289	0.43885	0.42490	0.1805	1.0914	2.1828	200
14	50.999	16.5	26.2	1.78930	0.44505	0.43050	0.1853	1.1204	2.2407	013
15	54.101	18.1	28.8	1.69380	0.47212	0.45478	0.2068	1.1159	2.2319	311
16	57.012	23.3	37.0	1.61404	0.49752	0.47725	0.2278	1.1013	2.2026	222
17	65.978	14.1	22.4	1.41475	0.57577	0.54448	0.2965	1.3016	2.6031	400
18	68.728	12.4	19.7	1.36470	0.59976	0.56445	0.3186	1.0747	2.1494	322
19	74.359	9.9	15.7	1.27467	0.64890	0.60431	0.3652	1.1462	2.2925	220
20	77.587	12.3	19.6	1.22949	0.67707	0.62652	0.3925	1.0748	2.1497	421

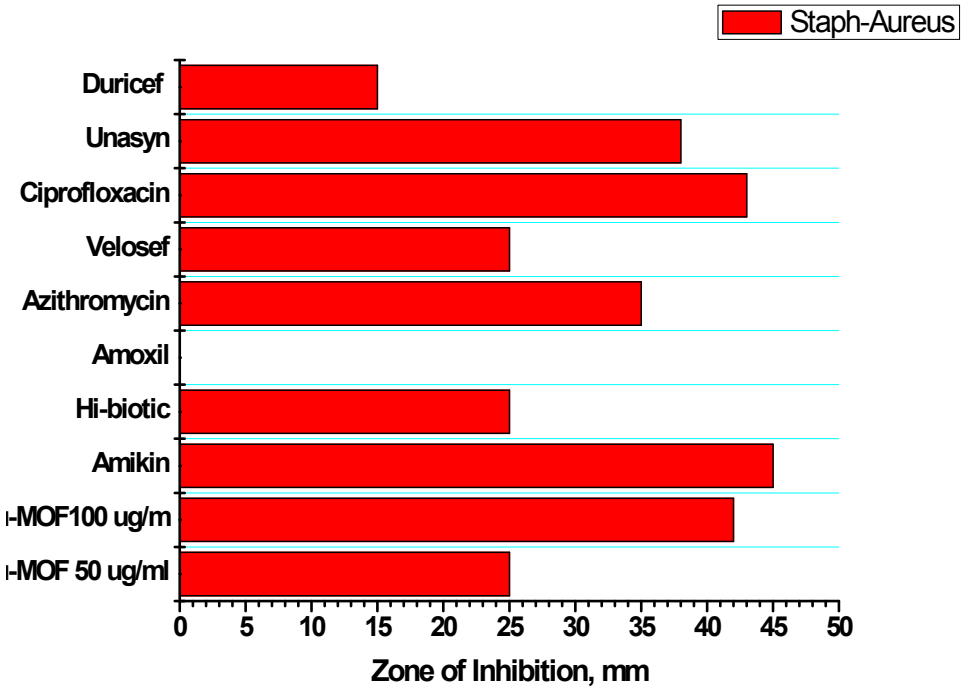


(S5): The Thermogravimetric analysis (TGA) and Differential scanning calorimetry (DSC) for **C1**

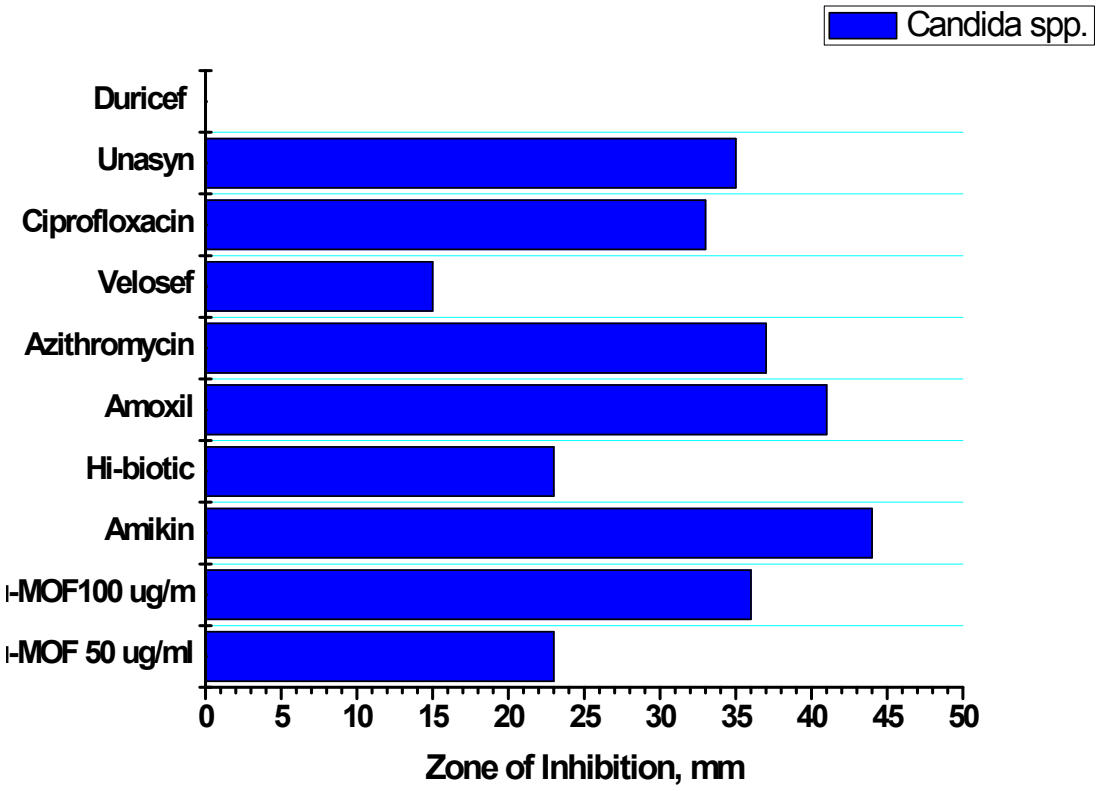
(S6): Table II. Absorption maxima of **C1** in pure solvents and relevant solvent parameters.

Solvents	α	β	π*	$E_T(30)$	DN	AN	Acity	Basity	**C1** bands λ_{nm}		
									I	II	III
Water	1 17	47	1 09	63 1	18 0	54 8	1 00	1 00	316	363	468
Dimethylsulfoxide	00	76	1 00	45 1	29 8	19 3	34	1 08	306	358	459
Dimethylformamide	00	69	88	43 8	26 6	16 0	30	93	304	354	444
Acetonitrile	19	40	75	45 6	14 1	18 9	37	86	302	348	442
Methanol	98	66	60	55 4	30 0	41 3	75	50	312	386	463
Ethanol	86	75	54	51 9	32 0	37 1	66	45	310	384	462

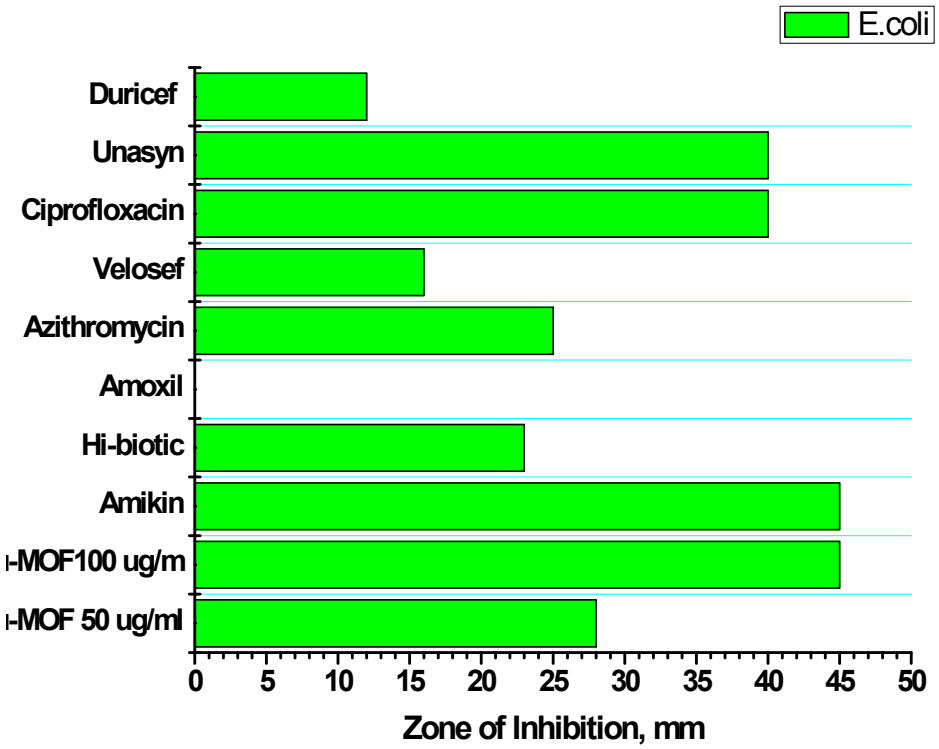
The property parameters of organic solvents; α is HBD ability, β is HBA ability, π* is polarity/polarizability, ET(30) is polarity, DN is donor number, AN is acceptor number, Acity, Basity.



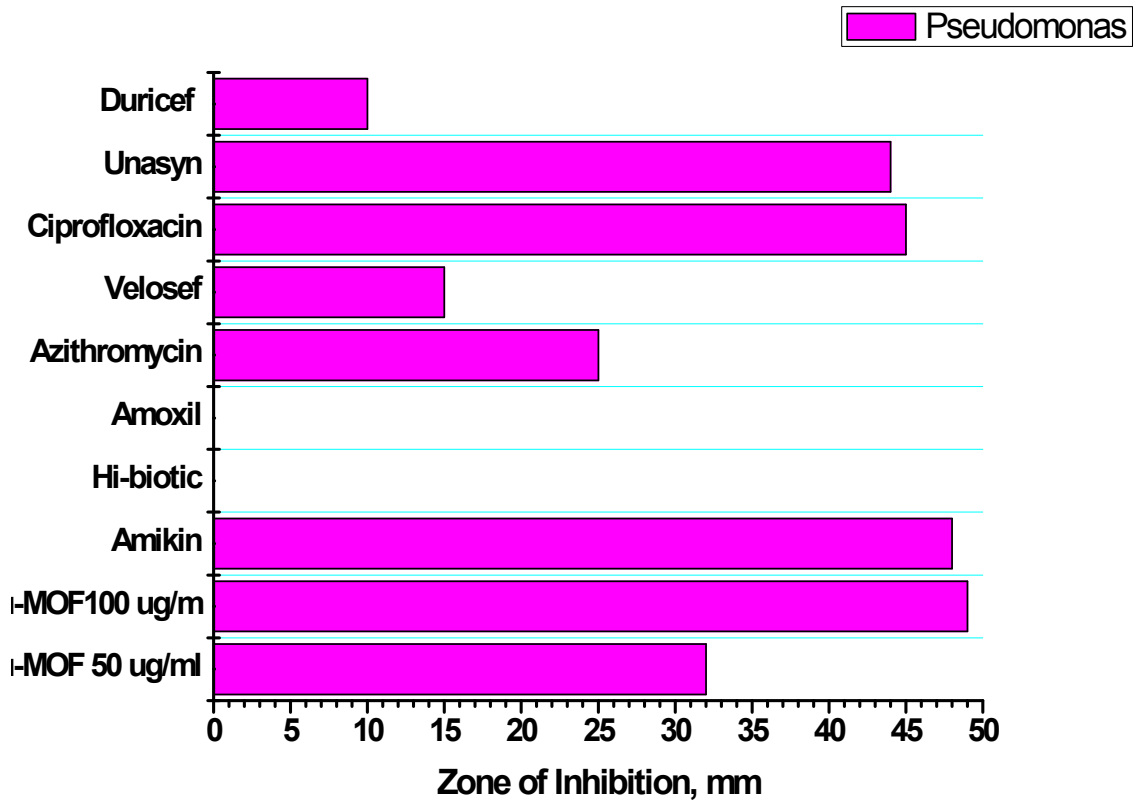
(S7): The antibacterial activity of **C1** against standard antibacterial drugs for Staph-Aureus bacteria



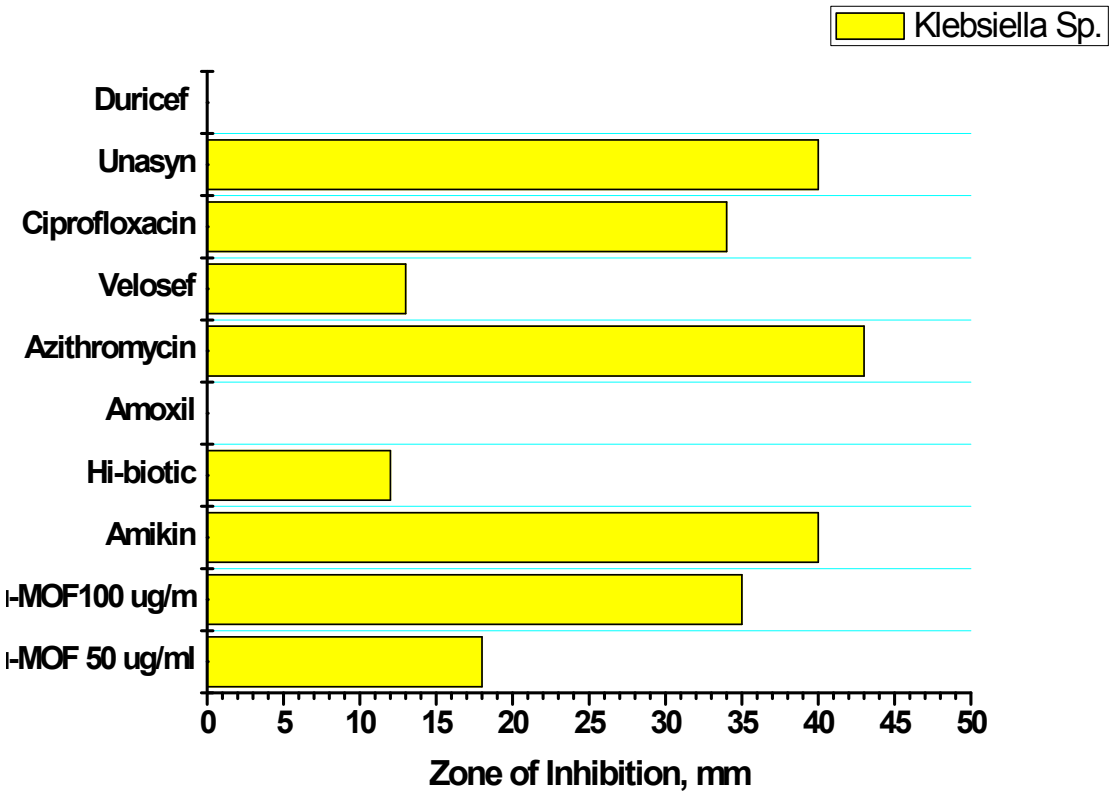
(S8): The antibacterial activity of **C1** against standard antibacterial drugs for Candida Spp.



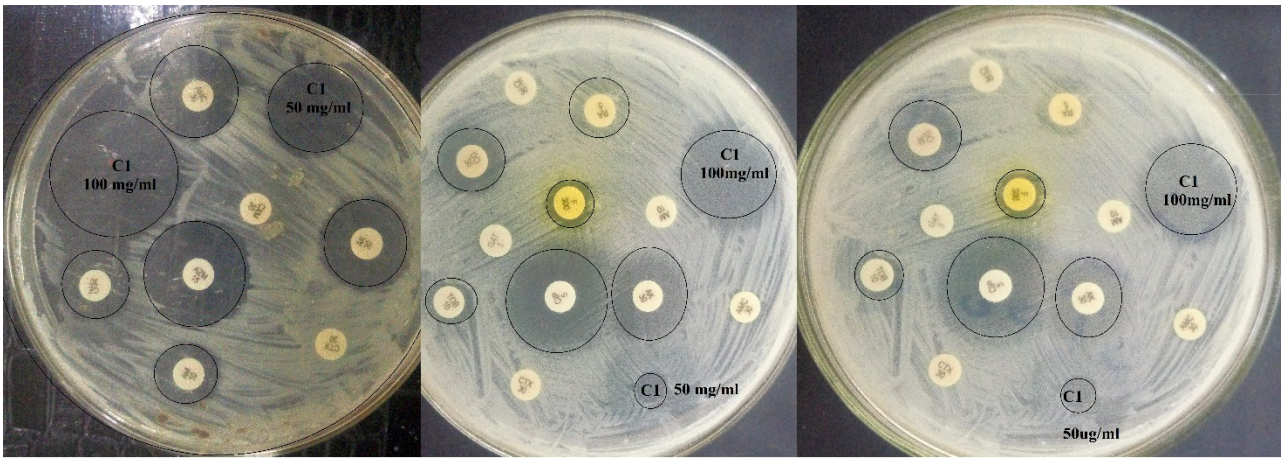
(S9): The antibacterial activity of **C1** against standard antibacterial drugs for E.coli bacteria



(S10): The antibacterial activity of **C1** against standard antibacterial drugs for Pseudomonas bacteria



(S11): The antibacterial activity of **C1** against standard antibacterial drugs for Klebsiella bacteria



(S12): Examples for cultures and sensitivity for comparison of **C1** against different antimicrobial drugs