

## Electronic Supplementary Information

### **A trinuclear Zn(II) Schiff base azido compound: synthesis, structure and exploration of antimicrobial activity**

**Mrinmoy Ghosh<sup>a</sup>, Samik Biswas<sup>b</sup>, Moumita Roy<sup>a</sup>, Saptarshi Biswas<sup>c</sup>, Pameli Ghosh<sup>d</sup>, Subratanath Koner<sup>d</sup>, Supratim Mandal<sup>b\*</sup> and Sandip Saha<sup>a\*</sup>**

*<sup>a</sup>Department of Chemistry, Acharya Prafulla Chandra College, New Barrackpur, Kolkata-700131, India*

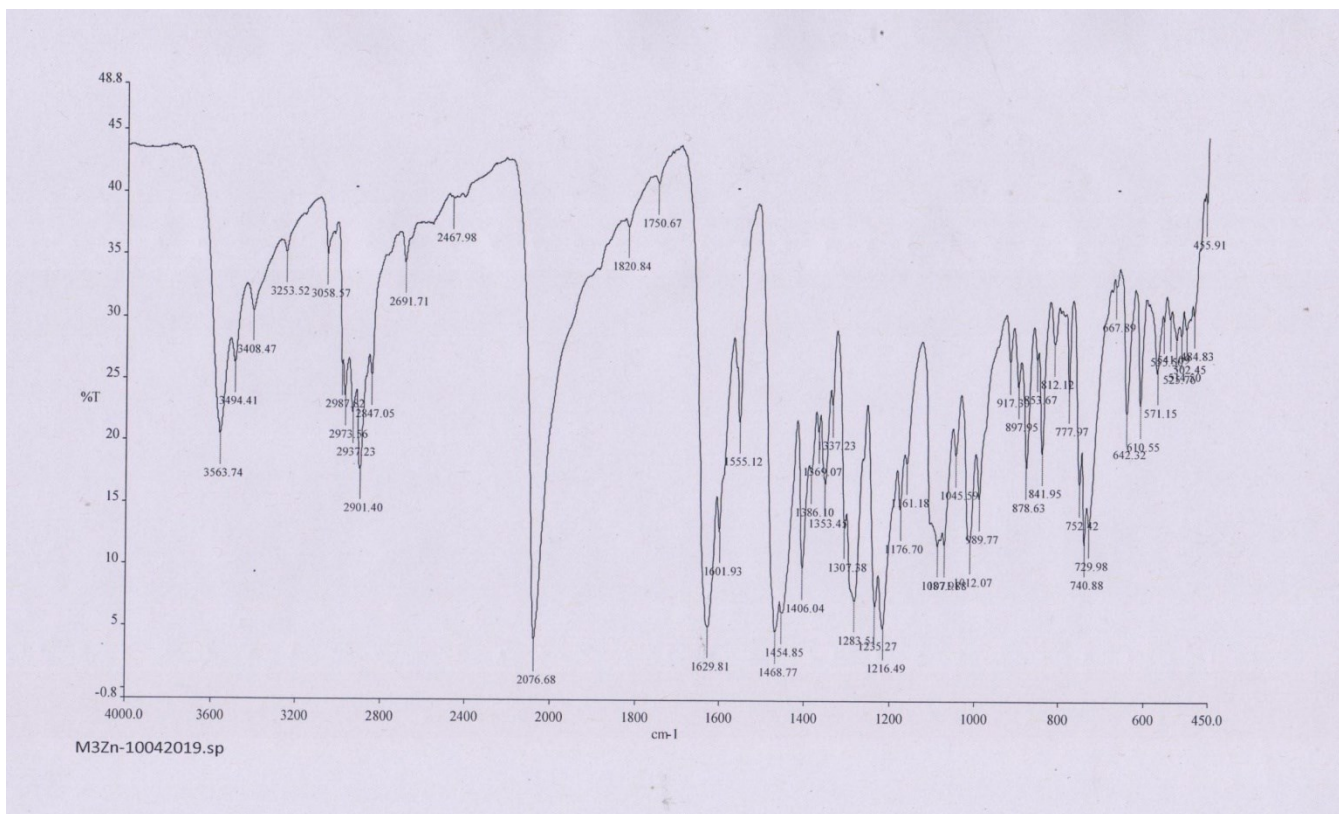
*<sup>b</sup>Department of Microbiology, University of Kalyani, Kalyani, West Bengal 741235, India*

*<sup>c</sup>Department of Chemistry, Katwa College, Katwa, West Bengal 713130, India*

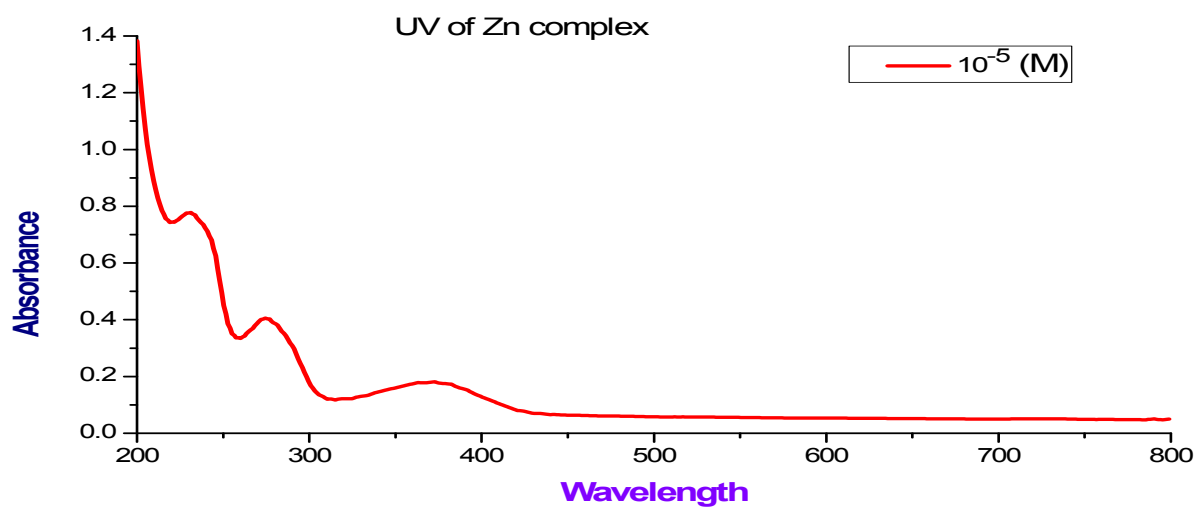
*<sup>d</sup>Department of Chemistry, Jadavpur University, Kolkata 700032, India*

\*Corresponding authors. E-mail: [sandipsaha2000@yahoo.com](mailto:sandipsaha2000@yahoo.com) ; Fax. +91-33-2537-8797 and

E-mail: [supratim.mandal@gmail.com](mailto:supratim.mandal@gmail.com)



**Figure S1: FT-IR spectrum of complex 1**



**Figure S2: UV-Vis spectrum of complex 1**

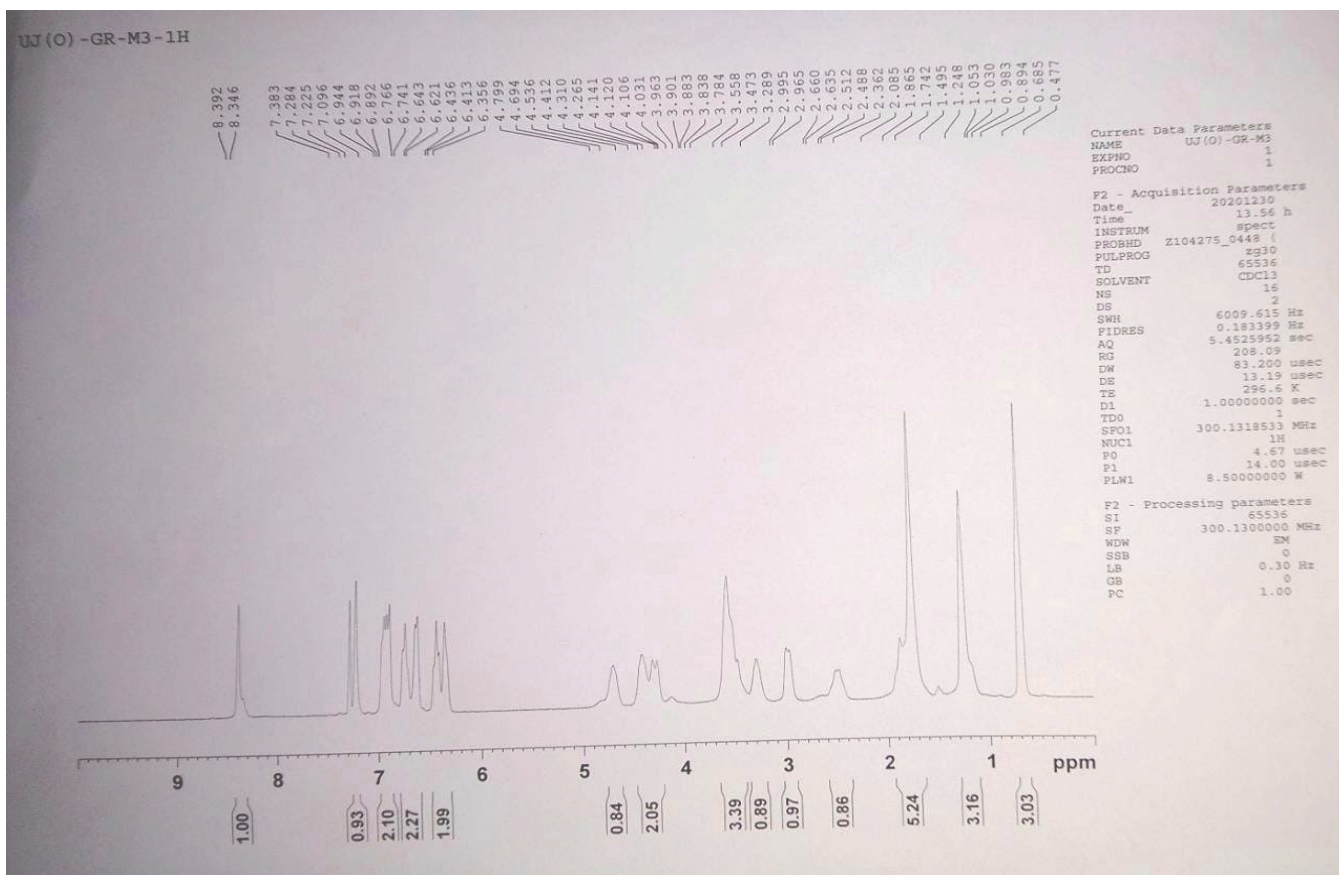


Figure S3: <sup>1</sup>H NMR spectrum of complex 1

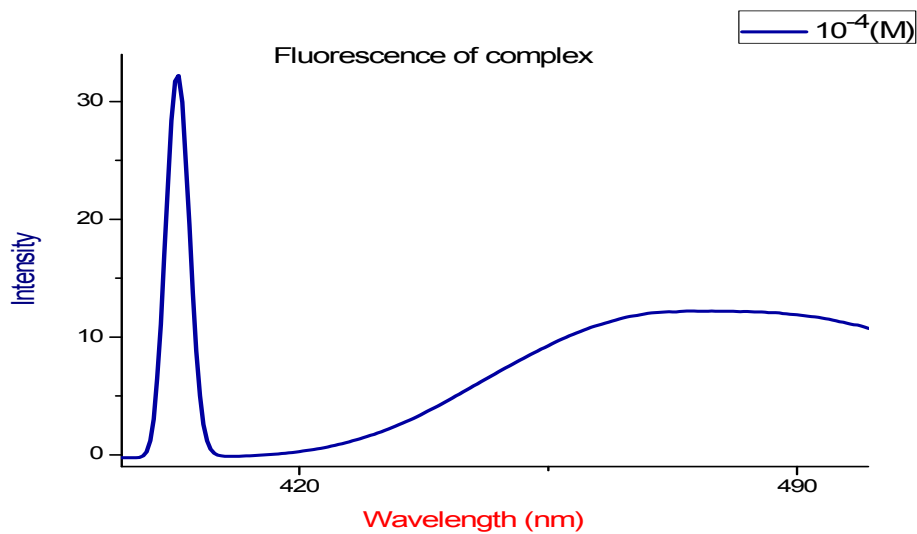


Figure S4: Fluorescence spectrum of complex 1

**Table S1.** Hydrogen bond parameters of complex **1**

D – H...A	D–H (Å)	H...A (Å)	D...A (Å)	∠D–H...A (°)	Symmetry
O1W – H1WB ... N5	0.86(2)	2.31(8)	2.895(9)	126(7)	-
O1W – H1WB ... O1W	0.86(2)	1.74(6)	2.463(11)	141(9)	-x,y,1/2-z

**Table S2.** Minimum Inhibitory Concentration (MIC) of the Schiff base ligand only against various Gram-negative and Gram-positive strains using micro-dilution technique (µg/ml)

	Microorganisms	Description	MIC (µg/ml)
Gram-negative	<i>Escherichia coli</i> ATCC 25922	Quality control strain ; Serotype O6	1500
	<i>Pseudomonas aeruginosa</i> ATCC 27853	Quality control strain; opportunistic pathogen for both humans and plants	1500
	<i>Salmonella typhimurium</i> ATCC 14028	Wild-type	1500
Gram-positive	<i>Staphylococcus aureus</i> MTCC 96	Methicillin-susceptable <i>S.aureus</i> (MSSA)	1500
	<i>Enterococcus faecalis</i> ATCC 29212	Vancomycin susceptible <i>E. faecalis</i> (VSE)	1500
	<i>Bacillus subtilis</i> ATCC 27370	M 168; spore forming Bacilli	1500