

SUPPORTING INFORMATION

A Novel Na(I) Coordination Complex with s-Triazine Pincer Ligand: Synthesis, X-ray Structure, Hirshfeld Analysis, and Antimicrobial Activity

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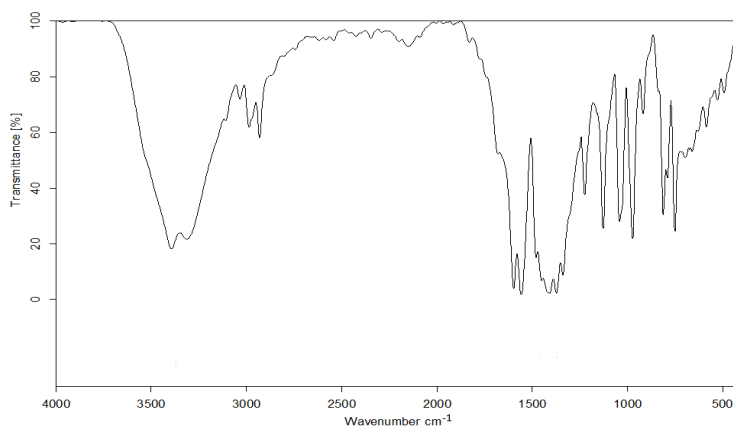


Figure S1. FTIR spectra of bpmt.

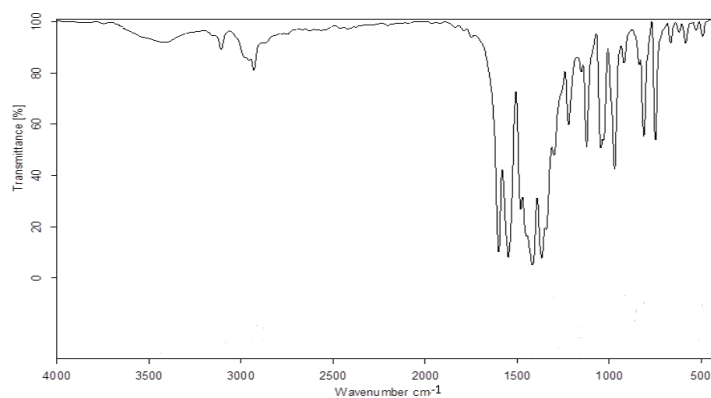


Figure S2. FTIR spectra of the $[\text{Na}(\text{bpmt})_2]\text{AuCl}_4$ complex.

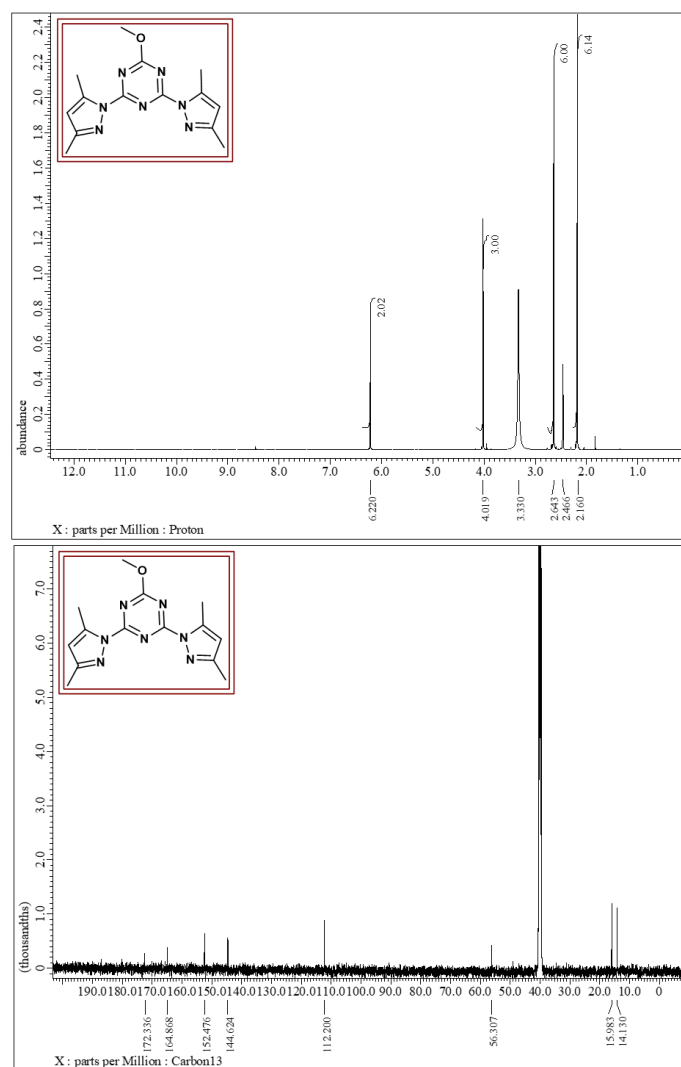


Figure S3. ^1H and ^{13}C NMR spectra of **bpmt**.

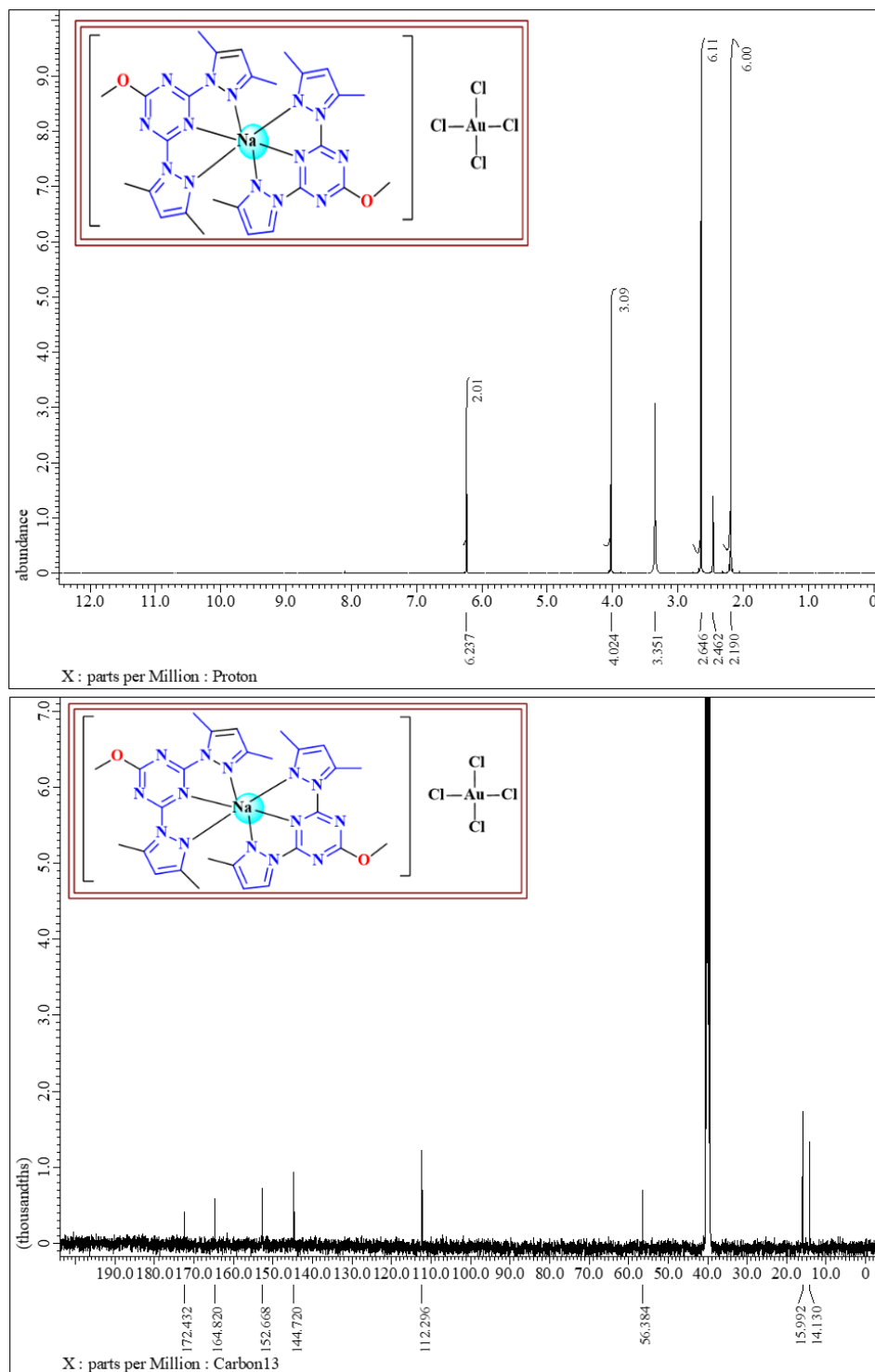


Figure S4. ^1H and ^{13}C NMR spectra of $[\text{Na}(\text{bpmt})_2]\text{AuCl}_4$.

Method S1

1. Antimicrobial assessment

The compounds were evaluated for antimicrobial efficacy against Gram-positive bacteria; *Staphylococcus aureus* (ATCC 25923), Methicillin-resistant *Staphylococcus aureus*, MRSA (ATCC 43300), MRSA (1) clinical isolates and multidrug resistant (MDR) *Enterococcus fecium* (31) clinical isolates and against Gram-negative bacteria including; *Klebsiella pneumonia* (ATCC 700603), *Pseudomonas aeruginosa* (ATCC 29853), *Escherichia coli* (ATCC 25922), *Acinetobacter baumannii* (ATCC 19606), MDR clinical isolates including two *Klebsiella pneumonia* isolates (50 and R124), one *Pseudomonas aeruginosa* (5) isolate, *Proteus mirabilis* and one *Acinetobacter baumannii* (8) in addition to one fungal isolate; *Candida albicans*. Based on the CLSI reference [S1], their minimum inhibitory concentration are determined.

2. Determination of minimum inhibitory concentration

Investigation of antimicrobial activity of chemical compounds was performed by micro-broth dilution assay for determination of minimum inhibitory concentration (MIC). In summary, 100 µL of Muller-Hinton broth (MHB) (Oxoid® Limited, Basingstoke, UK) were disseminated in 96 multi-well microtiter plates, followed by the addition of 100 µL chemical compound into the first row of the microtiter plate. Then, from the first to the twelfth well, serial dilution was performed. Each well received 7 µL of freshly prepared bacterial suspension (1.5×10^8 cfu/mL). For each bacterial strain, positive and negative controls were carried out. Plates were incubated for 18-24 hours at 37°C, with Amoxicillin 1000 µg/mL serving as reference standard antibiotic.

References

- S1. Wayne, P. Clinical and laboratory standards institute: Performance standards for antimicrobial susceptibility testing: 20th informational supplement. *CLSI document M100-S20* 2010.