Electronic Supplementary Material (ESI) for Dalton Transactions

Supporting Information

Coordination-driven self-assembly of 2D-metallamacrocycles using a shape-selective Pt^{II}_2-organometallic 90° acceptor: design, synthesis and sensing study

Sankarasekaran Shanmugaraju, Dipak Samanta, Bappaditya Gole and Partha Sarathi Mukherjee*

Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore-560 012, India. Fax: 91-80-2360-1552; Tel; 91-80-2293-3352

E-mail: psm@ipc.iisc.ernet.in

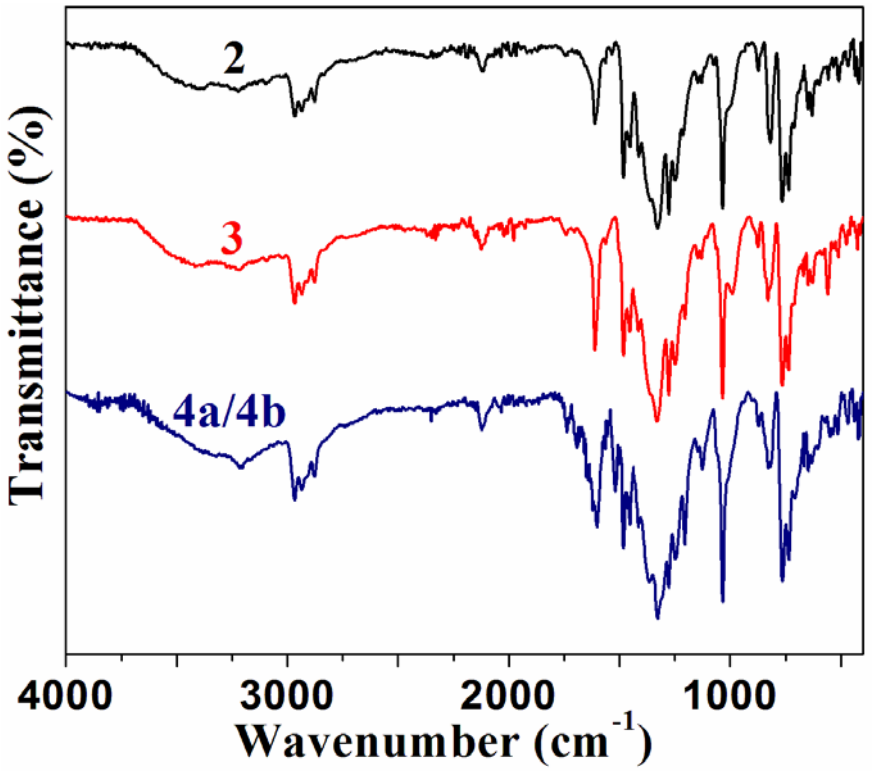

Fig.S1. Infra-red spectrum of the macrocycles **2** – **3** and **4a**.

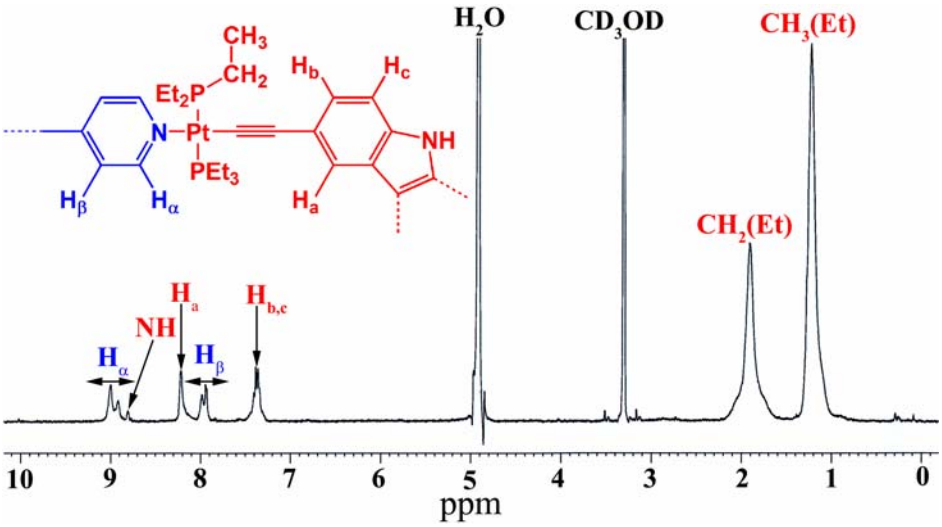

Fig.S2. ^{1}H NMR spectrum of the molecular square **2** recorded in CD_3OD with the peak assignments.

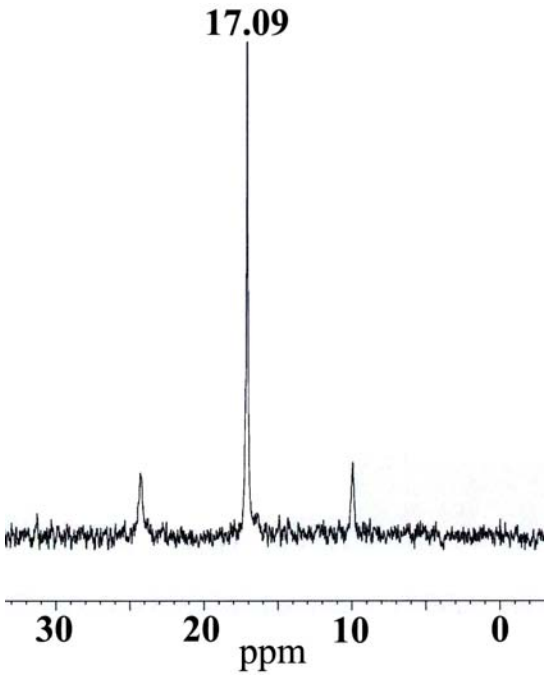

Fig.S3. ^{13}P NMR spectrum of the molecular square **2** recorded in CD_3OD.

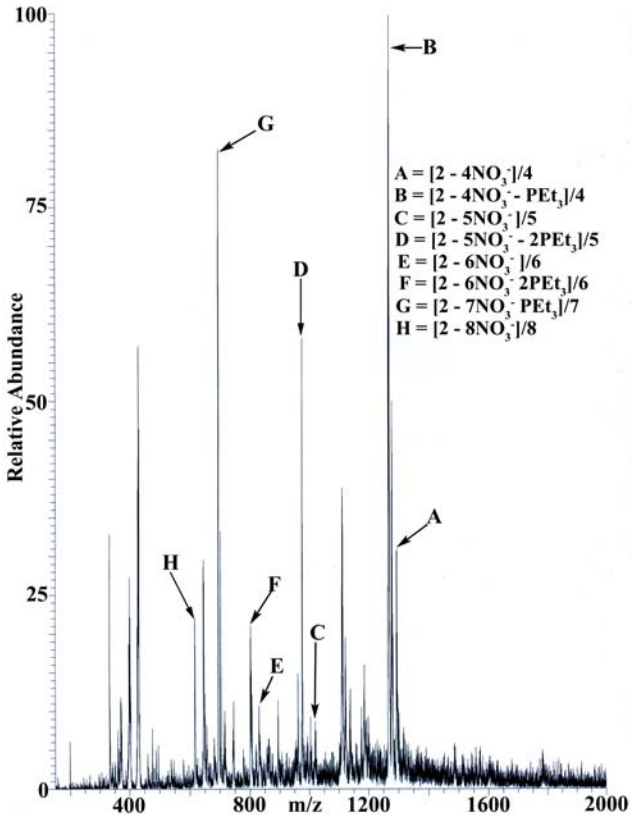

Fig.S4. ESI-MS spectrum of macrocycle **2** recorded in CH_3CN/ CH_3NO_2.

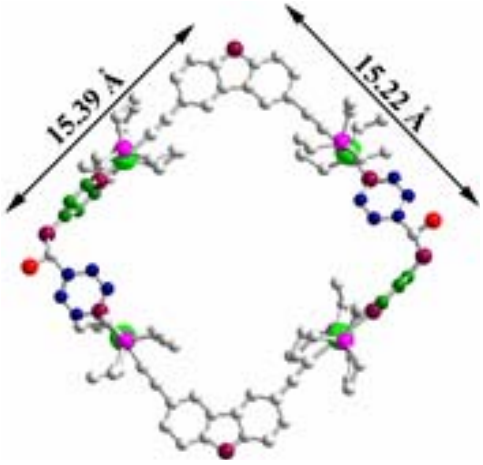

Fig.S5. Energy-minimized structures of rhomboid **4a** (green = Pt, magenta = P, reddish brown = N, red = O, grey = C). Blue and green color code indicating two different binding sites of linker. The hydrogen atoms are removed for the sake of clarity.

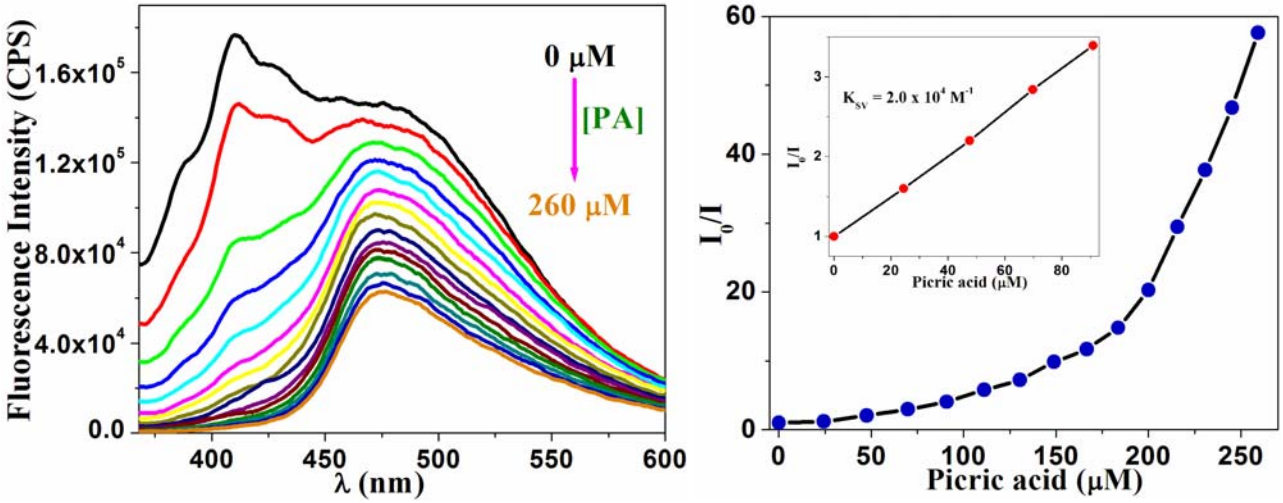

Fig.S6. Fluorescence quenching (left) of the macrocycle **2** (1.0×10^{-6} M) with picric acid (1.0×10^{-3} M) in DMF-methanol solution (excited at λ_{ex} = 324 nm and corresponding emission monitored from λ_{em} = 368 nm; excitation and emission slit width is 5 nm) and obtained Stern-Volmer plot; inset: Stern-Volmer plot obtained at lower concentration of picric acid (right).