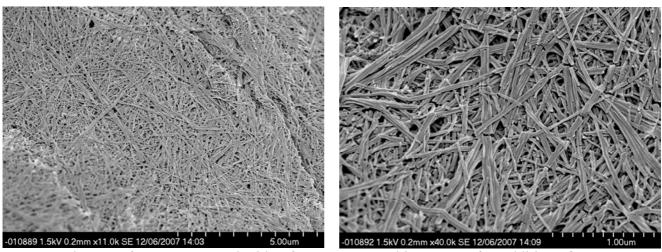
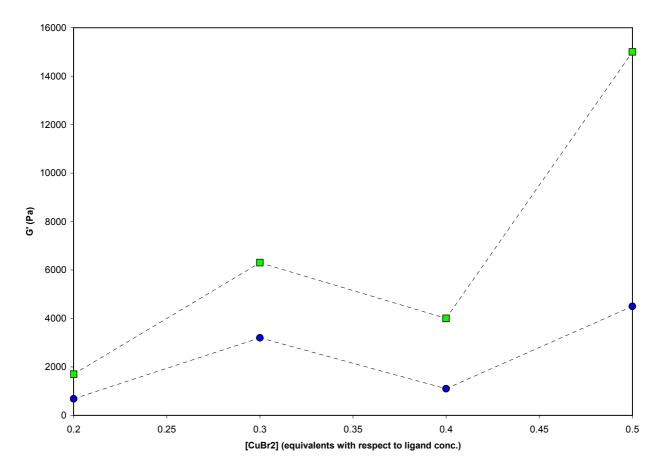
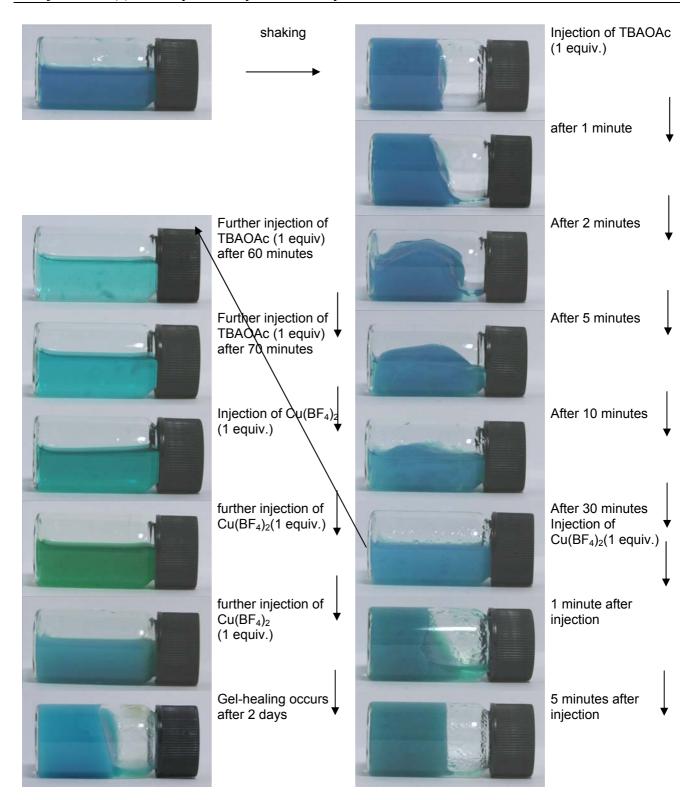
## **Supporting Information**



**S1.** SEM pictures of a CuBr<sub>2</sub> xerogel with 1 from a 1 wt% gel in MeOH after addition of 0.3 5 equivalents CuBr<sub>2</sub>.



**S2**. Gel strengthening in samples of ligand 1 with 0.2, 0.3, 0.4, and 0.5 equiv.of  $CuBr_2$ . G' is measured immediately (blue circles) and 1 week after shaking (green squares).



**S3.** Full sequence of gel-break up by acetate addition and gel-reformation by subsequent copper salt addition. The gels are made from ligand **1** (1 weight %) after the addition of 0.3 equiv. CuBr<sub>2</sub> in MeOH.