Electronic Supplementary Information for Dalton Transactions

Supporting information

Stepwise Deposition of Metal Organic Frameworks on flexible synthetic Polymer Surfaces

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Reaction cell

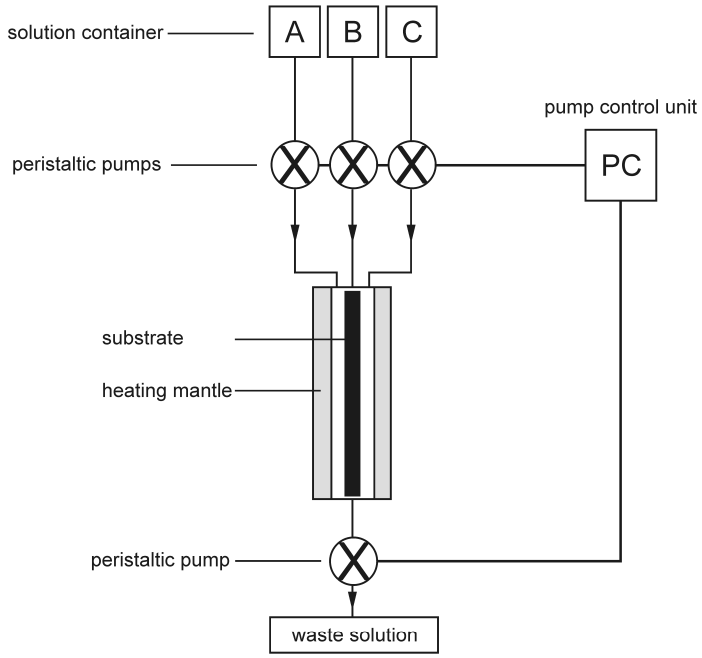

Figure S1. Scheme of "Step-by-step" growth apparatus.

EDX mapping

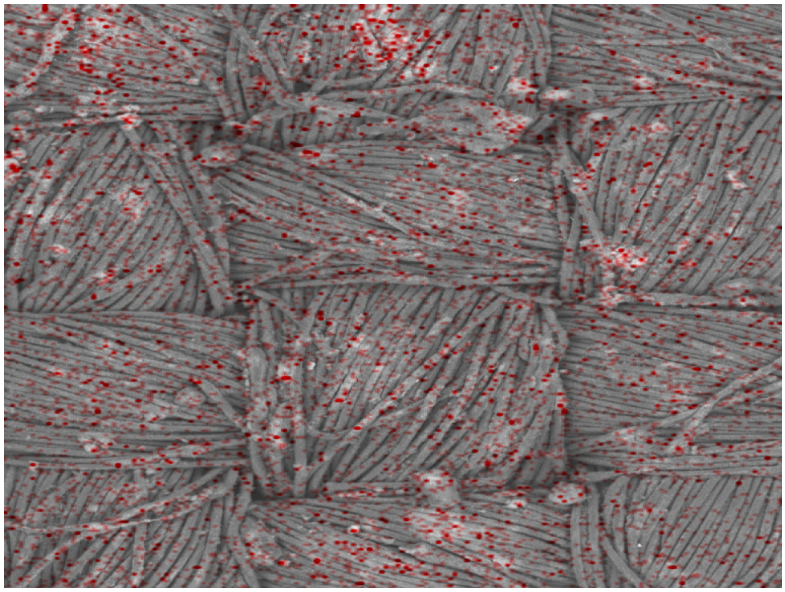

Figure S2. EDX Cu mapping image of a synthetic polymer substrate after applying 40 deposition cycles of $[Cu_3(btc)_3]_n$. The areas where copper was detected are imaged in red.

FT-IR spectroscopic measurements of pyrazin loaded thin films

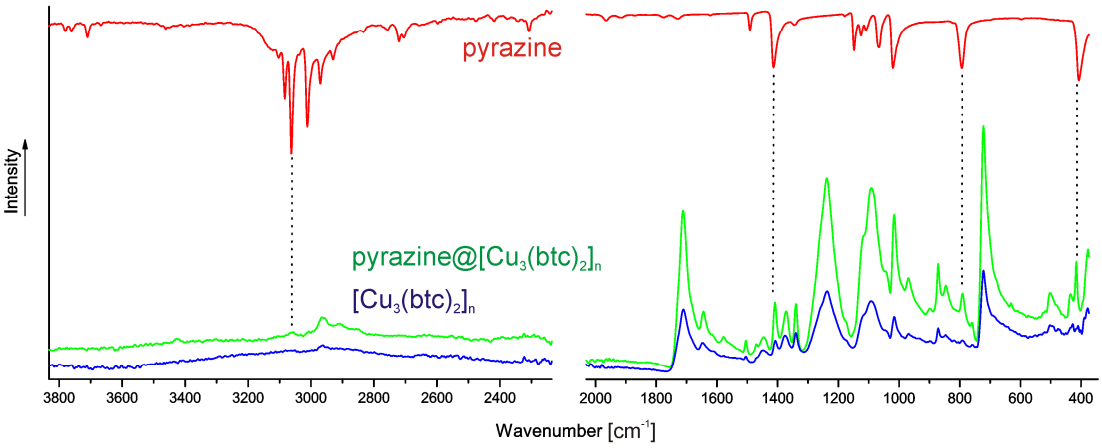

Figure S3. FT-IR spectra of a $[Cu_3(btc)_2]_n$ material (40 deposition cylces) deposited on flexible polymer surface before loading experiment with pyrazine (blue) and after the loaded experiment (green). The reference FT-IR spectrum of pyrazine is presented in red.

TG data of pyrazin loaded thin films

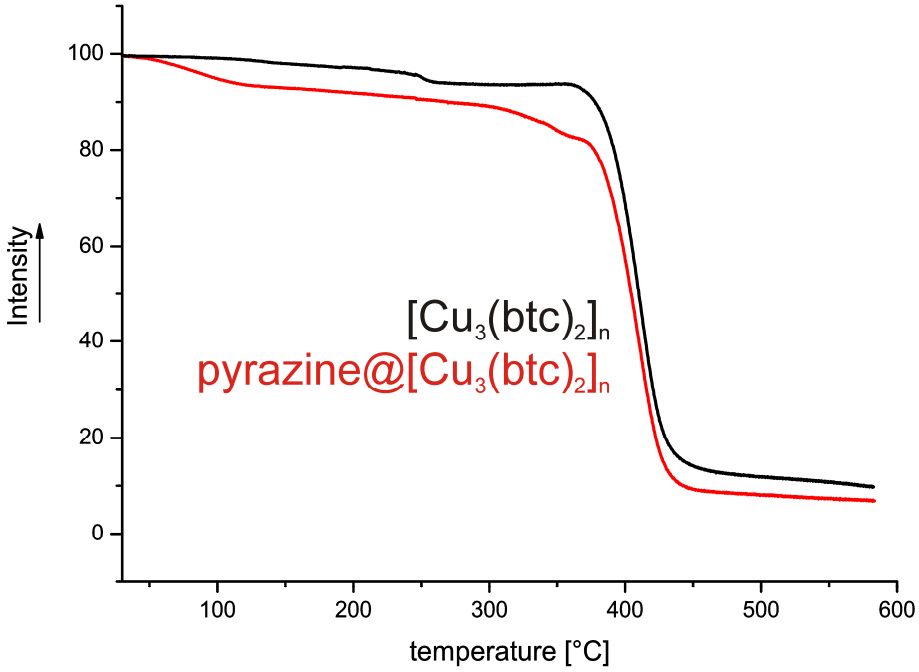

Figure S4. TG data of unloaded $[Cu_3(btc)_2]_n$ material (40 deposition cycles) deposited on flexible polymer surface (black line) und of the same material after loading with pyrazine (red line).