

Supplementary Materials

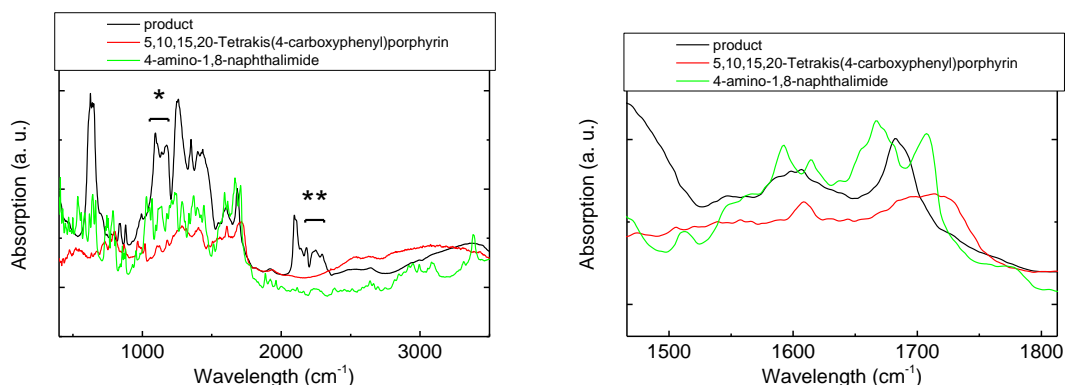


Figure S1. infrared spectra of the starting porphyrin and final product (right: zoomed amide bond region). The two asterisks mark the position where there is a band that is possibly an overtone of the C-N of the naphthalimide (single asterisk), but that does not appear in the spectra of the reagents, which means a new chemical substance (Refat, M. S.; Didamony, H. A.; Abou El-Nour, K. M.; Grabchev, I.; El-Zayat, L.; Adam, A. M. A. *Arabian Journal of Chemistry* **2011**, 4, 83). There are 5 peaks corresponding to phenyl vibration modes and 14 to the skeletal vibration modes of 5,10,15,20-tetrakis(4-carboxyphenyl)porphyrin that are found in the literature (Li, X. Y.; Czernuszewicz, R. S.; Kincaid, J. R.; Su, Y. O.; Spiro, T. G. *Journal of Physical Chemistry* **1990**, 94, 31). However, this is also a region where naphthalimide assigned peaks coexist as seen in the figure.

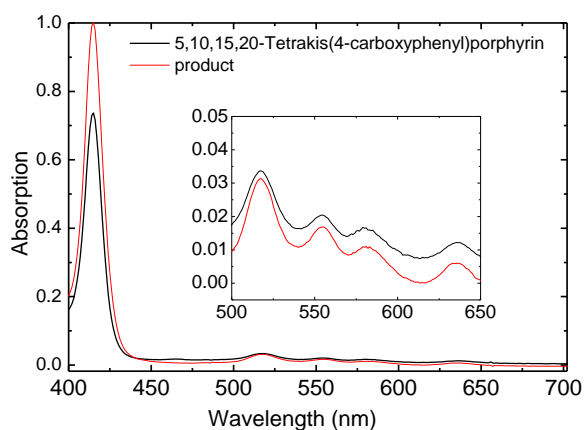


Figure S2. Optical absorption spectra of the 5,10,15,20-Tetrakis(4-carboxyphenyl)porphyrin and porphyrin product in water. The Soret band/visible bands ratio are different for the precursor and product porphyrin.

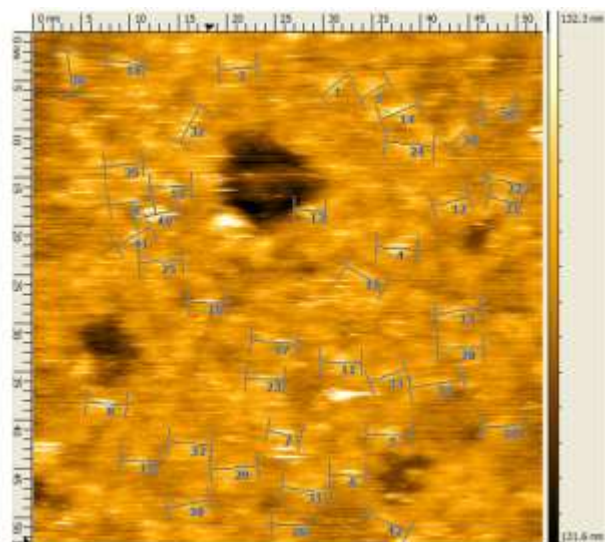


Figure S3. STM image of isolated porphyrin molecules. In order to confirm their presence, each molecule has been measured in the middle by STS. Measurements outside the borders indicated Au STS pattern.