Applying thermo-destabilization of microemulsions as a new method for co-catalyst loading on mesoporous polymeric carbon nitride – towards large scale applications

M. Schröder, K. Kailasam, S. Rudi, K. Fündling, J. Riess, M. Lublow, A. Thomas, R. Schomäcker, M. Schwarze* Technische Universität Berlin, Institut für Chemie, Straße des 17. Juni 124, 10623 Berlin

Supporting Information:



Fig. S1: Filtered reaction solutions a) after *in-situ* photoreduction of Pt on mp-CN for various initial platinum concentrations (black NPs are visible) and b) after photocatalytic reaction with ex-situ prepared Pt@mp-CN (no NPs are visible and the yellowish color is due to TEOA)



Fig. S2: a) XRD pattern; b) UV-Vis reflectance spectra; c) Nitrogen sorption isotherm; d) Pore size distribution of CN-6 sample.



Fig.S3: Energy-dispersive X-ray (EDX) spectrogram of *ex-situ* Pt loaded mp-CN directly after synthesis via microemulsion approach



Fig. S4: Absorption of irradiated light by a quartz glass window and by a polycarbonate window of the same thickness



Fig. S5: Small scale hydrogen evolution setup with a) a glass burette for visible hydrogen quantification, b) a small glass reactor with catalyst suspension and c) a stirrer for keeping the suspension