6<sup>th</sup> live session of <u>Focus Materialchemie</u> – Wednesday, **24.05.2023** 16:00 – @ <u>Seminarraum Lehar 01</u> (TU-Wien, Getreidemarkt 9, BC, OG. 01, room A46) – join us on <u>ZOOM</u> (ID: 983 0066 2349)

## Discovering and studying of a new polymer nanoparticle (pdots) system for photocatalytic reduction reactions

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Photocatalytic hydrogen production has been predominantly studied using inorganic photocatalysts. However, in recent years organic photocatalysts have gained growing attention due to the ease of modification and smaller band gaps, thus being able to utilize a larger spectrum of sunlight. A subgroup of these organic photocatalysts are polymer nanoparticles ("pdots"). In this work, a new promising pdots system was discovered and studied on its fundamental photophysical processes using steady-state- and transient absorption spectroscopy..