

DFG: Dynamic surface coatings through the hierarchical self-assembly of responsive colloidal building blocks



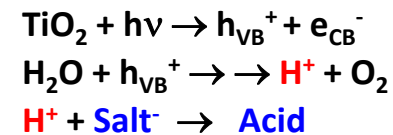
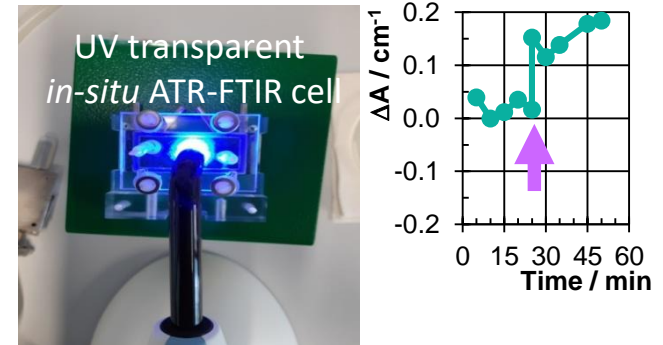
Aim

- Generation of pH- and light-responsive coatings through rational design, synthesis and directed assembly of responsive colloidal building blocks

Approach

- Photoacidic hybrid colloids with TiO₂ core & polyampholyte shell
- pH responsive colloids based on ampholytic triblock terpolymer
- Deposition of pure colloids or mixed with polyelectrolytes
- *in-situ* ATR-FTIR: Dissociation degree α of sensoric polyacids

Hybrid TiO₂ colloid coating
generating H⁺ upon UV illumination



Project Leaders

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Project Data

Funding period: 07/2019-06/2022
Volume: 190.000 €
Funded by: DFG
Project leader: A. Fery / M. Müller