

Blockvorlesung T1ZS-P

## Dyes, Pigments and Modern Functional Materials

Starting with the chemistry of textile dyes a theoretical background for chromophores was developed including organic pigments, the photophysics of chromophores and spectroscopic methods. The physiology of colour and the interaction of radiation with matter are as well subjects of the lectures as the construction of matched indicators. The knowledge of the properties and the behaviour of chromophores form the basis for the understanding of their modern applications such as in laser systems, sensors, dye-sensitized solar cells and OLEDs.

A further focus is set on the interaction of two and more chromophores forming complex functional units with resonance energy transfer (FRET), photo-induced electron transfer (PET) and exciton interactions. Metamaterials were briefly presented. Recent development applying *peri*-arylenes as highly stable chromophores for future technology will be considered and discussed.

Baeyer Hörsaal:

Do 11.1.2018	12-14 Uhr	Fr 12.1.2018	8-10 Uhr
Do 18.1.2018	12-14 Uhr	Fr 19.1.2018	8-10 Uhr
Do 25.1.2018	12-14 Uhr	Fr 26.1.2018	8-10 Uhr

