

ChemPlusChem, 2015

A Hetero-Bifunctional Spacer for the Smart Engineering of Carbon-Based Nanostructures

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Abstract

© 2015 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim. The cover picture shows a multifunctional platform based on carbon nanotubes, where a modular organic spacer acts as the anchoring site for controlled covalent functionalization of the surface. The combination of fluorescent dyes and post-derivatizable disulfide pendant arms capable of reacting with thiol end-capped (bio)molecules, generates optically traceable (bio)conjugates. The release of a pyridinic dye allows for a precise estimation of the functionalization loading through simple UV/Vis measurements. Details are given in the Full Paper by Giuliano Giambastiani et al. (DOI: 10.1002/cplu.201402391).

<http://dx.doi.org/10.1002/cplu.201500036>
