DNA stabilized silver nanocluster flourophores.

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In this presentation, fluorescent properties of DNA stabilized silver nanoclusters (AgNCs) are presented.[1] The DNA acts as a scaffold and helps to tune the cluster size which is usually in the several to tens of atoms range. This new class of fluorophores has attracted increasing attention in the last decade due to their interesting photophysical properties. HPLC purification, mass-spec analysis and EXAFS studies start to shed light on the structure of the AgNC, although many aspects still remain to be unraveled. Recent progress in understanding the photophysical properties will be presented, together with a FRET system comprised of an AgNC and an organic fluorophore.[2]

Figure 1. Examples of synthesized solutions of different silver nanoclusters, stabilized in DNA at our research group.

Acknowledgement: T.V., S.B. and M. C.-T. gratefully acknowledges financial support from the "Center for Synthetic Biology" at Copenhagen University funded by the UNIK research initiative of the Danish Ministry of Science, Technology and Innovation (Grant 09-065274), bioSYNergy, University of Copenhagen's Excellence Programme for Interdisciplinary Research, the Villum Foundation (Project number VKR023115), the Danish Council of Independent Research (Project number DFF-1323-00352) and the Carlsberg Foundation (CF14-0388). C.C. thanks the Erasmus plus programme and the University of Florence.

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