



Alkynes and Bridged Triarylamines as Versatile Construction Elements for Functional Molecular Materials

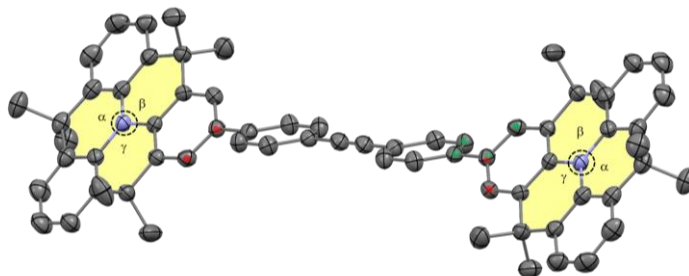
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Triarylamines and their bridged counterparts have in the meanwhile become ubiquitous in the area of organic electronics owing to their appreciable electron donor and hole transport properties [1]. We have recently realized that various structurally relatively simple triarylamines in combination with the highly reactive acetylenic moieties may serve as versatile building blocks for the construction of novel nitrogen-containing polycyclic aromatic hydrocarbons (PAHs). In these compounds nitrogen readily adopts a planar sp^2 -hybridized geometry to provide for efficient electronic communication with the surrounding π system [2,3]. The resulting PAHs are highly attractive objects for fundamental studies as defined molecular fragments of heteroatom-doped carbon allotropes on one hand and as functional materials for diverse applications on the other.



In this talk, our recent synthetic efforts will be presented and the fundamental characteristics of the resulting compounds discussed.

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References:

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