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Title:	Spatially organized $\pi$ -electron rich foldamers
Authors:	Ajith, Arya (/jspui/browse?type=author&value=Ajith%2C+Arya)
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Abstract:	<p>The field of foldamer chemistry was inspired from the investigation of natural bio- logical systems in which covalent and non-covalent molecular interactions between specific units in their sequence assist folding into a well-defined three-dimensional structure of higher order architectures. Recreating this feature on synthetic systems would not only allow reproducing biological functions but also developing new func- tions that suitable for our technological needs. In this work, we mainly focused on foldamer designing and synthesis of a -electron rich polymer in which conformational preferences can be induced through different non-covalent and covalent interactions. The target polymer mainly consists of Dialkoxy naphthalene units, a potential can- didate to facilitate charge transport through space when confined those units into a well-organized foldameric system. All other structural features of the backbone are meant to assist the folding process. The major outcome of the work is a functional- ized polymer backbone with an optimized spacer chain length, having the potential to adopt higher order architectures.</p>
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