

Inter-IISER Chemistry Meet (IICM 2017)

Perylenebisimide-Porphyrin Dyads and Extended Assemblies

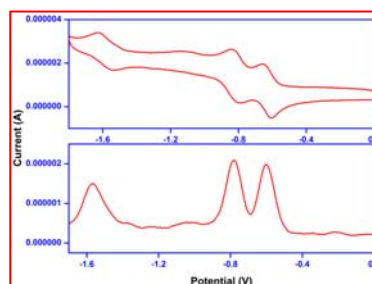
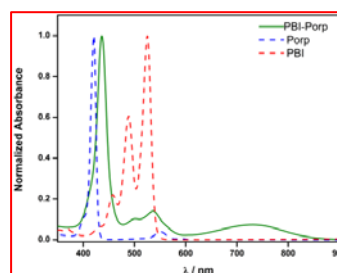
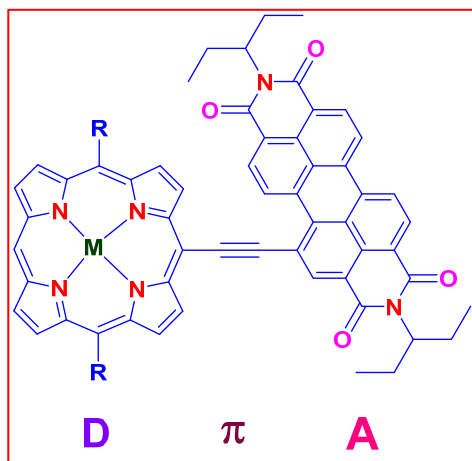
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Abstract:

Many recent efforts have been targeted towards the development of new and efficient organic sensitizers that are suitable for practical use. Among the various pigments, members of the porphyrin family are attractive candidates for light harvesting due to their high molar absorption coefficients and excited state energy transfer characteristics. Though porphyrins absorb intensely in the 400-4050 nm range, they have very limited absorption in the rest of the visible region. Efficient light harvesting systems consisting these macrocycles are realized by introducing various accessory pigments. Perylenebisimides can be ideal accessory systems for porphyrins as they absorb strongly in the visible region where porphyrin absorption is limited and are exceptionally stable. They have long excited state life times and can be modulated synthetically for various applications. In this current talk, recent results on these molecular systems and a few selected larger assemblies will be highlighted.



References and Notes:

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