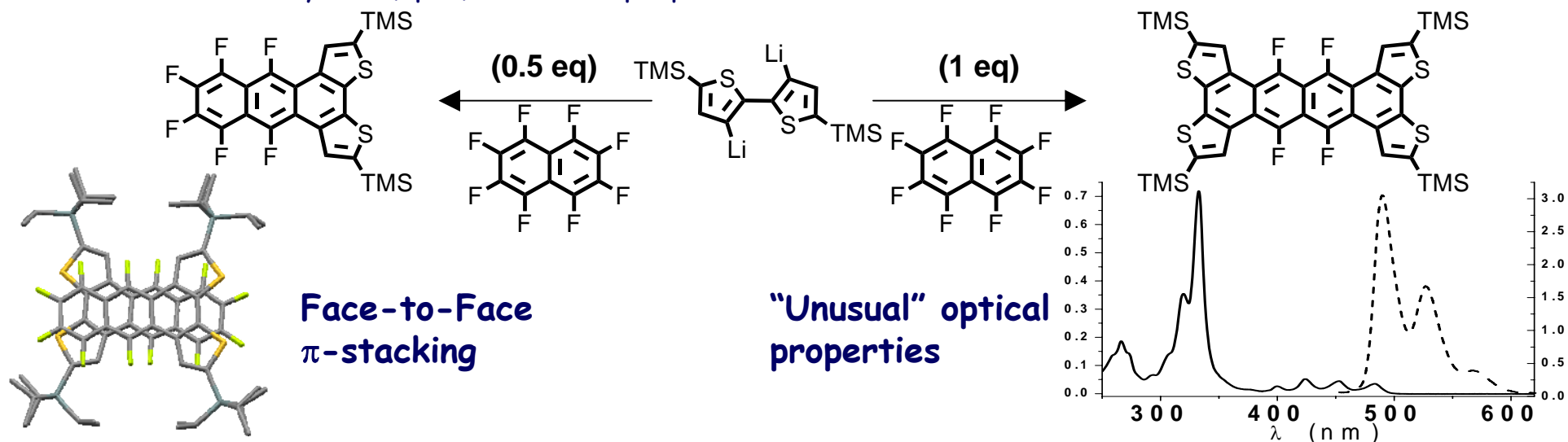
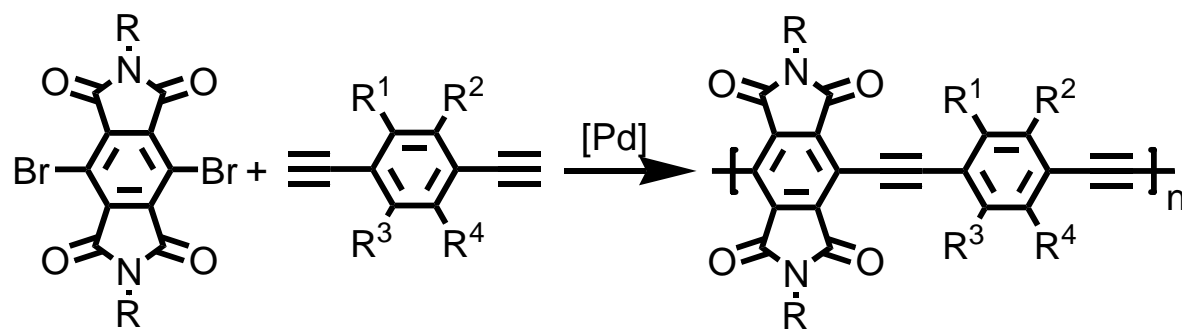


Fluorinated Polycyclic Aromatics: Synthetic methods are being developed to rapidly and efficiently synthesize materials with several rings fused together. These "flat" molecules bear fluorine atoms to control self-assembly and (opto)electronic properties.



Alternating Donor-Acceptor conjugated polymers can be engineered to give a broad range of (opto)electronic properties by synthetic design. We have prepared a series of poly(phenylene ethynylene)s, together with small-molecule model compounds to study these effects.



$R^1 - R^4 = H, \text{ alkyl, alkoxy, amino}$



**PMDI copolymer with
metallic luster**