## 9 ORGANIC IMATERIALS COMPOSED OF ALTERNATING ARYL/PERFLUOROARYL UNITS MARK D. WATSON, DEPT OF CHEMISTRY, UNIVERSITY OF KENTUCKY, USA, 40503-0055 $1s^{2}2s^{2}2$

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.



 $R^1 - R^4 = H$ , alkyl, alkoxy, amino



18.998

PMDI copolymer with metallic luster