Creating Functional Materials from Contorted Aromatic Building Blocks

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This presentation will detail our efforts to create materials from contorted aromatic molecules. In particular, I will discuss how to create ladder polymers from helicenes and twistacenes building blocks. These materials have extraordinary properties as materials. The helicenes have the largest chiroptic response of any molecular species. The twistacenes excel as photovoltaics, photodetectors, batteries, and pseudocapacitors. The presentation will discuss these opportunities.