Reaction Development for the Synthesis of Conjugated Organic Materials

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Conjugated organic materials are quickly becoming indispensable for technologies such as photovoltaics, light emitting diodes and field-effect transistors. Therefore, efficient assembly of these materials is an important goal. Advancing synthetic strategies provide a direct way to both streamline synthesis and render new architectures synthetically accessible. This talk will discuss our recent efforts developing a C-H bond functionalization and dehydration polymerization strategies to access novel, highly polar, conjugated polymers as well as their resulting properties as low exciton-binding semiconductors.