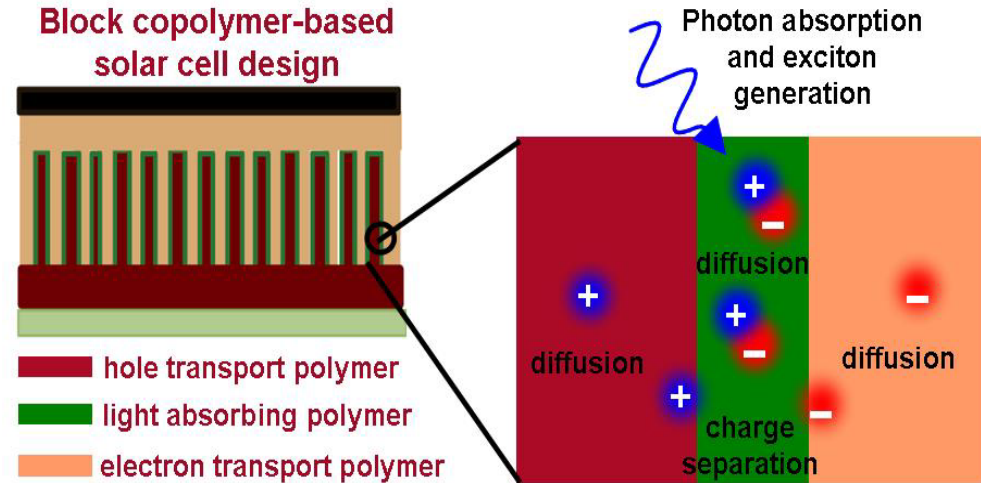


# Polymer-Based Materials for Harvesting Solar Energy (PHaSE)

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**PHaSE's** goal is to maximize collection and conversion efficiency of a broad frequency range of the solar spectrum using directed self-assembly of polymer-based materials, to uncover basic physical principles that will allow design and fabrication of more effective and inexpensive photovoltaic devices.



## RESEARCH PLAN AND DIRECTIONS

Organic-based photovoltaics are relatively inexpensive and easy to fabricate, with energy conversion efficiencies and performance lifetimes that continue to improve. PHaSE's interdisciplinary research teams seek to maximize conversion of light to electrical charges by making new and better materials, and finding effective ways to assemble them in devices. Such basic research developments are crucial to yield economically viable polymer photovoltaics.