**Enhancing Solar Cells and Catalysts using Carbon Nanomaterials**

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One of the most important issues facing society is the ability to supply the world’s energy requirements via both environmentally responsible and sustainable means. Renewable energy, and in particular solar energy, has the potential to address current issues in energy production but costs, both in terms of the energy required for production and final price to the consumer, as well flexibility in terms of system deployment are problems that will need to be addressed. Reducing the environmental footprint in various chemical processes is also very important. This talk will focus on work using carbon nanomaterials to make new architectures for solar cells or new generation nonmetallic catalysts. Several possible structures will be explored and the disadvantages and advantages of each will be examined.

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