



Department of Environment and Energy Engineering

Yoshinori Sato Lab

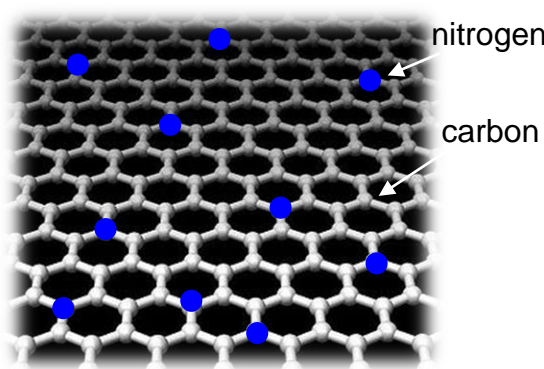
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Research

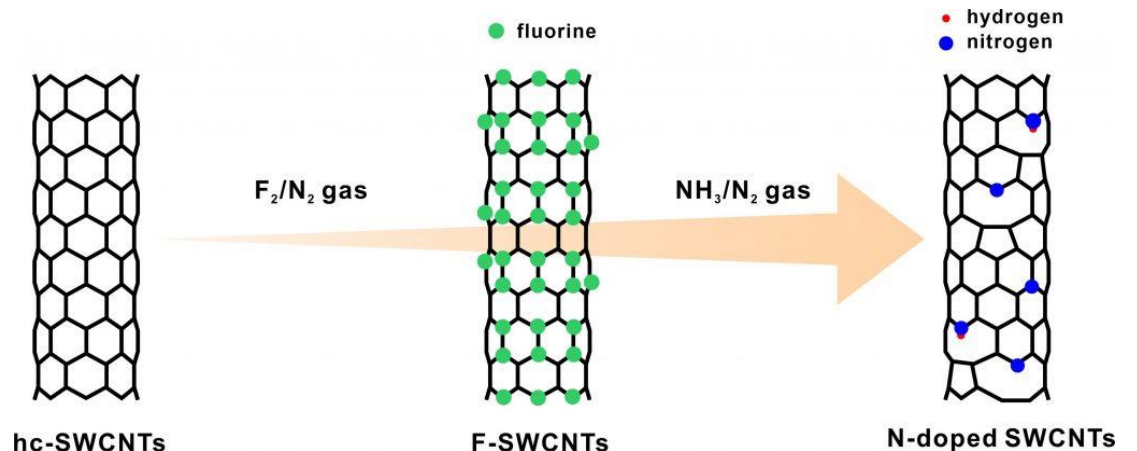
In the past, a number of composites consisting of nanomaterials that possess excellent features have been produced in basic studies. However, it is extremely hard to design and produce materials and composites in which nanomaterials' properties are reflected, because each nanomaterial in the composite assembles at random, without a view of the overall nanomaterials. In this laboratory, the purpose of the research is to study and develop high-functional non-metallic light materials with high-performance surfaces and interfaces using boron, carbon, nitrogen, oxygen, fluorine, sulfur, and phosphorus in an effort to expand the properties of nanomaterials to those of bulky materials.

- ◆ Cathode catalysts for polymer electrolyte fuel cells
- ◆ Carbon nanotube fibers & their composites for advance functional materials
- ◆ Controlled doping into carbon framework
- ◆ Energy harvesting & sensors

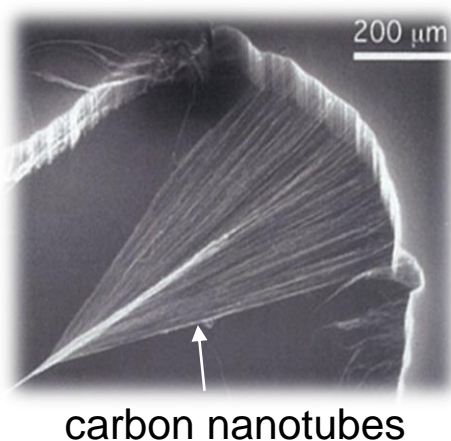
Cathode Catalysts for Polymer Electrolyte Fuel Cell



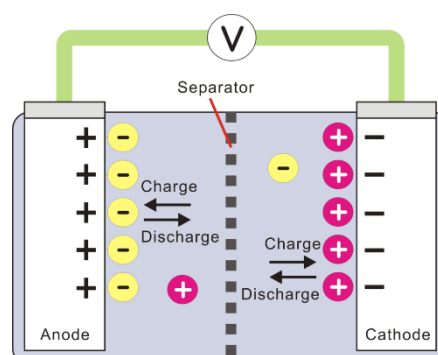
Controlled Doping into Carbon Framework



CNT Fiber & Composites



Electric Double-Layer Capacitors



Energy Harvesting & Sensors

