

# International Summit on Past and Present Research Systems of Green Chemistry

August 25-27, 2014 Hilton Philadelphia Airport, USA

## Preparation and applications of photoluminescent nanomaterials

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Fluorescent nanomaterials, including gold nanodots (Au NDs), DNA templated silver nanoclusters (DNA-Ag NCs), and carbon dots (C-dots), have become useful sensing materials because of their interesting optical properties and biocompatibility. In this talk, the author will briefly discuss several green approaches to the preparation of the three types of photoluminescent nanomaterials and their analytical applications. C-dots prepared from used tea, ground coffee, leaves, and ginger are highlighted. Detection of metal ions using the as-prepared photoluminescent nanomaterials is emphasized. Advantages and disadvantages of the three types of photoluminescent nanomaterials are discussed.

### Biography

Huan-Tsung Chang has completed his PhD from Iowa State University in 1994. He is a distinguished Professor of National Taiwan University and a Fellow of the Royal Society of Chemistry. He has published more than 250 papers in reputed journals.

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