



**Sustainable  
Nanotechnology  
Organization**

Research | Education | Responsibility

The Sustainable Nanotechnology Organization (SNO) is a non-profit, worldwide professional society comprised of individuals and institutions that are engaged in:

- Research and development of sustainable nanotechnology
- Implications of nanotechnology for Environment, Health, and Safety
- Advances in nanoscience, methods, protocols and metrology
- Education and understanding of sustainable nanotechnology
- Applications of nanotechnology for sustainability

SNO's purpose is to provide a professional society forum to advance knowledge in all aspects of sustainable nanotechnology, including both applications and implications, societal and economic aspects.

7th Sustainable Nanotechnology  
Organization Conference 2018  
Thursday, Nov. 8 – Saturday, Nov. 10  
Washington DC



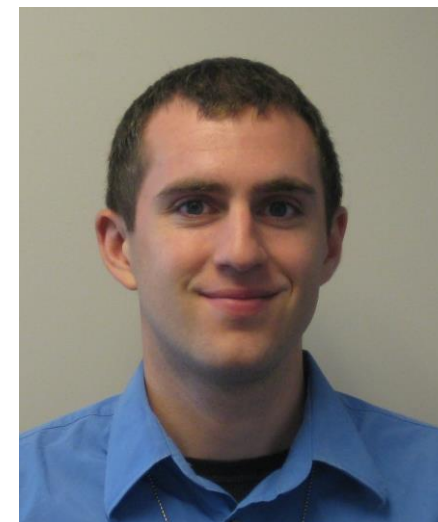
## Conference Chair



**Hilton Alexandria Old Town**  
**11767 King Street,**  
**Alexandria, Virginia, 22314, USA**

Call for Papers opens March 15 until August 17, 2018  
Information:

<http://www.susnano.org/SNO2018/conference-overview-2018.html>



**Elijah Petersen**, National  
Institute of Standards and  
Technology

## 2018 CONFERENCE SESSIONS

### **1. Tribute to Barbara Karn**

Barbara Karn is co-founder and executive director of SNO. She retired from NSF where she directed a program funding research in environmental nanotechnology. She spent 10 years building the nanotechnology— applications and implications- through grants at EPA. She worked on green nanotechnology at the Wilson Center. Dr. Karn represented EPA on the NNI and brought nano environmental and human health issues to the European Community. She is most proud of being able to maintain this research community through the legacy of SNO.

### **2. Food/Agriculture**

This session centers on Nanotechnology for food production, pesticide delivery, nutrient delivery, disease suppression, food fortification, and environmental implications.

### **3. Water**

This session focuses on applications of nanotechnology to address water or air contaminants, including applications in water supply, wastewater treatment and industrial air pollution control.

### **4. Fate and Exposure**

This session will consider studies addressing nanomaterial release, fate and transport, transformations, and exposure modelling.

### **5. Nanotoxicology**

This session emphasizes the evaluation of the effects (positive or negative) that advanced nanomaterials have on the environment and human health.

## **6. Life Cycle**

It is important to consider a life-cycle perspective when evaluating the applications of nanotechnology, from raw materials to synthesis, and from product use to end of life. Papers in this session can address the entire life-cycle of particular applications, or the implications in specific life-cycle phases, including recycling.

## **7. Sensors/Measurement**

Papers in this session focus on the need to develop sensors, new instruments, approaches, and/or further refinement of existing tools for characterizing nanomaterials and using nanomaterials as sensors to detect chemicals of interest.

## **8. Green Synthesis**

This session focuses on the synthesis of nanomaterials with lowered energy and fewer polluting by-products and starting materials. Environmentally benign methods for forming in place, mechanical synthesis ('top-down' method that reduces the size of particles, gas phase synthesis, and green wet chemistry.

## **9. Education/Social aspects**

Papers in this session will address nano-education programs and curriculum development. In addition, societal aspects, such as laws, regulations, economics, and social issues, will be covered.

## **10. Nanomedicine**

This session will accept papers that deal with the use of various types of nanoparticles for use in medicine, particularly to diagnose and treat cancer.