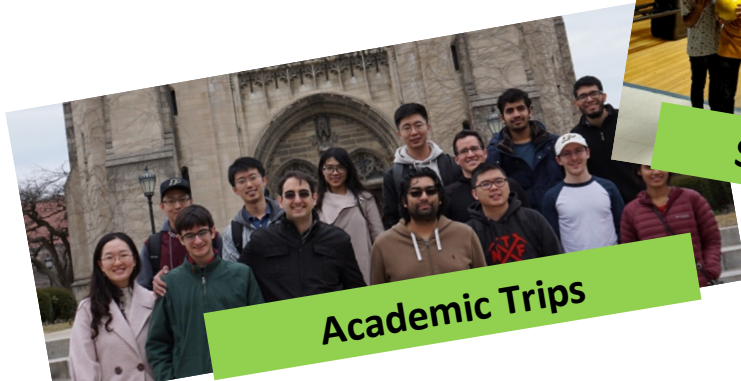


# Callout!!!

*Come learn about the  
Nanotechnology Student  
Advisory Council and how you  
can get involved!*

**Time: Thursday, 12:30pm**  
**Date: September 12**  
**Location: Birck 1001**

## What does NSAC do?



**Academic Trips**



**Social Events**



**Workshops**

**and more...**

## NSAC Distinguished Speaker:

### **Bridging the gap between large and small: thermofluids and nanoengineering for the Water-Energy Nexus**

David Warsinger

Assistant Professor of Mechanical Engineering



Climate change, degrading water resources, and economic and population growth are increasing the need for new science and technologies at the Water-Energy-Food Nexus. In enabling new and improved technologies to tackle these issues, a thermofluids systems approach is essential to guide the design of new nanomaterials, allowing for performance improvements and new capabilities. Following this approach,

thermodynamic design of water treatment membrane technologies such as membrane distillation (MD) leads to innovations with superhydrophobic nanostructured surfaces for heat transfer. New structures can also be created and optimized with this approach to operate in large systems. Nanomaterial self-assembly techniques can be guided by thermofluids designs to make macro-scale membrane systems with photonic properties for catalysis and solar distillation.



## **Pizza Lunch Provided !!**

