

# *Akua A. Asa-Awuku*

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## ● Education

- M.S. (2006) Chemical & Biomolecular Engineering, Georgia Institute of Technology
- B.S.E (2003) Chemical Engineering, Massachusetts Institute of Technology

## ● Current Position

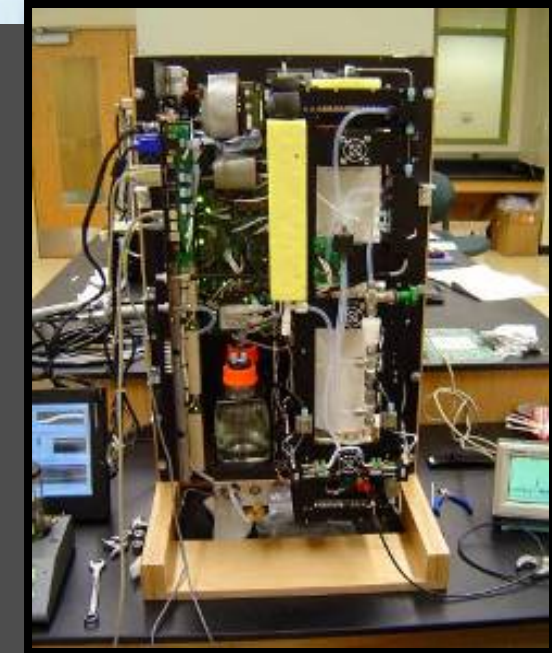
- PhD Candidate, School of Chemical and Biomolecular Engineering, Georgia Institute of Technology
- [www.gatech.edu/prism/~gtg555s.html](http://www.gatech.edu/prism/~gtg555s.html)

## ● Research Interests

- Investigation of the activation of organic aerosol into cloud droplets.



# Organic Aerosols



- Can act as CCN & affect particle hygroscopicity.
- Organics affect droplet growth kinetics, contribute solute, decrease surface tension.
- What is the source of organic aerosol?
  - Laboratory-generated from atomized solutions
  - Secondary Organic Aerosol from Smog Chambers
  - Biomass Burning Aerosol
  - Marine Aerosol from MASE Campaign
  - Urban/Polluted aerosol samples from Mexico City, Houston, Atlanta, and other sites

## Characterization Techniques

- Experimental
  - CCN Activity
  - Droplet Growth Kinetics
  - Surface Tension & contact angle
  - Functional group analysis
- Modeling
  - Kinetic Limitations

