

# Curriculum Vitae

## Hongzhi Wang

Ph.D. candidate (graduation expected in 2013)  
School of Chemical and Biomolecular engineering  
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### Research of Interest

Emulsion stabilization; Micro-encapsulation for release control or water treatment; Synthesis and self-assembly of nano-particles; Novel specialty paper development

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### Education background

- **Georgia Institute of Technology** **2009~present**  
Ph.D. candidate, Paper Science and Engineering
  - **Nanjing Forestry University** **2006~2009**  
M.S. Pulp and Paper Engineering
  - **Nanjing Forestry University** **2002~2006**  
B.S. Light Chemical Engineering
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### Research experiences

- Georgia Institute of Technology** **2009~present**
    - Researching to stabilize emulsions with nano-particles and surfactant experimentally and theoretically
    - Developing stimulus responsive microcapsules for release control
    - Modeling the colloidal interactions at the oil-water interface
  - Jiangsu Province Key Lab of Pulp and Paper Science, Nanjing Forestry University** **2006~2009**
    - Optimized the properties of paper as substrates for UF membrane
    - Prepared UF membrane through sol-gel process on the paper substrate
  - Jiangsu Province Key Lab of Pulp and Paper Science, Nanjing Forestry University** **2002~2006**
    - Set up a lab-scale equipment to simulated the environment of papermaking machine
    - Investigated the parameters influencing the filler's absorption to fibers
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### Internship experiences

- Invited summer internship, National Starch Specialty Ltd (Shanghai)** **Jul~Sep,2006**
    - Led a team investigating the method of enzyme hydrolysis to determine the starch content in the pulp( paper published )
    - Exposed to on-site technical service with company technical professionals
  - Scholarship and internship program, National Starch Specialty Ltd (Shanghai )** **Jul~Aug,2005**
    - Trained to develop social responsibilities, leadership and teamwork spirits
    - Completed team research project on wet end chemistry test of various wet end starch using PCD and CTR
    - Completed team research project on floc test of different categories of high molecular weight cationic starch
    - Presented project findings to technical supervisor board
  - Field internship, Qingshan Papermaking Mill (Fujian)** **Sep, 2005**
    - Learned the knowledge of onsite operations and maintenances of the papermaking machine
    - Drew the flowchart of production line and completed internship report
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### Skills:

Dynamic light scattering; SurPass electrokinetic analyzer; Optical microscopy; Confocal microscopy; contact angle measurements; interfacial tension measurements; AFM; SEM; PCD; CTR; paper properties characterization.

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