



Don't miss TAPPI's essential introductory course on Wet End Chemistry for a better understanding of how chemicals and additives can – and will – improve your final product!

**The TAPPI Introduction to Wet End Chemistry Course**  
**June 11-13, 2013**  
**TAPPI Training Room, Peachtree Corners, Ga. USA**

This course sells out at 25 participants. Registrations fill quickly; so register soon to reserve your seat.

Instructors for this course know that cost savings is ultimately your mark for a strong finish, so they focus the 3-day interactive training on innovative wet end chemistry principals and the use of additives to change or create new paper products. You'll learn how to:

- Reach higher efficiency and consistent, quality products
- Use chemical additives to improve or create new products
- Reduce downtime and off-spec production
- Make better judgments on selection and use of chemicals
- Troubleshoot problems and optimize performance
- Respond quickly to changing fiber qualities, regulations and competition

**Learning Outcomes**

- Identify the properties of papermaking furnish and the process components, and discuss how they interact to affect wet end chemistry phenomena.
- Discuss possible solutions to paper machine process and paper quality problems associated with wet end additives and arising from chemical deposits.
- Identify additives that can be used to change the balance of charge for purposes of process control, trouble-shooting and optimization situations.
- Identify the most important factors affecting first-pass retention and the rate of drainage of water from the fiber mat during paper formation.
- Identify classes of wet-end chemical additives that can be used to achieve paper property objectives in various grades.



**Meet Your Course Chair**

Martin A. Hubbe, Ph.D. is a TAPPI Fellow and currently serves as Professor in the Department of Forest Biomaterials at North Carolina State University in Raleigh, N.C., USA. Dr. Hubbe is a member of the American Chemical Society, TAPPI and a frequent presenter. He has nearly 120 publications to his credit and holds five patents.



**Register by May 11 for registration savings.**

**www.tappi.org/13WEC**  
**1-800-332.8686 (US)**  
**1-800-446-9431 (Canada)**

**Earn Your CEUs**

TAPPI will award **1.7 Continuing Education Units (CEUs)** for completion of the curriculum.

**Who'll Be Attending**

This introductory- to intermediate-level course is designed for mill superintendents, development engineers, chemical and process engineers, chemists, process and quality control technicians, and sales and technical service representatives. Participants should have one to five years of paper industry experience and college-level chemistry and math courses are helpful.

**What Past Participants Say**

When asked in a survey offered after this course, past participants wrote that the TAPPI Introduction to Wet End Chemistry Course enabled them to:

*"Improve sizing on high-demand systems"*

*"Improve runnability"*

*"Recommend chemicals to improve processes"*

*"Understand wet end chemistry interaction"*