



10 - 12 DEC 2018

A PRACTICAL GUIDE TO WET END CHEMISTRY

This course is specifically designed to provide a basis on which to troubleshoot paper machine runnability & product quality problems that can result from wet-end chemistry imbalances. The course includes theory, practical day to day information and troubleshooting exercises.

What you will learn:

- The functions of the individual chemicals and interactions with furnish components.
- Critical ranges of temperature, pH and chemical environment which will ensure optimum performance from these chemicals.
- The interactions of the chemical groups with each other and their dependence on the parameters of the wet-end, e.g. temperature, conductivity, dissolved ionic species and pH.
- How to troubleshoot paper machine runnability and product quality problems that can result from wet-end chemistry imbalance.
- How effective use of chemicals can help reduce costs and improve efficiency.

Who should attend ?

For anyone working in the area of paper making chemicals, such as mill chemical engineers, technical managers, shift managers, machine operators and technical specialists from chemical companies.

Registration Fees

Appita Members: NZ\$1250

Non-Members: NZ\$1500

Included in the fee: Catering, notes, and stationery.

VENUE

Kauri Room, Distinction Hotel,
390 Fenton Street
Rotorua, New Zealand

DATE

10 - 12 DECEMBER 2018

CLICK HERE TO REGISTER



www.appita.com

PROGRAM

Monday 10 Dec - DAY 1

- 10:30 AM Registration
- 10:45 AM Welcome
- 11:00 AM Water & Fibre Basics
- 12:30 PM Fibres: Basic properties of papermaking fibres
Comparison of hardwood and softwood, virgin and recycled
Chemical additives
- 1:15 PM Lunch
- 1:45 PM Class Exercises Problem Solving
- 2:30 PM Basic wet end chemistry - Part 1: Colloids
- 3:15 PM Afternoon Tea
- 3:30 PM Basic wet end chemistry - Part 2: Measurement
- 4:15 PM Class Exercises Problem Solving
- 5:00 PM Close

Tuesday 11 Dec - DAY 2

- 8:30 AM Recap from Day 1
- 9:00 AM Retention & drainage
- 10:00 AM Dyes
- 10:30 AM Morning Tea
- 11:00 AM Class exercise
- 11:45 AM Sizing - practical applications & troubleshooting
- 12:45 PM Lunch
- 1:15 PM Wet strength & dry strength
- 2:15 PM Foam and defoamers
- 3:00 PM Afternoon Tea
- 3:15 PM Pitch - causes, characterisation and control
- 4:15 PM Stickies - causes, characterisation and control
- 5:00 PM Day 2 Wrap up

Wednesday 12 Dec - DAY 3

- 8:30 AM Recap from Day 2
- 8:45 AM Microbiological control
- 9:30 AM Wet end chemistry process control
- 10:30 AM Morning Tea
- 10:45 AM Troubleshooting the wet end - class exercises
- 11:30 AM Paper Properties & Testing
- 12:30 PM Troubleshooting paper properties - class exercises
- 1:30 PM Close

For more information contact:

Appita

Karen Clark

T: +64 7 350 2252

E: appita.nz@xtra.co.nz

COURSE PRESENTERS



Dr. Martin A. Hubbe, Professor, and Buckman Distinguished Scientist, focuses on chemical additives to the paper machine, including the colloidal chemistry affecting dewatering, the charged nature of cellulosic materials and the development of dry strength.



Dr Vanderhoek is considered Australia's foremost expert on wet-end chemistry and its impact on paper machine runnability. He has been supporting the pulp and paper and related industries for over 40 years in a variety of technical and management roles; 28 years with APM/Amcor, 9 years with CSIRO and 5 years with VTT.



Dr Doug McLean has worked in the pulp & paper industry for 20+ years, majority of those years with Nalco Chemical Company (Canada, USA, NZ & Australia). Dr McLean holds a Chemical Engineering degree from the University of Maine as well as a MSc and a PhD, in wood pitch chemistry, from the University of Tasmania.