

**JANUARY 7-10, 2013 • ST. PETERSBURG, FLORIDA USA**

# 2013 KRAFT RECOVERY COURSE



**REGISTER BY DEC. 6  
TO SAVE OVER \$900.**



**Course Chairman:** Professor Honghi Tran • Director, Pulp and Paper Centre, University of Toronto  
**Course Co-Sponsors:** The Steam & Power Committee of TAPPI's Engineering Division, and the Alkaline Pulping Committee of TAPPI's Pulp Manufacture Division

## Course Schedule

### MONDAY, JANUARY 7, 2013

<b>Session 1</b>	<b><u>Introduction to the Course</u></b>
8:00 am	<b>Honghi Tran</b> University of Toronto, ON, Canada
8:20 am	1.1 The Kraft Recovery Process <b>Jim Brewster and Honghi Tran</b>
<b>Session 2</b>	<b><u>Recausticizing/Lime Reburning</u></b>
9:00 am	2.1 Recausticizing Principles and Practice <b>Dale R. Sanchez</b> Vector Process Equipment, Inc. Burlington, ON, Canada
9:40 am	Morning Break
10:00 am	2.1 Recaust. Principles and Practice (Cont'd)
10:40 am	2.2 Lime Kiln Principles & Operations - I <b>Richard Manning</b> Kiln Flame Systems, High Wycombe, UK
11:30 am	Team Conference
11:50 pm	Lunch on Your Own
1:10 pm	2.2 Lime Kiln Principles & Operations - II <b>Glenn M. Hanson</b> Industrial Kiln & Dryer Group, Louisville, KY
1:50 pm	2.3 Lime Kiln Chemistry <b>Honghi Tran</b> University of Toronto, ON, Canada
2:30 pm	Afternoon Break
2:50 pm	2.4 Refractory Installation and Maintenance <b>Thomas Gencarelli</b> Harbison-Walker Refractories, Pittsburgh, PA
3:30 pm	Kiln/Recausticizing Operations Workshop
4:30–5:30 pm	Homework/ Networking Hour/ Reception

### TUESDAY, JANUARY 8, 2013

8:00 am	Introduction to Day 2 & Team Presentation <b>Honghi Tran</b>
<b>Session 3</b>	<b><u>Black Liquor Evaporation</u></b>
8:30 am	3.1 Liquor Properties & Evaporation Basics <b>David Clay</b> Jacobs Engineering, Portland, OR
9:10 am	3.2 Evaporator Design and Operations <b>Jean-Claude Patel</b> AH Lundberg Associates, Inc. Naperville, IL
9:50 am	Morning Break
10:10 am	3.3 Evaporator Fouling <b>David Clay</b> Jacobs Engineering, Portland, OR
10:50 am	3.4 Evaporator Optimization <b>Jean-Claude Patel</b>
11:30 pm	Team Conference
11:50 pm	Lunch on Your Own
1:10 pm	3.5 Foul Condensate Stripping <b>Paul Johnson</b> AH Lundberg Associates, Inc. Bellevue, WA
1:50 pm	3.6 Tall Oil Soap Recovery <b>Doug Foran</b> Arizona Chemical Co., Savannah, GA
2:30 pm	Afternoon Break
2:50 pm	3.7 NCG Handling <b>Paul Johnson</b>
3:30 pm	Evaporator Operations Workshop
4:30–5:30 pm	Homework/Networking Hour

- Continued -

**WEDNESDAY, JANUARY 9, 2013**

8:00 am Introduction to Day 3 & Team Presentation  
**Honghi Tran**

**Session 4**     **Recovery Boilers**

8:30 am     4.1 Recovery Boiler Equipment and Issues  
**Andrew K. Jones**  
International Paper, Loveland, OH

9:10 am     4.2 Black Liquor Droplet Burning  
**Mikko Hupa**  
Åbo Akademi University, Turku, Finland

9:50 am     Morning Break

10:10 am    4.3 Black Liquor and Air Delivery  
**David Clay**

10:50 am    4.4 Recovery Boiler Chemical Principles  
**Mikko Hupa**

11:30 am     Team Conference

11:50 am     Lunch on Your Own

1:10 pm     4.5 Recovery Boiler Optimization  
**David Clay**

1:50 pm     4.6 Fireside Deposits and Plugging Prevention  
**Honghi Tran**

2:30 pm     Afternoon Break

2:50 pm     4.7 Recovery Boiler Water Treatment  
**Bob Bartholomew**  
Sheppard T. Powell Associates, Baltimore, MD

3:30 pm     Recovery Boiler Workshop

4:30–5:30 pm     Homework/Networking Hour

**THURSDAY, JANUARY 10, 2013**

8:00 am Introduction to Day 4 & Team Presentation  
**Honghi Tran**

**Session 5**     **Recovery Process Management**

8:30 am     5.1 Emissions from Recovery Processes  
**Mikko Hupa**

9:10 am     5.2 Control of Chloride, Potassium and other non-process elements  
**Honghi Tran**

9:50 am     Morning Break

10:10 am    5.3 Recovery and Utility Management  
**Jim Brewster**  
Irving Pulp & Paper, Saint John, NB, Canada

10:50 am    5.4 Corrosion & Cracking in Recovery Equipment- I  
**W. B. A. (Sandy) Sharp**  
SharpConsultant, Columbia, MD

11:30 am     Team Conference

11:50 am     Lunch on Your Own

1:10 pm     5.5 Corrosion & Cracking in Recovery Equipment-II  
**W. B. A. (Sandy) Sharp**

**Session 6**     **Emerging Issues**

1:50 pm     6.1 Energy Optimization  
**Jim Brewster**  
Irving Pulp & Paper, Saint John, NB

2:30 pm     Afternoon Break

2:50 pm     6.2 Biomass Combustion Principles and Boiler Optimization  
**Arie Verloop**  
Jansen Combustion and Boiler Technologies, Inc., Kirkland, WA

3:30 pm     Energy and Cost Reduction Workshop

4:20 pm     Concluding Remarks  
**Honghi Tran**

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