**TAPPI Training Facility** Peachtree Corners (Atlanta Metro) Georgia USA



August 7, 2014 **Tentative Schedule.** Subject to Change.

8:00-8:30 Welcome, Introductions **Learning Objectives** 

8:30-12:00 Corrugated, Corrugator Overview and Operation **Identify Main Components of a Corrugated Web** Liner Medium, adhesive.

**Board Characteristics** Liners (two sides) Medium Moisture Why Starch or Adhesive What Determines Temperatures? **Function of a Single-Wall Corrugator** With Respect to the Bond. Continuous Running.

**Pre-Heaters and Wrap Arms Bonding Factors and Variables for Combined** Board. Managing Raw Resources Paper – Starch Corrugator Center Lining Mechanical/Process

**Bonding Window Overview** Factors and Variables for Combined Board

12:00-1:00 LUNCH

1:00-5:00 **Mechanics of the Bond** Starch, Moisture, Heat, and Pressure

**Starch vs. Temperature and Paper Application Versus Heat** Paper Effect on Bonding

**Bonding Terms Mechanics of the Bond** Application Wetting/Penetration Gelatinisation Green-Bond Drying/Fully Curing.

**Starch Application** Single-Facer Double-Backer Rider Roll Contact Bar **Proper Wiping** 

**Applicator roll Film Thickness** 

Applicator Cell Pattern Applicator Roll Speed Starch Viscosity

## Wetting/Penetration

Factors that Impact Penetration Starch Viscosity Paper Starch Temperature

Heat Control & Moisture Management

Heat Transfer Conditions **Uneven Paper Tension Diagonals** Lack of Heat Lack of Penetration **Reading Board Corner Peels** Center Rip Bond Glue Line Analysis

**Bridge Temperature Management** 

**Double-Backer Hot-Plate Operation Combined Board Moisture Content** 

**Course Summary**