

# Seminar 2/2:

## WET-END OPTIMIZATION

### ANGELES BLANCO & CARLOS NEGRO

Professors, Chemical Engineering Department  
University Complutense, Madrid  
Visiting Professors at UBC's Pulp and Paper Centre

**WHEN:**  
Tuesday August 23

**TIME:**  
1:00-2:00pm

*(Seminar 1/2 will be held at  
12:00-1:00 pm)*

**WHERE:**  
Pulp & Paper Centre  
2385 East Mall  
Room 101

**WHO:**  
Open to students, faculty  
& industry

For more information,  
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**SPEAKER BIO:**

**Prof. Blanco** works in the Chemical Engineering Department of the Complutense University of Madrid (UCM). She is the leader of the Cellulose and Paper Research Group and of the Advance UCM-HOLMEN Laboratory placed within the facilities of Holmen Paper in Madrid. Her research activities are focused on pulp and paper research in the area of wet-end chemistry, paper recycling, deposit control, sustainable water use and recently on nanotechnology and on development of treatment trains for water reuse in various industrial sectors.

**Prof. Negro** is a Professor of Chemical Engineering at the Complutense University of Madrid. His research interest is focused mainly on sustainable water use in the industry, wet-end chemistry, paper science and technology, recycling and nanotechnology. Carlos' group has made a broad range of contributions to the paper recycling industry and the sustainable water use for different industrial sector including: chemical industry, paper industry, petrochemical, packaging, stainless steel and food industries. He is also President of the Spanish Chemistry & Society Forum.

**ABSTRACT:**

Chemical treatments can affect not only the efficiency of the process (including the rate of production and various costs), but also the uniformity of the paper product, its optical properties, and its strength. Therefore, wet-end optimization is a challenge that has to be adapted to each particular case.

Wet-end optimization is complicated due to the instabilities caused by raw material and process conditions which can have different effects on the runnability of the paper machine and the properties of the final paper. Thus, it is important not only to understand the wet-end chemistry but also the impact of trends in papermaking on wet end and its consequences on the final product.

During this seminar we will address:

- How to improve the effectiveness of papermaking chemicals by controlling the aggregation mechanism.
- Balance between retention and drainage.
- Integration of water and retention system management.
- On-line wet end control
- Wet end audit - A case study

