FREE INDUSTRY SEMINAR Nano Cellulosic Materials in the Recycling Paper Industry

Hosted by BioPRIA in conjunction with Appita

www.biopria.com

BioPRIA and Appita are delighted to invite you to attend a free seminar by visiting Professors Angeles Blanco and Carlos Negro from the ChemEng Department, University Complutense of Madrid.

This seminar will summarize the production and characterization of different nano cellulosic materials and their application in the recycling paper industry. The seminar is recommended for researchers and process engineers from industry and academia interested in the applications and possibilities of this renewable nanomaterial.

- WHEN: 28 August 2018
- TIME: 10:00 am 11:30 am
- WHERE: BioPRIA, Building 59, 15 Alliance Lane, Monash University, Clayton Campus (Morning tea will be provided)

OR Join online via ZOOM

PARKING: Ticket parking available at the multilevel carpark just off Research Way.

CLICK HERE TO REGISTER VIA EVENTBRITE REGISTRATIONS CLOSE 23 August 2018

For further information please contact the Appita Office: admin@appita.com







PROGRAM

10: 00 AM WELCOME - Professor Gil Garnier, Director BioPRIA

10:15 AM NANO CELLULOSIC MATERIALS IN THE RECYCLING PAPER INDUSTRY

This seminar will summarize the production and characterization of different nano cellulosic materials and their application in the recycling paper industry. It reviews potential improvements in mechanical, physical and optical properties of paper and board product; the interactions of these nano cellulosic materials with the wet-end, i.e. solids retention, water drainage and paper formation; as well as the uses of CNF to improve water reuse and energy savings in the recycling paper industry.

During this seminar we will address issues intending to inspire attendances to think about many open questions in our days:

- Which is the nano cellulosic materials potential to contribute to overcome the limits of paper recycling?.
- Which are the benefits of nano cellulosic materials on mechanical, physical and optical paper properties?.
- Is it possible the direct production of CNC from recycled papers?.
- The production of high filler-loaded recycled papers is affected by high values of linting and low values of strength, could CNFs play a role?
- Is it nano fibrillated cellulose (CNF) an alternative to mechanical beating to improve the strength properties of paper?
- The use of BC to improve paper strength is usually limited by the decrease of tear index. Could these two effects be decoupled by the addition of BCNF of low fibrillation?
- · How the nano cellulosic materials interact with the retention aids?
- It is possible to avoid the negative effect on nano cellulosic materials on drainage?
- Which are the challenges in using nano cellulosic materials in recycling in our days?. Tips to help developing new ideas in this field.

11:30 AM DISCUSSION & WRAP UP





PRESENTERS



Carlos Negro is Professor of Chemical Engineering at the Complutense University of Madrid. His research interest is focussed mainly on sustainable water use in the industry, wet-end chemistry, paper science and technology, recycling and nanotechnology. Carlos group has made broad range of contributions to the field of sustainable water use for different industrial sector including: chemical industry, paper industry, petrochemical, packaging, stainless steel and food industries. He has extensive domestic and international collaborations participating in more than 100 research projects (regional, national, European and worldwide, public and industrial funded, fundamental and applied). He is member of the working group Water in the Industry of the European Technology Platform for Water.

Membership: AIChE Member Life, Fellow-RSC, ACS, ANQUE, IASPM, IWA.



Angeles Blanco is Professor of Chemical Engineering at the Complutense University of Madrid. Since 1990 she has been involved in pulp and paper research in the area of wet-end chemistry, sustainable water use, paper recycling, deposit control and in nanocellulose production and applications. She is the leader of the Cellulose and Paper Research Group of the Complutense University of Madrid since 2004 and she has been leader of the Advance UCM-Holmen Laboratory from 2005 to 2016. She has been the COST Spanish representative for the Forestry Products Domain for 15 years, she was member of the Research Committee of TAPPI for 6 years, advisor expert on science and technology of the EU Framework Programs, board member of the European Water Partnership (EWP) collaborating in the groups of Sustainable Water Management, Water and Energy and Climate Change, she has actively participated in the development of the Vision and Research Agenda of the European Forestry and Forestry Products Technology Platform, she has been Vice-president of the European Fibre and Paper Research Organisations (EFPRO) during 6 years, member of the Research Committee of CEPI during 10 years and Scientific Advisor of the Spanish Pulp and Paper Institute of Spain(IPE) during 4 years. She is editor of the journal Environmental Science and Pollution Research

Membership: APPITA, IWA, TAPPI, IASPM, AIChE and ANQUE.









