

**The 6<sup>th</sup> International Symposium on  
ADVANCED TECHNOLOGIES  
FOR THE PULP AND PAPER INDUSTRY**

**Braila – ROMANIA, September 6 - 9, 2011**

**Celebrating *55 years* of CEPROHART activity**

**Organized by**

**PULP AND PAPER RESEARCH AND DEVELOPMENT  
INSTITUTE – CEPROHART BRAILA**

**TECHNICAL ASSOCIATION FOR ROMANIAN PULP AND PAPER  
INDUSTRY (ATICHR)**

**With the support of:**

**MINISTRY OF EDUCATION, RESEARCH, YOUTH AND SPORT  
National Authority for Scientific Research**

**Bucharest - ROMANIA**

**Sponsors: S.C. VRANCART S.A. Adjud  
S.C. PETROCART S.A Piatra Neamț**

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**Violeta Negreanu** – Head of Suceava Research Team, SC CEPROHART SA – Suceava Subsidiary

**Eva Cristian** – Head of Development and Engineering Department, SC CEPROHART SA Braila

## GENERAL PROGRAMME

### Tuesday, 6 September 2011

18<sup>00</sup> – 20<sup>00</sup> Registration, CEPROHART BRAILA, Al.I.Cuza Blvd no.3

20<sup>00</sup> Cocktail

### Wednesday, 7 September 2011

9<sup>00</sup> – 9<sup>15</sup> Official opening of Symposium

9<sup>15</sup> – 13<sup>00</sup> Working sessions

13<sup>00</sup> – Lunch

15<sup>00</sup> – 17<sup>45</sup> Working sessions

20<sup>00</sup> – Social programme

### Thursday, 8 September 2011

9<sup>00</sup> – 13<sup>00</sup> Working session

13<sup>00</sup> – Lunch

15<sup>00</sup> – 16<sup>30</sup> Working sessions

16<sup>30</sup> – 17<sup>00</sup> Official Symposium closing

17<sup>30</sup> – 18<sup>30</sup> Round table

20<sup>00</sup> – Official Dinner

### Friday, 9 September 2011

Danube Delta trip

### Useful information:

Registration of participants and Cocktail will be held at CEPROHART Headquarters, Al.I.Cuza Blvd no.3, Braila

Official opening of the Symposium and the scientific communications will be held in the Conference Hall of Maria Filotti Theatre, Traian Square no.1, Braila

### Tuesday, 6 September 2011

Venue: SC CEPROHART SA, Braila, Al.I.Cuza Blvd no.3

18<sup>00</sup> – 20<sup>00</sup> Registration

20<sup>00</sup> Cocktail

## Wednesday, 7 September 2011

Venue: Maria Filotti Theatre, Traian Square no.1, Braila

8<sup>00</sup> - 9<sup>00</sup> Registration of participants

9<sup>00</sup> – 9<sup>30</sup> Official Opening of Symposium

### 9<sup>30</sup> – 11<sup>00</sup> Plenary Conferences

Lecture Room: Conference Hall

Chairman: Prof. Dan Gavrilescu

#### 1. Romanian pulp, paper and corrugated board industry. Current state and perspectives

*Constantin Chiriac*, Patronizing Federation of Pulp and Paper Industry in Romania – ROMPAP, Bucharest, Romania

*Petronela Nechita, Dan Buteică, Boris Andronic*, Pulp and Paper Research and Development Institute – CEPROHART SA Brăila, Romania

#### 2. Advanced sorting of recovered paper- a key solution to improve environmental credentials of paper recycling

*Elena Bobu, Alina Iosip*, “Gheorghe Asachi” Technical University Iasi, Romania

*Cristian Banarie*, SC VRANCART SA Adjud, Romania

#### 3. New pulping and coarse screening concept for high reject content OCC raw materials

*Tero Jussila* – Tampulping Oy, Tampere, Finland

### 11<sup>00</sup> - 11<sup>20</sup> Coffee break

### 11<sup>20</sup> – 13<sup>00</sup> Working Session I

Lecture Room: Conference Hall

Chairman: Prof. Dan Gavrilescu

#### 4. Energy saving in paper machine vacuum system. How to utilize modern process and variable speed drive technology

*Jussi Lahtinen*, Runtech Systems Oy, Finland

#### 5. Dewatering equipments in wet-end

*Shaun Macklin*, Groupe Laperrière & Verreault Inc., Austria

#### 6. Company presentation: FLOWTEC partner on the field of pulp and paper industry

*Roman Weiss*, Flowtec Industrietechnik GmbH, Austria

### 13<sup>00</sup> – Lunch

### 15<sup>00</sup> – 17<sup>45</sup> Working Session I

15<sup>00</sup> – 16<sup>15</sup>

Lecture Room: Conference Hall

Chairman: Prof. Elena Bobu

#### 7. Research aimed at obtaining high yield pulps in the presence of some additives

*Gheorghe Duțuc*, SC SOMEȘ SA Dej, Romania

*Dan Gavrilescu*, “Gheorghe Asachi” Technical University Iasi, Romania

#### 8. Opportunities for a sustainable development of the wood biomass sector

*Mihaela Begea, Sevastița Vrăciu, Corina Berkesy*, ICPE Bistrița SA, Bistrița, Romania

**9. New perspectives on the hydrolytic conversion of vegetal materials**

*Adina Elena Panzariu, Teodor Malutan, "Gheorghe Asachi" Technical University Iasi, Romania*

**10. Research regarding the manufacturing of the food-packaging paper with barrier properties**

*Daniela Manea, Cătălina Mihaela Talaşman, Argentina Radu, Pulp and Paper Research and Development Institute, CEPROHART SA, Brăila, Romania*

*Dan Gavrilescu, "Gheorghe Asachi" Technical University Iasi, Romania*

*Mariana Ionescu, Gabriel Mustăţea, Giuseppe Spadaro, National Institute of R&D for Food Bioresources – IBA Bucharest, Romania*

**11. Studies regarding the influence of some endogenous factors on paper ageing**

*Nechita Petronela, Maricica Burlacu, Pulp and Paper Research and Development Institute, CEPROHART SA, Brăila, Romania*

*Nicoleta Melniciuc, Alexandru Ioan Cuza University, Iaşi, Romania*

**16<sup>15</sup> – 16<sup>30</sup> Coffee break**

**16<sup>30</sup> – 17<sup>45</sup>**

Lecture Room: Conference Hall

Chairman: Prof. Teodor Măluţan

**12. Possibilities of bio refining of some secondary products resulted from bast fibers processing**

*Iulian Andrei Gilca, Adrian Cătălin Puitel, V.I.Popa, "Gheorghe Asachi" Technical University Iasi, Romania*

**13. SR EN 16001:2009 – A new challenge for organizations**

*Elena Tatiana Constantin, TÜV Rheinland Romania*

**14. Effects of recycling on rheological properties of papers from secondary fibres**

*Florin Ciolacu, "Gheorghe Asachi" Technical University Iasi, Romania*

**15. General aspects concerning the tensile strength using „zero-span” test**

*Violeta Negreanu, Maria Cantea, Vasile Negreanu, Anca Axinte, Pulp and Paper Research and Development Institute, CEPROHART SA, Suceava Subsidiary, Romania*

*Adriana Gabriela Banu, SC AMBRO SA Suceava*

**16. Chitosan derivatives for surface paper coating**

*Raluca Nicu, Elena Bobu, "Gheorghe Asachi" Technical University Iasi, Romania*

**15<sup>00</sup> – 17<sup>45</sup> Working Session II**

**15<sup>00</sup> – 16<sup>15</sup>**

Lecture Room: Theatre Foyer

Chairman: Dr. Florin Ciolacu

**17. Use of ferromagnetic microwire as information carrier**

*V.S. Larin, L.I Chicu, "Microfir Tehnologii Industriale" srl, Chişinău, Republica Moldova*

*Valentin Midoni, S.C. MEDAPTEH S.R.L., Bacău, Romania*

**18. Elements of paper securing philosophy and security techniques for value documents**

*Constantin Stanciu, „Dunarea de Jos” University, Galati, Romania*

**19. The modernisation of the Ceprohart SA R&D and micro production infrastructure to ensure the extension and diversification of production and research in the special paper products area**

*Dan Buteică, Petronela Nechita, Boris Andronic, Ionel Gavrilă, Gicu Cazan, Constantin Secară,* Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

**20. Glass-Coated microwires for modern applications**

*Maria Mirela Codescu, Wilhelm Kappel, E. Patroi, E.Manta, E.Erdei,* R&D National Institute for Electrical Engineering ICPE-CA Bucharest, Romania

**21. Research on development of metallic micromarkers manufacturing technologies**

*Diana Paius, Mihaela Pelteacu, Mona Mihailescu,* Optoelectronica - 2001, Bucharest, Romania

**16<sup>15</sup> – 16<sup>30</sup> Coffee break**

**16<sup>30</sup> – 17<sup>45</sup>**

Lecture Room: Theatre Foyer

Chairman: Prof. Constantin Stanciu

**22. Techniques for identification and control of security elements, developed and implemented by the Research and Expertise Laboratory of CN National Printing House**

*Iulian Avram, Ramona Tudor,* National Printing House, Bucharest, Romania

**23. The transfer of security microwires paper technology to the CEPROHART Paper Machine**

*Constantin Constantin, Ion Zăpodeanu, Dan Buteică, Ionel Gavrilă, Maricica Burlacu,* Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

**24. Elements and methods to secure document designed paper and products with high level of protection**

*Maricica Burlacu, Ion Zăpodeanu, Dan Buteică, Petronela Nechita,*

*Daniela Manea, Catalina Talaşman, Constantin Constantin,* Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

**25. Technique for paper securing: New Mec. New SECUR 20**

*Traian Nanu,* Primatehnic SRL, Bucharest, Romania

**20<sup>00</sup> – Social programme (Concert of rock symphonic music)**

## Thursday, 8 September 2011

Venue: Maria Filotti Theatre, Traian Square no.1, Braila

### 9<sup>00</sup> – 10<sup>45</sup> Working session I

Lecture Room: Conference Hall

Chairman: Dr. Petronela Nechita

#### 26. On stacking strength of corrugated board boxes

*Dan Gavrilescu*, „Gheorghe Asachi” Technical University, Iasi  
Romania

*Ana Toth*, Dunapack Rambox Srl, Sfantu Gheorghe, Romania

#### 27. Surface sizing and coating of liner and cardboard

*Per Emilsson*, UMV Coating A,B Säffle, Sweden

*Fangl Friederich*, Fangl Technologies e.U., Bad Vöslau, Austria

#### 28. Realease paper: Can phosphate esters be an alternative to silicone ?

*Dan Belošinschi, Bruno Chabot and François Brouillette*, Centre de Recherche sur les Matériaux Lignocellulosiques (CRML), Université du Québec à Trois-Rivières (UQTR), Québec, Canada,

#### 29. Synthesis of Chitosan derivatives for target applications in papermaking

*Mihail Lupei, Elena Bobu*, „Gheorghe Asachi” Technical University, Iasi Romania

#### 30. Alkaline pulping and oxygen delignification of rapeseed fibers to low lignin content

*Bogdan Marian Tořănică, Adrian Cățălin Puițel, Dan Gavrilescu*, „Gheorghe Asachi” Technical University, Iasi Romania

#### 31. Company presentation: SC APLIND SRL Bucharest – Direct Use of Gas Turbine Exhaust Gas

*Mihai Gustiuc, Sorin Ionescu*, SC APLIND SRL Bucharest, Romania

### 9<sup>00</sup> – 10<sup>45</sup> Working session II

Lecture Room: Theatre Foyer

Chairman: Prof. Geta Cârăc

#### 32. Watermarking. A role in security in the 21<sup>st</sup> Century

*Stuart Robertson*, Woollard & Henry Ltd. Aberdeen, Scotland, UK.

#### 33. The identifying of the paper and board fibrous composition by using colour reaction

*Argentina Radu, Daniela Manea, Cățălina Mihaela Talașman, Dan Buteică*, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

#### 34. Pigments for value papers securing

*Constantin Stanciu, Ion Zăpodeanu, Geta Cârăc, Rodica Dinică*,

“Dunarea de Jos” University, Galati, Romania

Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

#### 35. Research aimed at implementing new systems for printing value documents, using nanoparticle security elements

*Constantin Constantin, Dan Buteica*, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania

*Vlad Socoliuc*, Romanian Academy, Timisoara Subsidiary

**36. Comparative aspects on the use of security paper or plastics (polycarbonate) for travel documents (or other value documents)**

*Valentin Moroiu, Cosmin Staicu, National Printing House, Bucharest, Romania*

**10<sup>45</sup> – 11<sup>00</sup> Coffee break**

**11<sup>00</sup> – 13<sup>00</sup> Working session I**

Lecture Room: Conference Hall  
Chairman: Dr. Daniela Manea

**37. Incineration of combustible waste resulting from technological processes within Vrancart SA Adjud**

*Vasile Matcasu, Mihai Marcel Botez, Vrancart SA Adjud, Romania*

**38. Bleaching of wood pulp and natural fibers using POMS**

*Gheorghe Dutuc, Alexandru Botar, Paula Maria Crăciun, Adina Maria Bodescu, Dan Gavrilesu, Grigore Craciun*

Somes SA Dej, Romania

Jialex SRL Cluj, Romania

University of Agricultural Sciences and Veterinary Medicine, Cluj, Romania

Aurel Vlaicu University Arad, Romania

“Gheorghe Asachi” Technical University, Iasi, Romania

**39. A chance for archive future: disinfestations by ionization radiation treatment – physical – mechanical tests on the materials from the treated archives**

*Cătălina Mihaela Talaşman, Daniela Manea, Argentina Radu, Maricica Burlacu, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania*

**40. Aspects regarding compliance of improved barrier papers with food safety and environment requirements**

*Mariana Ionescu, Gabriel Mustăţea, Valentin Ionescu, Giuseppe Spadaro, National Institute of R&D for Food Bioresources – IBA Bucharest, Romania*

*Daniela Manea, Cătălina Mihaela Talaşman, Argentina Radu, Maricica Burlacu, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania*

**41. Radiation paper drying**

*Marcel Mureşan, Constantin Vasile Ionescu, SC Calorset SRL, Bucharest, Romania*

**42. The analysis of the potential impact on the environment of products and processes through Life Cycle Assessment**

*Mihaela Daniela Dumitran, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania*

*Dan Gavrilesu, “Gheorghe Asachi” Technical University Iasi, Romania*

**43. Using frequency inverters with high precision speed references and CanOpen and Ethernet communication protocols for paper machine drive**

*Cornel Enus Răduca, Valeriu Policarp, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania*  
*Mihai Crăescu, Elcatin Serv Srl Brăila, Romania*

**13<sup>00</sup> – Lunch**

## 15<sup>00</sup> – 16<sup>30</sup> Working session I

Lecture Room: Conference Hall

Chairman: Dan Buteică

### 44. Environmental issues related to incineration of waste resulting from technological processes at VRANCART Adjud

*Vasile Matcașu, Mihai Marcel Botez, SC VRANCART SA Adjud, Romania*

### 45. Method and aggregate for drying of combustible waste, before incineration, resulted from papermaking process

*Mihai Marcel Botez, Marcel Mureșan, Constantin Vasile Ionescu, Vasile Matcașu, SC VRANCART SA Adjud, Romania, SC CALORSET SRL Bucharest, Romania*

### 46. Current state and future actions of the Project: Organizational aid and training programs for personnel employed in the pulp, paper and board sector in order to adapt to dynamics of the domestic and foreign market

*Petronela Nechita, Marina Merticaru, Adrian Nechita, Pulp and Paper Research and Development Institute, CEPROHART SA Braila, Romania*

### 47. Good practices and trends of organization labour at European level

*Steluța Nisipeanu, Maria Haiducu, Maria Rus, The National Research and Development Institute on Occupational Safety "Alexandru Darabont" (INCDPM) Bucharest, Romania*

### 48. ESCO integrated Services (Energy Service Company)

*Marcel Mureșan, Mihai Marcel Botez, Constantin Vasile Ionescu, Vasile Matcașu, SC CALORSET SRL Bucharest, SC VRANCART SA Adjud, Romania*

## 16<sup>30</sup> – 17<sup>00</sup> Official Symposium closing

## 17<sup>30</sup> – 18<sup>30</sup> Round table

Moderator: Constantin Chiriac - Patronizing Federation of Pulp and Paper Industry in Romania – ROMPAP, Bucharest, Romania

## 20<sup>00</sup> – Official Dinner

## Friday, 9 September 2011

Danube Delta trip

