



### **Cost Action FP1005**

# Fibre suspension flow modelling - a key for innovation and competitiveness in the pulp & paper industry

### MC and WG Meeting Agenda

## Nancy 13-14 October 2011 INPL: 2 av. de la Forêt de Haye - Vandoeuvre-les Nancy

### DAY 1 - THURSDAY, OCTOBER 13, 2011

- 1. (9:30-9:45) Welcome to participants by chairman and local organiser
- 2. (9:45–10:00) Report on the status of the Action (C. Marchioli)
- 3. (10:00–10:20) Short Term Scientific Missions: application procedure (D. Asendrych)
- 4. (10:20-10:50) Coffee Break
- 5. (10:50-12:30) Scientific presentations from Action members and experts collaborating in each WG
  - Work at KTH, Stockholm: themes and equipment F. Lundell (WG1)
  - A study of rheological properties of complex fluids. A proposal for co-operation **I. Salmela** (WG1)
  - Experimental investigation on secondary structures developing in a turbulent pipe jet and extension to fibre laden case A. Capone (WG1)
  - Modeling fiber suspensions flows using rheological data M.G. Rasteiro (WG2)
  - Complex Impedance Tomography: A non-invasive procedure for imaging two-phase flow systems **P. Faia** (WG2)
  - Fibre orientation and related head-box optimization systems J. Hamalainen (WG3)
  - On the orientation of flat objects in Brownian shear flows J.L. Angilella (WG3)
  - Simulation of micro structure mechanics in dynamic fibre networks T. Kuntzsch (WG3)
- 6. (12:30-13:30) Lunch Break
- 7. (13:30–15:30) Scientific presentations from Action members and experts collaborating in each WG
  - New challenges in modeling the flow in fibrous suspensions: increasing the secondary fiber content of paperstock **F. Ciolacu** (WG1/WG2)
  - Ceprohart expertise in the field of fibre suspension flow. Future challenges **P. Nechita** (WG1)
  - Imaging methods in multi-phase flow research P. Saarenrinne (WG1)

- Rheological concepts for improving efficiency in papermaking operations J.C. Roux (WG2)
- Friction loss and velocity profile in pulp flows M. Rueff (WG1/WG2)
- TBA R. Zelm (WG2)
- Two sectors, same questions: Flow simulations as tools in paper and wood-based panel manufacture **H. Thömen** (WG3)
- Modelling of gas-solid turbulent channel flow with non-spherical particles with large Stokes numbers B. van Wachem (WG3)
- Simulations of inertial point-particles at NTNU. Part I: Overview of recent activities L. Zhao (WG3)
- Simulations of inertial point-particles at NTNU. Part II: Some recent examples C. Nilsen, L. Zhao (WG3)
- Microstructure simulation of early paper forming using immersed boundary methods **E. Svenning** (WG3)
- 8. (15:30-16:00) Coffee Break
- 9. (16:00–18:30) Management Committee meeting (for MC members/substitutes only)
  - 9.1 Adoption of the MC meeting agenda
  - 9.2 Presentation of the delegations
  - 9.3 Adoption of the kick-off meeting minutes
    - 9.3.1 News from the Chair (C. Marchioli)
    - 9.3.2 News from the Administrative Officer (C. Azevedo)
  - 9.4 Nomination and selection of new experts (from both COST and non-COST countries) to be invited to working group meetings
  - 9.5 Training school 2012 on experimental methods at VTT and KTH
    - 9.5.1 Presentation of current schedule
    - 9.5.2 Selection of lecturers and attendees
  - 9.6 Short Term Scientific Missions (STSM)
    - 9.6.1 Evaluation and decision on submitted STSM applications
  - 9.7 Dissemination
    - 9.7.1 Book publication: selection of contributions and publication deadlines
    - 9.7.2 Annual report
    - 9.7.3 Symposium on "Rheology of fiber suspensions" at the XVI<sup>th</sup> Intern. Congress on Rheology: Announcement by M.G. Rasteiro
  - 9.8 Action website
    - 9.8.1 Report on current state (by C. Marchioli)
    - 9.8.2 Discussion on further development and content
  - 9.9 Place and date for the next MC Meeting
  - 9.10 Any Other Business (AOB)
    - 9.10.1 Definition of test cases (to be discussed further within the parallel WG meetings)
    - 9.10.2 "Tour de table" Report of WG leaders on:
      Present/future WG activities
      Present/future national coordination and communication activities

### DAY 2 - FRIDAY, OCTOBER 14, 2011

- 1. (9:30-11:00) Parallel WG meetings (chaired by WG leaders)
  - 1.1 Definition of test cases
  - 1.2 Involvement of industrial partners
    - 1.2.1 Which industrial partners?
    - 1.2.2 Procedure for inviting industrial partners to meetings
  - 1.3 Expected output during the Action's first year
  - 1.4 Place and date for the next WG Meeting (if needed)
  - 1.5 AOB
- 2. (11:00-11:30) Coffee Break
- 3. (11:30–12:30) Open technical discussion
  - 3.1 Report of each WG leader on WG meeting decisions/outcomes
  - 3.2 Auditors' comments
- 4. (12:30-13:30) Lunch Break
- 5. (13:30-15:00) Open technical discussion
  - 5.1 Selection of relevant test cases
  - 5.2 Final remarks
- 6. (15:00-15:15) Closure of the Meeting

#### Notes:

• Juha Salmela will give a presentation on Laboratory-Scale Pipe Rheometry: A Study of a Microfibrillated Cellulose Suspension during the WG1 Meeting