

## 7<sup>th</sup> MC-WG Meeting of COST Action FP1005

June 3-5, 2014

KTH & NORDITA, Stockholm (Sweden)

### Agenda

#### DAY 1 – TUESDAY, JUNE 3

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|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 08:30 | <b>Registration and coffee</b>                                                                                                                                                           |
| 09:20 | <b>Welcome Address</b>                                                                                                                                                                   |
| 09:30 | <u><i>Keynote:</i></u> <b>Flow processes for novel nano structured bio-based materials</b><br>Speaker: Daniel Söderberg (Royal Institute of Technology, Stockholm, Sweden)               |
| 10:10 | <b>EIT use latest advances: characterization of pulp suspension distribution and estimation of suspension velocity</b><br>Speaker: Pedro Faia (University of Coimbra, Coimbra, Portugal) |
| 10:30 | <b>Online orientation measurements of elongated particles by X-ray scattering</b><br>Speaker: Karl Håkansson (Royal Institute of Technology, Stockholm, Sweden)                          |
| 10:50 | <b>Cost effective drag reduction by bio-polymer additives in industrial size turbulent pipe flow</b><br>Speaker: Mattia Simeoni (University of Udine, Udine, Italy)                      |
| 11:10 | <b>Transitional fibre suspension flow in a plane channel</b><br>Speaker: Matias Kvik (Royal Institute of Technology, Stockholm, Sweden)                                                  |
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| 11:30 | <b>Lunch</b>                                                                                                                                                                             |
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| 13:00 | <b>Fiber photogrammetry</b><br>Speaker: Pentti Saarenrinne (Tampere University of Technology, Tampere, Finland)                                                                          |

13:20	<b>Novel experimental results on the rheology of fiber-laden foams</b> Speaker: Antti Koponen (VTT, Jyväskylä, Finland)
13:40	<b>Numerical modelling of air-fiber flows</b> Speaker: Jelena Andric (Chalmers University of Technology, Gothenburg, Sweden)
14:00	<b>New advances in modelling of fiber suspension flow using a pseudo-homogeneous approach</b> Speaker: Maria Graça Rasteiro (University of Coimbra)
14:20	<b>Lattice Boltzmann simulation of finite size particle-fluid suspension and sedimentation</b> Speaker: Minh Do-Quang (Royal Institute of Technology, Stockholm, Sweden)
14:40	<b>Coffee Break</b>
15:10	<b>On the validity of Jeffery torques for rigid particles in turbulence</b> Speaker: Jure Ravnik (University of Maribor, Maribor, Slovenia)
15:30	<b>On the relative motion between rigid fibers and fluid in turbulent channel flow</b> Speaker: Cristian Marchioli (University of Udine, Udine, Italy)
15:50	<b>Nonlinear rotational dynamics of a spheroidal particle in simple shear flow</b> Speaker: Tomas Rosen (Royal Institute of Technology, Stockholm, Sweden)
16:10	<b>Force and torque on a finite-size inclined fiber</b> Speaker: H.I. Andersson (Norwegian Univ. of Science & Technology, Trondheim, Norway)
16:30	<b>Funding opportunity for European universities to perform pilot trials at Innventia</b> Speaker: Paul Krochak (Innventia, Stockholm, Sweden)
16:40	Closing Discussion
18:00	Transfer to Dinner
18:30	Social Dinner

## DAY2 – WEDNESDAY, JUNE 4

09:00	<b>Viscoelastic fluid suspension problems in fracking and drilling</b> Speaker: Eric S.G. Shaqfeh (Stanford University, Stanford, USA)
09:20	<b>Laboratory and numerical models for logjams</b> Speaker: Michael Wilkinson (Open University, Milton Keynes, UK)
09:40	<b>Chaotic sedimentation of low-Re particles in a vertical channel : the effect of particle/particle and particle/wall interactions</b> Speaker: Jean-Regis Angilella (Université de Caen, ESIX/LUSAC, France)
10:00	<b>Coffee Break</b>
10:30	<b>Break-up of small aggregates in bounded and unbounded turbulent flows</b> Speaker: M.U. Babler (Royal Institute of Technology, Stockholm, Sweden)
10:50	<b>Numerical and experimental studies on irregular non-spherical particle transport</b> Speaker: Martin Sommerfeld (Martin-Luther-Universität Halle-Wittenberg, Halle, Germany)
11:10	<b>Perspectives for the understanding of complex deposits on surfaces</b> Speaker: Christophe Henry (University of Gdansk, Gdansk, Poland)
11:30	<b>How large particles filter the motions of ambient turbulence</b> Speaker: Evan Variano (UC Berkeley, Berkeley, USA)
11:50	<b>Lunch</b>
13.00	Lab-visit at KTH Mechanics (approx 1 hour)
14.00	Tour at Innventia AB (approx 2 hours)

## DAY3 – THURSDAY, JUNE 5

09.00      WG meetings

11.00      Update on Horizon 2020 proposals

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12:00      **Lunch**

13.00      MC meeting and proposals discussion

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15:00      **Meeting closure**

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