Agenda - Characterization Cluster Workshop

Covent Garden
Place Charles Rogier 16, Brussels, Belgium
Room: COV2 – 9/183

Thursday 27th November 2014
Start Time 09:00

Time	Item	Name of presenter
09:00 - 09:20	Welcome and opening of the meeting. Objectives, scope, structure of the cluster	• Christos Tokamanis, EC • Hans-Hartmann Pedersen, EC • Rene Martins, EC
Scoping papers – presentations by PTAs:		
09:20 – 09:40	"Sensors"	• Rudolf Frycek
09:40 - 10:00	"Characterisation Tools"	• Costas Charitides
10:00 - 10:20	"Characterisation for Model Validation"	• Gerhard Goldbeck
10:20-10:50 Coffee break		
10:50 – 12:30	**3 Parallel Sub-cluster Meetings** • "Sensors" … • "Char. for Model Validation" • "Characterisation Tools" See below for detailed agenda of each sub-cluster parallel meeting	• Rudolf Frycek • Gerhard Goldbeck • Costas Charitides
12:30-14:00 Lunch break		
14:00 – 15:00	**3 Parallel Sub-cluster Meetings – cont'd**	• Rudolf Frycek • Costas Charitides • Gerhard Goldbeck
15:00-15:30 Coffee break		
15:30 – 16:45	Sub-cluster Conclusions and Plenary Discussion	• Rudolf Frycek • Costas Charitides • Gerhard Goldbeck
16:45 – 17:00	Future planning	• Hans-Hartmann Pedersen, EC • Rene Martins, EC

PS: Standardization and Instrumentation will be addressed in all sessions

Detailed agenda - 3 Parallel Sub-cluster Meetings

"Sensors"

1) Introductory presentations*)

- **Prof. Andreas Schütze (University of Saarland)** – Sensor systems for environment and health: challenges and opportunities
- **Prof. Dermot Diamond (Dublin City University)** - Challenges in autonomous environmental sensing
- **Prof. Vladimir M. Mirsky (Brandenburg University of Technology Cottbus)** – Change of the paradigm: smart chemical sensors with additional integrated functions
- **Dr. Adriele Prina Mello (IMM/AMBER/CRANN-TCD)** - Challenges in sensors for health applications: the future of cancer diagnostics.
- **Dr. Michele Penza (ENEA)** – New Sensing Technologies for Environmental Sustainability in Smart Cities (COST Action TD1105 EuNetAir)
- **Olivier Martimort (NanoSense)** - Challenges for sensor industrialisation

2) Discussion) and formulation of the sub-cluster scope details**

- Gathering of recommendations for programming and policy making,
- Communication and organising common dissemination events,
- General support to innovation, business planning and financing,
- Agree on communication tools towards other possible cluster (or sub-cluster) participants and to the general public (e.g. website),
- Identify personnel leading such clustering activity.

"Characterisation for Model Validation"

1) Introductory presentations*)

- **Gerhard Goldbeck** - Overview, intro and aims
- **Anna Proykova (Co-Nanomet, Sophia University) –** Uncertainties and limitations in metrology and simulation at the nanoscale
- **VANESSA project**: selected podcasts on Validation of Numerical Engineering Simulations: Standardisation Actions
- **Eoin O'Reilly (DEEPEN, Tyndall National Institute, Cork)** – Characterisation and model validation of nanostructures for electronic and photonic devices.
- **Speaker TBC** - Characterisation and model validation in Multiscale Modelling Projects
- **Chris Ebert (Fraunhofer IWM), Marco Sebastiani, (UNIROMA3) -** The European Materials Modelling Council activity in Validation.

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“Characterisation Tools”

1) Introductory presentations*)

- Challenges and advances of microscopy in materials science (MEMS, NEMS, biological samples, thin films). **Tofail Syed, UL (LANIR)**
- Monitoring of nano-scale processes and production. **Marco Sebastiani, UNIROMA3 (I-STRESS)**
- Industrial and SMEs ability to in-line characterization for optimization of scale-up. **Mariëlle Wouters, TNO (INSIGHT)**
- Nanometrology standardization methods for magnetic materials and nanostructured films. **Lars Ridderstrom, ICT (NANOMAG)**
- Linking of metrology/standardization with industry. The role of EU and interntional bodies. **Lars Mattsson, KTH (NEMI)**

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** Introductory Presentations will last 10 minutes and 5 minutes will be used for raising questions. Total 1:30 hrs.*

** Each presentation should reflect the sub-cluster goals and scientific achievements/challenges and not be focused on the projects' progress*

*** 2nd discussion part is 1 hour*