

COST Action IC1208

Integrating devices and materials: A challenge for new instrumentation in ICT

IC1208 Joint 2nd Management Committee Meeting (MCM2)
and Meetings of Working Groups WG1–WG4

CEMDATIC. Escuela Técnica Superior de Ingenieros de Telecomunicación

Universidad Politécnica de Madrid

Madrid (Spain), 3-4 October 2013

Venue

The meeting will be held at the Escuela Técnica Superior de Ingenieros de Telecomunicación, Avda. Complutense 30, Ciudad Universitaria, 28040-Madrid. (<http://www.etsit.upm.es>)

Meetings will take place in meeting room SJ A-128.2 in the Main building (Building A) 1st floor

Registration, Poster session and coffee breaks in hall A-HAL.01 in the Main building.

Thursday, 3 October 2013, Afternoon-evening session

WG1: *Liquid crystal modification with nanostructures*

Coordinator: Prof. José Manuel Sánchez-Pena (Universidad Carlos III de Madrid, Spain)

Oral presentations

- 15:00 Prof Darko MAKOVEC (Department for Materials Synthesis, Joef Stefan Institute, Ljubljana, Slovenia): *Research at the Department for Materials Synthesis: Nanoparticles, Nanocomposites and Nanosuspensions*
- 15:20 Prof Federico Cebollada Baratas (CEMDATIC, Universidad Politécnica de Madrid, Spain): *Tailoring magnetic and dielectric materials: fundamental and applied research*
- 15:40 Ms Beatriz BERNARDO (CEMDATIC, Universidad Politécnica de Madrid, Spain): *Synthesis of NiFe₂O₄-BaTiO₃ multiferroic composites*
- 16:00 Dr Cristina CIOMAGA (Faculty of Physics, Alexandru Ioan Cuza University, Iasi, Romania): *Ferroelectric and multiferroic composite materials with emergent electromagnetic properties: experimental-modelling approach*

- 16:20 Mr Nikola ILIC (Institute for Multidisciplinary Research, University of Belgrade, Serbia): *Bismuth ferrites as a single multiferroic*
- 16:40 Dr Alexey EREMIN (Soft Matter Lab, Otto-von-Guericke Universität, Magdeburg, Germany): *Structure and electro-optic properties of non-polar colloidal suspensions of anisotropic pigment particles*
- 17:00 BREAK
- 17:20 Dr Christophe BLANC (Laboratoire Charles Coulomb (UMR 5221), Axe Colloïdes, Verres et Nano-matériaux, CNRS/University Montpellier II, France): Carbon nanotubes and liquid crystals
- 17:40 Dr Vladimira NOVOTNA (Institute of Physics, Prague, Czech Republic): *Design and physical properties of new liquid crystalline compounds*
- 18:00 Prof Renaud BACHELOT (Laboratory of Nanotechnology, Instrumentation and Optics, ICD-LNIO, University of Technology of Troyes, France): *The LNIO Lab of the University of Technology of Troyes*
- 18:20 Dr Roberto CAPUTO (LiCryL-INFM/CNR & Physics Department, University of Calabria, Italy): *Interaction of Liquid Crystals with Metal Nanoparticles: Photonic and Plasmonic applications*
- 18:40 Prof Herbert DE SMET (Department ELIS, Cmst, Ghent University, Belgium): *Study of blue phase liquid crystals*
- 19:00 Prof Jose Manuel SANCHEZ PENA (Electronic Technology Department, Escuela Politécnica Superior- Universidad Carlos III, Madrid, Spain): *Research Activities of Displays & Photonic Applications Group*
- 19:20 Closing

Friday, 4 October 2013, Morning Session

WG2: *Biosensors and reading electronics*

Coordinator: Dr. Luis García-Gancedo (University of Cambridge, UK)

Oral presentations

- 09:20 Dr Marta CLEMENT (CEMDATIC, Universidad Politécnica de Madrid, Spain): *Activity of the Group of Microsystems and Electronic Materials*
- 09:40 Mr Mario DE MIGUEL RAMOS (CEMDATIC, Universidad Politécnica de Madrid, Spain): *Biosensors based on BAW resonators: FEA simulation and fabrication*
- 10:00 Dr Luis GARCIA-GANCEDO (Electrical Engineering Division, University of Cambridge, United Kingdom): *Film bulk acoustic resonators: towards a low cost, label-free multiplexing platform*
- 10:20 BREAK
- 10:40 Dr Ventsislav YANTCHEV (Department of Solid State Electronics, The Angstrom Laboratory, Uppsala University, Sweden): *Advanced Micro-acoustic devices in Frequency Control and Sensor Applications*

- 11:00 Dr Achim BITTNER (Department for Microsystems Technology, Institute of Sensors and Actuator Systems, Vienna University of Technology, Austria): *Aluminium Nitride for Resonant Sensor Applications*
- 11:20 Prof Pierre-Michel ADAM (Laboratory of Nanotechnology, Instrumentation and Optics, ICD-LNIO, University of Technology of Troyes, France): *Plasmonic biosensors: principles and applications*
- 11:40 Dr Filip BEUNIS (Department of Electronics and Information Systems, ELIS, Ghent University, Belgium): *Optical trapping electrophoresis for biosensing*
- 12:00 BREAK
- 13:20 Prof Paula VILARINHO (Department of Materials and Ceramics Engineering, Centre for Research in Ceramics and Composite Materials, CICECO, University of Aveiro, Portugal): *Electroceramics: Integrating materials towards information and communication technologies*
- 13:40 Dr Giovanni VOLPE (Soft Matter Lab, Department of Physics, Bilkent University, Ankara, Turkey): *Main research lines of Soft Matter Lab at Bilkent University*

Friday, 4 October 2013, Afternoon session

WG3: New ICT devices based on reconfigurable LCs and unconventional materials
Coordinator: Dr. Antigone Marino (CNR-SPIN/ University of Federico II, Italy)

Oral presentations

- 14:00 Ms Petra JENUS (Department for Materials Synthesis, Joef Stefan Institute, Ljubljana, Slovenia): *Magneto-electric composites: preparation and properties*
- 14:20 Dr Przemyslaw KULA (Institute of Chemistry, Department of Advanced Technologies and Chemistry, Military University of Technology, Poland): *The development of Liquid Crystal materials on Military University of Technology*
- 14:40 Prof Renaud BACHELOT (Laboratory of Nanotechnology, Instrumentation and Optics, ICD-LNIO, University of Technology of Troyes, France): *The LNIO Lab of the University of Technology of Troyes (WG3)*
- 15:00 Xabier QUINTANA ARREGUI (CEMDATIC, Universidad Politécnic de Madrid, Spain): *Research activities at the Applied Photonics Group of CEMDATIc: liquid crystals, OLEDs, laser diodes*
- 15:20 Vincenzo CALIGIURI (LiCryL-INFM/CNR & Physics Department, University of Calabria, Italy): *Photonic devices based on anisotropic fluids*
- 15:40 Dr Antigone MARINO (National Research Council, CNR-SPIN, Physical Sciences Department, University of Naples Federico II, Italy): *Ellipsometric study of vertical aligned nematics*
- 16:00 Closing