

# MEMSWAVE 2007

Barcelona, 26-29 June 2007

8th International Symposium on RF MEMS and RF Microsystems

## ***RF-MEMS WORKSHOP ON INDUSTRY APPLICATIONS:***

***“RF Power MEMS : Reliability and Applications”***

### ***Organizers:***

***Robert Plana (LAAS-CNRS, France)***



***Volker Ziegler (EADS Innovation Works, Germany)***



***Universitat Politècnica de Catalunya (UPC)***

***Vertex Auditorium  
Campus Nord UPC***

***Barcelona***

***28 June 2007***

**8:00 Registration**

**8:30-8:40 Opening Session – CHAIRMEN: ROBERT PLANA, VOLKER ZIEGLER**

## ***Plenary Session***

***Chairman: Robert Plana, LAAS-CNRS (France)***

8:40-9:15            “FP7 and Micro/Nanosystems Objectives”  
Gordana Popovic, *European Commission, AMICOM PO*

## ***Session 1***

***HIGH POWER HANDLING APPLICATIONS AND DESIGN ASPECTS FOR RF MEMS***

***Chairman: Roberto Sorrentino, University of Perugia (Italy)***

9:15-9:50            “Technology overview of high power RF MEMS”  
Gaelle Lissorgues, *ESIEE, France*

9:50-10:25          “Design and modelling issues for high power handling RF MEMS”  
Tauno Vähä-Heikkilä, *VTT, Finland*

10:25-10:45 COFFEE BREAK

10:45-11:25          “High Power RF-MEMS for aeronautic applications”  
Volker Ziegler, *EADS Innovation Works, Germany*

11:25-12:05          “Power MEMS for Base Stations”  
Georg Fischer, *Alcatel- Lucent, Germany*

12:05-12:45          “High power MEMS for space applications”  
Jean-Louis Cazaux, *Alcatel Alenia Space, France*

12:45- 14:00 LUNCH

## ***Session 2***

### ***RELIABILITY OF POWER MEMS***

***Chairman: Pierre Blondy, XLIM, France***

- 14:00-14:30 “Casimir Effect Physics and RF MEMS/NEMS Reliability”  
Hector De Los Santos, *NanoMEMS Research LLC, USA*
- 14:30-15:05 “Dielectric charging in thin films: application to RF MEMS  
reliability optimization”  
George Papaioannou, *University of Athens, Greece*
- 15:05-15:40 “RF MEMS reliability under high power stress: characterization  
and modelling”  
Robert Plana, *LAAS-CNRS, France*
- 15:40-16:15 “RF MEMS reliability modelling and CAD”  
Gerold Schropfer, *Coventor, France*
- 16:15-16:50 "Reliability of switched MEMS varactors and switches  
under microwave power"  
Arnaud Pothier, A Crunteanu, Pierre Blondy, *XLIM, France*

16:50-17:10 COFFEE BREAK

## ***Session 3***

### ***TESTING TECHNIQUES AND STANDARDIZATION***

***Chairman: Jean-Louis Cazaux, Alcatel Alenia Space, France***

- 17:10-17:45 “Test and characterization techniques for MEMS reliability  
Investigation”  
Xavier Lafontan, *Nova MEMS, France*
- 17:45-18:15 “DFT for MEMS”  
Salvador Mir, *TIMA Laboratory, France*

18:15-18:20 CLOSING