



9th International Summer School on RF-MEMS and RF Microsystems

24 – 28 June 2013

INP-ENSEEIH

Toulouse France



LAAS-CNRS



The 9th International Summer School on RF-MEMS and RF Microsystems, organized by the Topical Group on RF MEMS of the European Microwave Association (EuMA®), aspires to continue the successful series of events started in 2004*. The purpose of this School is to transfer and exchange knowledge on Micro and Nano Systems for RF applications, through a number of tutorials presented by experts from worldwide leading organizations. The event is open to academia, research institutions, and industrial organizations. Lectures will cover the following themes:



Introduction to RF Micro and Nano-Systems Technology
M/NEMS Silicon and Non Silicon Processing and Materials
RF and Multiphysic Design and Modelling
Reliability and Failures Analysis
Micro and Nano-characterization
Reconfigurable architectures
Packaging and assembly



This year's summer school includes:

- Thematic half-day devoted to « Carbon based RF - Nanoelectronics »
- An Know-Each-Other interactive session scheduled on Day 2
- Half a day tutorial on commercial modelling and simulation CAD tools
- Half a day hands-on characterisation of COTS RF-MEMS switches



The event will take place at INP-ENSEEIH
2, rue Charles Camichel F-31071 Toulouse – France)
from Monday 24th until Friday 28th June 2013.



Scientific Committee (EUMA Topical Group Board):

O. Aydın-Çivi (METU)
P. Blondy (Univ. Limoges – Xlim)
F. Coccetti (Fialab – LAAS/CNRS)
M. Kaynak (IHP)
A. Muller (IMT)

H. Schumacher (Univ. Ulm)
R. Sorrentino (Univ. Perugia)
H. Tilmans (IMEC)
T. Vähä-Heikkilä (VTT)

Organizing committee:

F. Coccetti (Fialab – LAAS/CNRS)
G. Prigent (Laplace - INP)
G. Deligeorgis (LAAS/CNRS)
B. Ducrocq (LAAS/CNRS)

* within the framework of the AMICOM Network of Excellence

For more information, please visit our website: http://educ.laas.fr/ISS_RFMEMS2013
For administrative questions, contact: Brigitte DUCROCQ (ducrocq@laas.fr) - For technical questions, contact: Fabio COCCETTI (coccetti@laas.fr)
CNRS – LAAS - 7 avenue du Colonel Roche F-31077 Toulouse Cedex 4 France - Tel: +33 (0)5 61 33 79 00 - Fax: +33 (0)5 61 33 69 69 – www.laas.fr



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SCHOOL PROGRAM:

	Monday 24 JUNE	Tuesday 25 JUNE	Wednesday 26 JUNE	Thursday 27 JUNE	Friday 28 JUNE
08:30					
09:00	Registration / Intro	Technology (Process and materials)	Modeling	Characterization/reliability	Prospectives: RF Nanotechnology
	Registration (9:00 – 9:30)	RF-MEMS manufacturing processes and Materials	Electro-Mechanical modeling	Micro and Nanocharacterizaion Methods and Tools	Graphene based electronics
	Welcome Address ENSEEIH Head of School	M. Kaynak (IHP-Germany)	D. Elata (Technion - Israel)	C. Seguineau (Fialab)	The Graphene Flagship Project H. Happy (IEMN)
	Introduction F. Coccetti - G. Prigent				
11:00	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)
	RF-MEMS and RF-Microsystem Technology: Status and Perspectives	RF-MEMS and BiCMOS co-integration	Electrical and Electromagnetic modeling	Reliability and failure Analysis	Carbon Based Nanotechnology
	F. Coccetti (Fialab – LAAS)	M. Kaynak (IHP - Germany)	H. El Ghannudi (RF-Microtech Italy)	X. Rottemberg (IMEC - Belgium)	G. Deligeorgis (LAAS)
13:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
	RF-MEMS circuits and Systems in space applications	RF MEMS Packaging	TUTORIAL: Electromagnetic Modeling and simulation(HFSS and ADS)	HAND-ON: RF-MEMS switch Characterization	VISIT: Airbus production site (Toulouse)
	O. Vendier J.L. Cazaux (ThalesAleniaSpace)	S. Seok (IEMN)	G. Prigent (Laplace)	P. Blondy (Xlim)	
16:00	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)	
	RF-MEMS Antennas and Array	Know-Each-Other Interactive session	TUTORIAL: Electromechanical Modeling and simulation(COMSOL)	HAND-ON: RF-MEMS switch Characterization	
	O. Aydin-Civi (METU - Turkey)		C. Villeneuve (Laplace)	P. Blondy (Xlim)	
18:00	Welcome Buffet				
19:00			Social Dinner		

REGISTRATION* and FEES**:



Students (EuMA members).....	200 €
Students	300 €
Other (EuMA members).....	500 €
Other	600 €
Banquet – extra Ticket.....	40 €



CREDITS: For European PhD students, a one week course may be eligible for 2 ECTS credits, provided these are accredited by the university and/or PhD advisor.



NOTES:

This course is limited to 30 participants to ensure a high quality of training. Course notes will be distributed during the event.

* Please note that the registration is done in two steps. A pre-registration in which the participant main details have to be submitted, followed by a registration which includes the fee payment. Due to logistics and organizational constraints the registration must be completed BEFORE 5 June 2013 –

** School Fees cover banquet and all other events (19.6% VAT inclusive) – For becoming an EuMA members please visit: www.EUMWA.org

For more information, please visit our website: http://educ.laas.fr/ISS_RFMEMS2013

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