

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





24 – 28 June 2013 INP-ENSEEIHT Toulouse France





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-ENSEEIHT** 2, rue Charles Camichel F-31071 Toulouse – France) from Monday 24th until Friday 28th June 2013.



Scientific Committee (EUMA Topical Group Board):

O. Aydin-Çivi (METU)

H. Schumacher (Univ. Ulm)

P. Blondy (Univ. Limoges – Xlim)

F. Grandi (Finlan, LAGS (CNPS))

R. Sorrentino (Univ. Perugia)

H. Tilmans (IMEC)

F. Coccetti (Fialab – LAAS/CNRS)

M. Kawaak (IHD)

T. Vähä-Heikkilä (VTT)

M. Kaynak (IHP)

A. Muller (IMT)

F. Coccetti (Fialab – LAAS/CNRS)

G. Prigent (Laplace - INP)

Organizing committee:

G. Deligeorgis (LAAS/CNRS)

B. Ducrocq (LAAS/CNRS)

* within the framework of the AMICOM Network of Excellence



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LAAS-CNRS



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School Program:

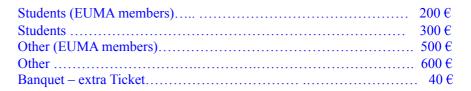
	Monday 24 JUNE	Tuesday 25 JUNE	Wednesday 26 JUNE	Thursday 27 JUNE	Friday 28 JUNE
08:30 09:00	Registration / Intro	Technology (Process and materials)	Modeling	Characterization/reliability	Prospectives: RF Nanotechnology
	Registration (9:00 – 9:30)	RF-MEMS manufacturing			
	Welcome Address ENSEEIHT Head of School	processes and Materials M. Kaynak	Electro-Mechanical modeling D. Elata	Micro and Nanocharacterizaion Methods and Tools C. Seguineau	Graphene based electronics The Graphene Flagship Project H. Happy
11:00	Introduction F. Coccetti - G. Prigent	(IHP-Germany)	(Technion - Israel)	(Fialab)	(IEMN)
	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)
	RF-MEMS and RF-Microsystem Technology: Status and Perspectives F. Coccetti	RF-MEMS and BiCMOS co- integration	Electrical and Electromagnetic modeling	Reliability and failure Analysis X. Rottemberg	Carbon Based Nanotechnology G. Deligeorgis
13:00	(Fialab – LAAS)	M. Kaynak (IHP - Germany)	H. El Ghannudi (RF-Microtech Italy)	(IMEC - Belgium)	(LAAS)
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
	RF-MEMS circuits and Systems in space applications O. Vendier J.L. Cazaux (ThalesAleniaSpace)	RF MEMS Packaging S. Seok (IEMN)	TUTORIAL: Electromagnetic Modeling and simulation(HFSS and ADS) G. Prigent (Laplace)	HAND-ON: RF-MEMS switch Characterization P. Blondy (Xlim)	VISIT: Airbus production site (Toulouse)
16:00	Break (15 min)	Break (15 min)	Break (15 min)	Break (15 min)	
	Dieak (15 ffilft)	Dieak (15 fillf)	Dieak (15 mm)	HAND-ON:	
	RF-MEMS Antennas and Array O. Aydin-Civi	Know-Each-Other	TUTORIAL: Electromechanical Modeling and simulation(COMSOL) C. Villeneuve	RF-MEMS switch Characterization	
18:00	(METU - Turkey)	Know-Each-Other Interactive session	(Laplace)	P. Blondy (Xlim)	
19:00	Welcome Buffet				
			Social Dinner		

REGISTRATION* and FEES:**









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 constrains 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