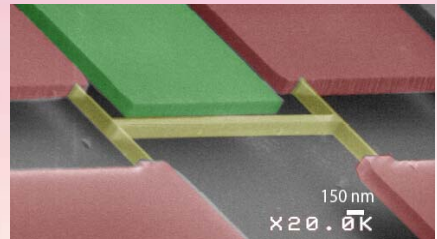


Workshop Announcement

The Caltech-Leti Nanosystem Program,

**Tuesday November 10th 2009, Caltech,
Pasadena, California, 9am - 6pm**



For the past two years, CALTECH-KNI and CEA/LETI-Minatec have joined their fundamental and technology research expertise to transition from the era of “nanocraft” to very-large-scale integration (VLSI) of Nanosystems (CMOS compatible). Researchers from both institutions are closely collaborating to transform nanotechnology-based prototypes into robust, complex sensing systems ready for transfer to industry. The NanoVLSI Alliance (www.nanovlsi.com) opens new application opportunities based on its Nano-ElectroMechanical Systems (NEMS) platform with a strong focus on three main areas: (i) high sensitivity gas-phase chemical sensors including preanalytical and chemical separation modules; (ii) liquid-phase biochemical sensor for pharmaceutical research and point-of-care diagnostics and; (iii) vacuum-based ultra-high resolution mass spectrometry. Product roadmaps were put in place in 2008 with first demonstrators -highly sensitive gas chromatograph output detector- delivered in less than two years.

To adequately design and accelerate delivery of these innovations to the market a Sponsor Program has been launched that will enable close interaction between the Alliance and leading industry players.

Three application spaces will be surveyed, each followed by an overview of how NEMS technology can provide transformative advantages. We will summarize our latest and most exciting results, future roadmaps, and long-term perspectives.

✚ **Monday 9th Evening Reception – Caltech**

✚ **Tuesday 10th Agenda: [register by sending email to ariel.cao@nanovlsi.com](mailto:ariel.cao@nanovlsi.com)**

8:45am-9am	Welcome remarks and vision statement for NANOVLSI Alliance Michael Roukes & Jean-Lou Chameau, President of Caltech
9:00am - 9:15am	Strategic perspective and capabilities at CEA-LETI in applied research Hughes Metras, CEA-LETI
9:15am - 10:00am	Caltech-Leti Nanosystems Sponsor Program: member's benefits & Solutions Including member's Perspective - AREVA Ariel Cao, Alliance for Nanosystems VLSI & Philippe Andreucci, CEA/LETI
10:00am - 10:30am	Roadmap toward High-Sensitivity & Selectivity, Gas-Phase Chemical Sensing Ed Myers, Caltech
10:30am - 11:00am	Roadmap toward High-Throughput Proteomic μ-Mass Spectrometry Michael Roukes, Caltech
11:00am - 11:30am	B R E A K
11:30am - 11:45am	Roadmap toward Microfluidic Biosensing for Medical, Pharmaceutical, Environmental, and AgroFood Diagnostics Jessica Arlett, Caltech
11:45am - 12:00pm	Application perspective in Biotechnology, Drug development and Safety To be announced
12:00pm - 2:00pm	L U N C H at Athenaeum – Caltech
2:00pm - 2:45pm	Caltech-KNI Nanofabrication facilities tour
2:45pm - 3:45pm	One and One discussion with key alliance individuals (register at ariel.cao@nanovlsi.com)
3:45pm - 4:00pm	B R E A K
4:00pm - 5:00pm	Panel: Gas sensing trends and applications perspective – Key challenges: Panellists (To be announced) – Moderator: Jean-Christophe Gabriel, CEA/LETI
5:00pm - 5:30pm	Closing, General Q&A – Michael Roukes, Caltech & Hughes Metras, CEA-LETI

