

Location & Schedule

The workshop will be held at
**Maison des Micro et Nano Technologies (MMNT)
Minatec Center
Parvis Louis Néel, Grenoble - FRANCE**



Conference schedule

Sunday, March 8

Conference registration 18.00 – 20.00
Welcome Reception 20.00 – 22.00

Monday, March 9

Conference registration opening 08.00
Oral sessions 08.30 – 18.30
Reception at the City Hall of Grenoble 19.30

Tuesday, March 10

Conference registration opening 08.00
Oral sessions 08.30 – 16.10
Poster session 16.00 – 18.30
Conference dinner "Chez Le Père'Gras" 19.00 – 24.00

Wednesday, March 11

Oral sessions 08.30 – 13.30

During the conference, materials, products & services from companies & institutions supporting MAM2009 will display

Important Deadlines Fees & Contact

Deadlines

Submission of papers : *March 8-9, 2009*

Full-length papers will be published in a special issue of *Microelectronic Engineering*. Submission of the papers will be due at the beginning of the workshop.

Registration Fees

Registration for the whole conference (*)			
	before 1 st Feb. (Advanced Reg.)	before 1 st March (Late)	On-site
Students	300 €	350 €	400 €
All except students	550 €	600 €	650 €

(*) Fee include all sessions, all meals, conference dinner & abstracts volume

Registration for 1 or 2 days (**)			
Students	150€ / day	All except students	250€ / day

(**) This fee does not include conference dinner.



Contact

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Website : www.mam-conference.org

MATERIALS FOR ADVANCED METALLIZATION

MAM 2009

A single-session Workshop devoted to
Materials Research,
Material Properties and Interactions

Final ANNOUNCEMENT

Source : Leti - CEA



**March 8-11, 2009
Minatec, Grenoble, France**

www.mam-conference.org

Scope of the Conference & Invited speakers

This workshop is the 18th in a series devoted to materials research, materials properties and interactions. Starting with refractory metals and silicides in the 80's, moving to materials for advanced metallization in 1995, this year's workshop addresses new and challenging topics in the field of BEOL solutions, novelties in alternative interconnect systems and more widely advanced materials and structures relevant to micro and nano-electronics. It aims to provide a forum for open discussions between material scientists, process and integration engineers and Ph-D students.

Topics include both fundamental and applied research, as well as issues related to introduction into manufacturing. With the progressive downscaling of device dimensions and the simultaneous demand for more functionality, the challenges have become tremendous. New and extensive materials research is needed to further follow IC scaling as well as to develop new devices at the nanoscale.

Invited speakers

O. Joubert, LTM, France, *Keynote - The place of new materials and processes*

M. Alessandri, NUMONIX, Italy

K. Banerjee, University of California-Santa Barbara, US, *Simulation & modeling - Innovative technologies*

C. Detavernier, University of Gent, Belgium, *Silicide, New phase in Ni-Si system*

L. Di cioccio, CEA LETI Minatec, France, *3D integration, passive, packaging - Direct bonding processes*

A.C. Diebold, University of Albany, US, *Advanced Optical Measurements for Advanced Transistor Processes*

X. Gagnard, STMicroelectronics, France, *Through Silicon Via : from the CMOS Imager Sensor Wafer Level Packaged to the 3D integration scheme*

S. Lombardo, IMM, Italy, *Memories - Phase change materials for memories*

M. Nihei, Fujitsu, Japan, *Integration of Carbon Nanotubes for LSI via Interconnects*

K. Schulze, TU Chemnitz, Germany, *Cu interconnect integration - Air gaps integration*

Zs. Tokei, IMEC, Belgium, *Metal process - Interconnect reliability*

JJ. Vlassak, Harvard University, US, *Dielectrics – Ultra low K film mechanical properties*

C. Volkert, Universität Göttingen, Germany, *Materials properties at nanoscale - Mechanical testing of metal nanowires*

Topics of Materials for Advanced Metallization

Materials and processes

Metallization for copper interconnects, contacts, metal gates, diffusion barriers, through silicon vias ...

Intermetal isolation
Porous ULK and ELK dielectrics, air gap and others

Dielectric liners for diffusion barriers, etch-stop, sealing and capping

Deposition, patterning, cleaning, surface functionalization and other process aspects

Architecture and device integration

Silicides and germanides

Materials for memories
high-k, phase change, nanodots, resistive oxides, ...

Innovative design approaches
X-architecture, DfM, DfR, DfT, DfY

Packaging materials and technologies

Nanomaterials
Carbon nanotubes, nanowires, nanodots...

Advanced characterization and modelling activities

Reliability, lifetime and analytical techniques

Advanced characterization

Modeling and simulation

Targeted applications

Alternative interconnects
3D integration, nano structures, optical & wireless systems

Copper and non copper advanced interconnects

System-on-chip and system-in-package

Memories devices
MRAM, FeRAM, CBRAM, PCRAM, ...

Advanced devices

MEMS, NEMS

Committee members

Scientific Program Committee

B. CHENEVIER CNRS - Grenoble INP Minatec, France

A. FARCY STMicroelectronics, Crolles, France

H. KÖRNER Infineon Technologies AG - München, Germany

S. MAITREJEAN CEA - Leti Minatec, Grenoble, France

S. MANTL Forschungszentrum Jülich, Germany

S. PETERSSON Royal Institute of Technology, Stockholm, Sweden

Y. SHACHAM-DIAMAND University of Tel Aviv, Israel

S. SCHMIDBAUER Qimonda, Dresden, Germany

S.E. SCHULZ TU Chemnitz, Germany

I. SUNI VTT, Espoo, Finland

O. THOMAS Aix-Marseille Université, France

Y. TRAVALY IMEC, Leuven, Belgium

E. ZSCHECH AMD Saxony, Dresden, Germany

Local Organizing Committee

L. ARNAUD CEA - Leti Minatec, Grenoble, France

E. BLANQUET CNRS - Grenoble INP, France

L. BOUDIBA Grenoble INP Minatec, France

V. CARRON CEA - Leti Minatec, Grenoble, France

B. CHENEVIER CNRS - Grenoble INP Minatec, France

T. CHEVOLLEAU CNRS – Minatec, Grenoble, France

A. FARCY STMicroelectronics, Crolles, France

J. GUILLAN STMicroelectronics, Crolles, France

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R. MADAR CNRS - Grenoble INP Minatec, France

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F. VOLPI Grenoble INP, France