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## WELCOME TO TRANSDUCERS'07 & EUROSENSORS XXI

On behalf of the Steering and Organizing Committees, we are pleased to welcome you in Lyon for the 14th International Conference on Micro-Sensors, Actuators and Microsystems - Transducers'07 & Eurosensors XXI.

The Transducers' Conferences began in 1981 in Boston, and continued every two years in Delft, Philadelphia, Tokyo, Montreux, San Francisco, Yokohama, Stockholm, Chicago, Sendai, Munich, Boston and Seoul. The Eurosensors Conference began in 1987 in Cambridge and has taken place every year in Europe since then. Once again, as it happens every six years, we benefit in Lyon of the commonality of the two Conferences to have a worldwide overview of the latest advances in the development of sensing and actuating Microsystems.

1552 abstracts were submitted this year: an unprecedented number that clearly demonstrates the great vitality of the Conference and of the R&D level in Microsensors and Actuators. From these 1552 abstracts and the 70 late news papers, 632 papers were selected to build a four day program with 210 oral presentations organized in 48 sessions and 422 posters organized in two sessions. The Conference starts in a plenary session with prominent world experts giving an overview and perspective in three key domains. 15 of the 48 parallel sessions will then be opened by invited speakers on selected technical areas. Special attention has been paid to the organization of the poster session area. It has been divided into 16 villages covering specific technical topics, and located in the same area as the 50 Exhibitors who will update their offer in manufacturing, design or testing equipments and services. The Digest of Technical Papers consists of two printed volumes and a CD-ROM. Due to the great number of papers, the four pages articles have been printed in an A5 format, in view to keep the participants bags as light as possible, and hoping this smaller format will be acceptable for all. All the papers will be accessible through the IEEE Xplore digital library and some of them in a special issue of ELSEVIER - Sensors and Actuators A or B. Our gratitude goes to the authors and exhibitors who have chosen the Conference to publish their latest results and have permitted to build this rich scientific program. We would also like to sincerely thank the organizers and the 15 lecturers of the 6 Short Courses on the Sunday preceding the meeting.

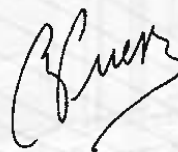
To keep with the tradition, a social program has been planned, offering attendees ample opportunities for informal interaction. A welcome party at the Congress Centre will be the opportunity for first friendship meetings on Sunday evening. A Monday evening reception will be held in the Lyon City Hall, in an atmosphere typical of the French Baroque period. The Conference banquet will be held on the banks of the river Saône, in the "Abbaye of Collonges" under the auspices of Paul Bocuse, the famous French chef. A varied program of guided tours has also been organized to allow spouses and guests the opportunity to discover Lyon historic sights, Annecy's old city between lake and mountains or Chamonix with the spectacular "Aiguille du Midi".

This Conference program would not have been possible without the dedicated teamwork of the 75 members of the three Regional Technical Program Committees, coordinated by Clark T. C. Nguyen (Americas), Makoto Ishida (Asia) and Paddy French (Europe), and the 9 Topic Specialists who participated in the selection of the final program. We would also like to express our thanks to the members of the Executive Organizing Committee for their many contributions, without forgetting the professionals at Preferred Meeting Management, Inc. for gathering and assembling the scientific papers, and Package Organisation for local arrangements. Our gratitude also goes to the Sponsors for their much appreciated financial support and the great encouragement it was for us.

Finally, we would like to thank you all for attending the Conference. It is the quality of your presentations and the dynamism of your exchanges that will really make the meeting a success. We sincerely wish you a fruitful Conference and an enjoyable stay in Lyon.



Gilles Delapierre  
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From left to right: Clark T. C. Nguyen, Paddy French, Robert Puers, Gilles Delapierre, Makoto Ishida.

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# Program at a Glance

MONDAY, 11 JUNE				
9:00 am - 9:30 am	OPENING CEREMONY			
9:30 am - 10:10 am	PLENARY (1A1.1)			
10:10 am - 10:40 am	COFFEE BREAK (Exhibition Area)			
10:40 am - 11:20 am	PLENARY (1A2.1)			
11:20 am - 12:00 am	PLENARY (1A3.1)			
12:00 am - 1:30 pm	LUNCH			
1:30 pm - 2:45 pm	SESSION 1A4 Bio Microsystems	SESSION 1B4 Precision Time Keepers	SESSION 1C4 Wireless Microsystems	SESSION 1D4 Etching Techniques
2:45 pm - 3:00 pm	BREAK			
3:00 pm - 4:15 pm	SESSION 1A5 Bio Sensors	SESSION 1B5 Alternative MEMS Technology	SESSION 1C5 Energy Scavenging	SESSION 1D5 RF MEMS Switches
4:15 pm - 4:45 pm	COFFEE BREAK (Exhibition Area)			
4:45 pm - 6:00 pm	SESSION 1A6 Nano-Liter Handling	SESSION 1B6 Nanoscale Technology	SESSION 1C6 Implantable Medical Microsystems	SESSION 1D6 Resonant Sensors
7:00 pm - 0:00 pm	EVENING RECEPTION (Lyon City Hall)			
TUESDAY, 12 JUNE				
9:00 am - 10:15 am	SESSION 2A1 $\mu$ TAS	SESSION 2B1 Micropower Generators	SESSION 2C1 Polymer MEMS	SESSION 2D1 Vibrating RF MEMS
10:15 am - 10:45 am	COFFEE BREAK (Exhibition Area)			
10:45 am - 12:00 am	SESSION 2A2 Wafer Scale Packaging	SESSION 2B2 Medical Microsystems	SESSION 2C2 MEMS Reliability	SESSION 2D2 DNA Handling
12:00 am - 1:30 pm	LUNCH			
1:30 pm - 2:45 pm	SESSION 2A3 Micro Assembly Methods	SESSION 2B3 Health Monitoring	SESSION 2C3 Electrostatic Actuators	SESSION 2D3 Cell Manipulation
2:45 pm - 5:45 pm	2E. POSTER SESSION (Exhibition Area) COFFEE BREAK			
	FREE EVENING			
WEDNESDAY, 13 JUNE				
9:00 am - 10:15 am	SESSION 3A1 Bio Microfluidics	SESSION 3B1 Photo Detection	SESSION 3C1 Neural Interfaces	SESSION 3D1 Actuators
10:15 am - 10:45 am	COFFEE BREAK (Exhibition Area)			
10:45 am - 12:00 am	SESSION 3A2 Pollution Sensors	SESSION 3B2 Tunable Lasers and Optics	SESSION 3C2 Tactile Sensors	SESSION 3D2 Accelerometers or Inertial Sensors
12:00 am - 1:30 pm	LUNCH			
1:30 pm - 2:45 pm	SESSION 3A3 Gas Chromatography	SESSION 3B3 Micromirrors	SESSION 3C3 Atomic Force Probes	SESSION 3D3 Nanotubes and Nanowires
2:45 pm - 5:45 pm	3E. POSTER SESSION (Exhibition Area) COFFEE BREAK			
7:00 pm - 11:00 pm	CONFERENCE BANQUET (Abbaye de Collonges)			
THURSDAY, 14 JUNE				
9:00 am - 10:15 am	SESSION 4A1 Gas MEMS	SESSION 4B1 Optical MEMS	SESSION 4C1 Pumps and Thrusters	SESSION 4D1 High-Q Resonators
10:15 am - 10:45 am	COFFEE BREAK (Exhibition Area)			
10:45 am - 12:00 am	SESSION 4A2 Artificial Nose	SESSION 4B2 Optics for Fluidics	SESSION 4C2 Probe-Based Metrology	SESSION 4D2 Gyroscopes
12:00 am - 1:30 pm	LUNCH			
1:30 pm - 2:45 pm	SESSION 4A3 Gas Sensors	SESSION 4B3 Microlens	SESSION 4C3 Magnetic Sensors	SESSION 4D3 Pressure and Acoustics
2:45 pm	END OF THE CONFERENCE			