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# Darnell Group

# NEWS

## Practical Energy Harvesting and Thin-Film Batteries Highlighted at nPF '09

Corona, California, April 20, 2009 – Practical energy harvesting, thin-film batteries and power management solutions for low-power wireless systems will be spotlighted at Darnell's third annual nanoPower Forum (nPF '09), May 18-20 in San Jose, California. Both are critical technologies enabling wireless applications such as mesh networks, wireless sensor and control applications, microelectromechanical (MEMs) systems, and so on. If you are an engineer involved with low-power system design, nPF '09 will provide you with the latest design techniques and powering solutions.

The Plenary Session will open with Zhong Lin Wang, Director of the Center for Nanostructure Characterization at the Georgia Institute of Technology, talking about "**Harvesting Mechanical Energy by Nanogenerators**;" Giovanni Balli, Director with the AutoGlobal Business Network, focusing on, "**Nanoelectronics: The European Vision and Strategy**;" Mark Buccini, Director of Worldwide Strategic Marketing at Texas Instruments revealing the details of, "**Living Life Under 1µ – Extreme Deeply Embedded Computing**;" Didier Sagan, Product Line Marketing Manager of the Medical Products Group with Zarlink Semiconductor will close out the session with a vision of, "**Wireless Body Area Network – Today and Tomorrow's Potentials**."

"Mesh networks, wireless sensor and control systems, industrial/building automation and a variety of medical, military and other applications are being enabled by the latest advances in energy harvesting, thin-film batteries and power management," observed Jeff Shepard, President of Darnell Group. "This year, our nanoPower Forum will focus on the latest practical solutions to the increasing complexity of wringing out the maximum performance from today's advanced ultra-low power devices," he continued.

nPF '09 will bring together component suppliers and system designers and will address the latest advances in this rapidly emerging field. Regardless of the energy harvesting technology (piezoelectric, photovoltaic, thermo-electric, and so on) or the energy storage technology (battery, supercapacitor, fuel cell, etc.), the critical aspect of designing an ultra-low power wireless device is the complete power management solution and efficient energy utilization. Designers will not wait for the "ultimate" energy harvesting or energy storage solution; it may never arrive. "Even if an improved energy harvesting and/or energy storage solution arises, the emphasis will remain on getting the maximum possible performance from the device, and that implies continued focus on developments in advanced power architectures, sophisticated power management and efficient energy utilization. nPF '09 will offer practical solutions for today's designs," Shepard concluded.

Media sponsors for Darnell's nanoPower Forum include Darnell's **PowerPulse.Net**, and the Penton Electronics Group, including: **Electronic Design, Power Electronics Technology, Microwaves & RF**, and **RF Design**.

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