mPhase demonstrates first working nanobattery prototype

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mPhase Technologies and Lucent Technologies Bell Labs today reported that their jointly developed nano-based "smart" battery prototype has proven it can store and convert energy on demand. This practical confirmation of the theory behind the technology is a major milestone in the product development process.

In a test conducted at Bell Labs' Murray Hill, N.J. facility, the development team demonstrated that the first fully assembled prototype device could generate enough power on demand to light a light-emitting diode (LED). The prototype is based on a novel nanostructured architecture pioneered at Bell Labs.

"We are pleased that the mPhase-Bell Labs team has surmounted many technical obstacles to make this theory into a working prototype," said Ron Durando, CEO mPhase Technologies. "This reinvention of the battery is addressing a major market need for portable, programmable power."

The new generation of reserve power cells is based on a Bell Labs discovery that electrolyte will stay atop nano-textured surfaces until stimulated to flow, thereby triggering a reaction producing electricity. The "electrowetting" process in effect can permit activation of the batteries when required, yielding a very long shelf life. Batteries based on this technology have the potential to deliver far longer shelf life than existing battery technology.

Source: mPhase Technologies, Inc.