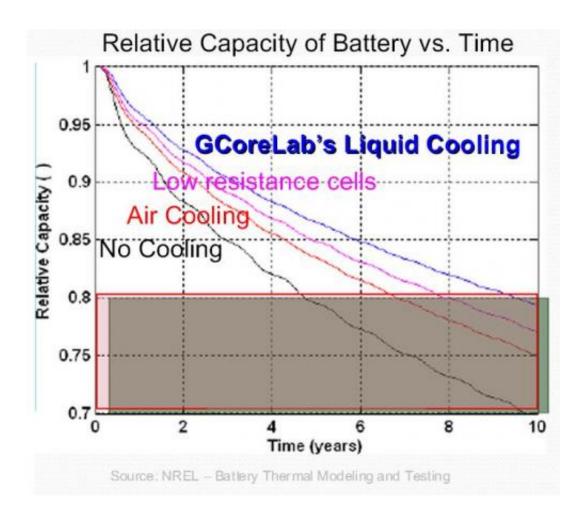


Gcorelab receives \$482,000 to develop new battery coolant technology

April 24 2013, by Bob Yirka



Credit: GCoreLab

(Phys.org) —Gcorelab, a Singapore based clean-tech company, has received \$482,000 in funding from Red Dot Ventures—a government



sponsored program for helping to promote promising new technology in that country. The investment indicates that new battery cooling technology being developed by Gcorelab has lived up to claims of being able to cool batteries 50 to 80 percent more than liquid cooling methods.

As most know, batteries are one technology that is holding up development of more <u>advanced electronics</u>. They don't hold as much charge as we'd like, take too long to recharge, and sometimes get too hot and catch on fire or blow up. For those reasons, technology companies around the world are working to solve the <u>battery</u> problem. Some are looking to replace batteries altogether, while others, like Gcorelab, are looking for ways to help make current batteries work better—in this case, to reduce the problem of batteries getting too hot.

Currently there are two basic ways to help keep batteries cool: using moving air or water. Both rely on the same concept, moving heat away from the battery and expelling it from the device they are being used to power. Liquid methods work better, but present problems as devices grow smaller or more mobile. That leaves engineers tinkering with fans and heat sinks, which as the press has been quick to point out (phones catching on fire, planes being grounded, etc.) hasn't always worked as planned.

Gcorelab says they've found a better solution and that is to add <u>smart</u> <u>sensors</u> to devices, along with a patented fin design that they say grabs heat better than standard heat sinks and moves it away more efficiently. They note that together the components of their system allow for better control of heat movement in both liquid and non-liquid systems and add that it can also be used in reverse to allow the battery to serve as a heater for the rest of the device when used in <u>cold temperatures</u>.

The company claims on its site that its technology is cheaper to implement than <u>liquid cooling</u> systems and uses roughly the same



amount of energy to cool devices up to 80 percent better than traditional systems. That they say makes their new technology an obvious choice for devices of all sizes. They add that they are already working with an electric bus maker in China—a country they note, that is poised to become the largest electric vehicle market in the world over the next several years.

More information: gcorelab.com/

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