



Rachid Yazami, receives the 2014 Draper Prize from the National Academy of Engineering

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Rachid Yazami, Director of Research at CNRS (French National Center for Scientific Research) and currently appointed visiting professor at the Nanyang Technological University in Singapore, was awarded on February 18, the prestigious **2014 Charles Stark Draper** prize in Washington, DC, presented by the **National Academy of Engineering (NAE)** in recognition for his work in developing rechargeable lithium batteries 30 years ago.

Prof. Yazami is sharing the USD \$500,000 prize with John B. Goodenough (USA), Yoshio Nishi (Japan) and Akira Yoshino (Japan), who have also contributed in this major industrial and scientific breakthrough.

Rachid Yazami began exploring graphite compounds in which lithium could be reversibly inserted between graphite layers. This provided an alternative to the lithium metal negative electrode. Yazami's lithium-graphite is the most commonly used anode in commercial lithium-ion batteries today.

Marketed for the first time in 1991, lithium batteries have revolutionized the world of portable electronics. In 2012, these lithium-ion batteries have represented a market of \$ 11.7 billion and market studies estimated that it will be an over \$ 20 billion market in 2016, thanks to the development of batteries for automotive and industrial storage.

The lithium-ion battery is used by millions of people around the world through the commonplace use of cell phones, laptops, hearing aids, cameras, tablets, power tools, and many other compact, lightweight mobile devices.



NAE photo) From left: C.D. Mele, Jr., NAE president; John Goodenough; Yoshio Nishi; Rachid Yazami; Akira Yoshino; Charles Holliday, NAE chair; and Franklin Miller, Draper chairman.