

November 29, 2007



Intel Announces Winner of University Notebook Challenge

Pedal Power the Healthy Solution for the Energy-Efficient Laptop of the Future

MUNICH, Germany--(BUSINESS WIRE)--

In the spirit of encouraging innovation toward energy-efficient technology Intel Corporation in April launched a challenge to European universities to design a device capable of powering laptops by using renewable, sustainable energy sources. Intel today awarded the winners of the Intel University Competition On Renewable Energy (CORE), the culmination of 7 months of creative endeavors from the participating teams.

The jury was composed of Nir Tessler, professor at the Israel Institute of Technology in Haifa, Eszter Morvay from the international IT analyst house IDC, and Ofri Wechsler, Intel Fellow. They judged entries from universities from Belgium, Germany, Ireland, Italy, Netherlands and Spain. Each entry was judged according to several criteria, from ecological value to ingenuity of design to commercial viability.

The winning solution, by the Spanish team (Polytechnic of Madrid), is based on a pedal machine powered by human energy. The cycling action produces energy which is turned into the electricity necessary to power the laptop by a power electronics converter. The solution was chosen as it demonstrates the team's systematic approach to deal with all aspects of the challenge -- from its ease of implementation to the innovative quality of its electronic components -- with special features to allow for a realistic usage model. The Spanish device is particularly user-friendly as it enables the user to adopt a flexible, customizable rhythm including any required breaks. Original features include the power electronic converter specifically designed to minimize charging time and keep energy flow at a constant level.

The runners-up, the Polytechnic of Milan (Italy) and Delft's University of Technology (Netherlands), will also be recognized on the respective merits of their solutions. The Italian team devised an ingenious way to utilize hydrogen fuel cell to power a laptop, which is particularly noteworthy by its duration and for being environmentally clean. Hydrogen is a renewable and sustainable source of energy, the most common element in the universe and although it is not present on earth in its elemental form it can be obtained from water through electrolysis. This presents an additional advantage in terms of utilizing time-sensitive energy (such as energy obtained through solar panels) and converting it back into electrical energy through the hydrogen-producing electrolysis process.

Delft University's design is also innovative and consists mainly of a rocking-motion pedal mechanism. An integrated design approach, drawing knowledge from a range of disciplines, was used to optimize the design.

The winning team, from the Polytechnic of Madrid (Spain), receives EUR 10,000 as funding to support scientific research. The two runners-up receive a top-of-the-line laptop.

Intel, the world leader in silicon innovation, develops technologies, products and initiatives to continually advance how people work and live. Additional information about Intel is available at www.intel.com/pressroom and <http://blogs.intel.com>.

Other brands may be claimed as the property of others. Intel, Intel Core and Intel Centrino are trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Source: Intel Corporation