

## 2008 “Galaxy” Star of Energy Efficiency Award

We nominate Dr. C. Daniel Mote, President of the University of Maryland, for the 2008 “Galaxy” Star of Energy Efficiency Award by the Alliance to Save Energy.

Through the vision outlined in the Strategic Plan for the University, developed under his leadership, Dr. Mote has aggressively pursued a vision calling for the university to become “...a showcase for environmental sustainability” through aggressive implementation of conservation, energy efficient technology, and renewable energy sourcing.

The University of Maryland, in College Park, is a major public research university, located on 1250 acres along the Baltimore-Washington high-tech corridor, and is the flagship of the University of Maryland System. It has a total 2007 enrollment of 36,000 students, and employs 12,000 university employees. Its 13 colleges and schools offer undergraduate degrees in 127 different majors, and 112 different graduate degrees. University of Maryland operates with a \$1.5 billion annual budget.

As an example of his goal realization, Dr. Mote has partnered with Maryland Governor Martin O’Malley, and Malcolm Woolf, the Maryland Energy Director, to secure funding to install new lighting in about 1 million square feet of hallways across the University of Maryland campus. This effort will save in excess of 85% of the current energy use, and provide a three year payback on investment.

Dr. Mote encouraged staff to “squeeze” more energy savings than provided by conventional lighting design. This redesign resulted in a project that utilizes 50% less energy per square foot than permitted in the yet to be adopted ASHRAE 90.1-2007 Energy Standard for Lighting Power Density (LPD). The hallways now consume less than 0.25 watts/sf, versus the 2007 standard of 0.5 watts/sf, while still meeting the light levels in the IESNA Standards. Dr Mote is already beating by 50% a future standard that has yet to be adopted by any state in the U.S.

This initial project, addressing hallways alone, will provide a 2.5% reduction in the annual electric consumption by the campus. The projected annual savings of 6,935 MWh, in 1 million square feet of hallways is the result of reducing consumption from 1 watt/sf to 0.25 watt/sf. This aggressive conservation effort was undertaken, without compromising the safety and security of students and staff, which required hallway lighting 24 hours a day. The new “step” dimming (50% and 100%) ballasts, provides additional opportunity to save energy at night and on weekends, when lights are dimmed to 50%, as well as providing opportunity for curtailment when the power grid experiences overload.

This philosophy of providing lighting 24 hours a day, at less than 0.25 w/sf, with the ability to “dim” the light level for additional savings, provides the opportunity to transfer this same energy saving innovation across the United States. Many other institutions, including universities, state and federal office buildings, as well as commercial office buildings, could utilize the University of Maryland’s proven solution for safe and secure hallway lighting, with minimal energy consumption.

Dr. Mote has shown, through this first in a series of energy saving initiatives, that he is serious about “slashing the energy budget”, and doing it in such a fashion as to be applicable to millions of buildings across the United States. Dr. Mote Deserves to be recognized for his vision and resolute determination to become “carbon neutral”.