## The challenge of building green at IIT

By Joseph Clair
DIRECTOR OF OCES

The IIT Campus Sustainability Plan sets targets for performance across several areas of university operation. Among these, the green building commitment stands as the most challenging, but also the most beneficial. Reducing emissions and energy waste, stormwater runoff, and solid waste all benefit the environment around the campus. Creating a more sustainable built environment directly benefits the members of the IIT community and improves the conditions in which we learn and work.

Although many green building standards and rating systems exist, the US Green Building Council (USGBC) has developed the most utilized and respected in the LEED Green

comfort, lighting quality and resource efficiency, all of which add value to buildings; however, the process of verifying that green building strategies have been utilized adds a cost not usually covered in most construction or operations work. This added cost has raised questions as to whether the value associated with following green building strategies justifies the cost of documenting, testing and verifying system operations. Research continues into this issue, and the Campus Sustainability Plan establishes that transparent reporting of performance is critical to a real sustainability program. Without the ability to have information reviewed and verified, owners leave themselves open to claims of "greenwashing", or claiming "green" without truly making the effort to accomplish the performance improvements.



Building Rating System. The system covers five areas of building design: site planning, water use, energy and emissions, materials, and indoor environmental quality, and offers four levels of certification based on the number of green strategies implemented. In addition, the USGBC has adapted the system to cover buildings at different stages of development: new construction, neighborhood development, commercial interiors (small tenant renovation), and existing buildings operation and maintenance. Because of this flexibility and scalability, the working group that developed the green building commitment for the Campus Sustainability Plan recommended that IIT use LEED as the basis for the target, and that IIT commit to meet the third highest level of certification (Gold) in all new construction and in the operation of seventy-five percent of existing buildings.

The improvements associated with green building operation affect air quality, thermal

The Facilities Department at IIT will develop standards and guidelines for greening buildings in order to improve the ability of the university to provide ongoing maintenance of campus buildings. These standards will reflect the commitment to hold the university to the standard of care developed by entities such as ASHRAE and IES that develop standards for indoor comfort, health and lighting levels. Rooting our standards in the work of these industry-recognized entities strengthens our commitment, and provides a link for students between what they learn in the classroom and what they see in campus operations.

IIT must work diligently if it wants to achieve its goal of becoming the most sustainable urban university campus in the United States, especially when it comes to greening buildings. With a spirit of innovation and excellence, IIT will find a way to make the campus a greener place to study and work.



## IIT Undergraduate Research Day

Undergraduate Research Day is an opportunity to showcase the outstanding research performed by IIT undergraduates both on- and off-campus. It will be held in the MTCC on Tuesday, February 1, 2011 from 12:30-2:00 PM. Students who are currently involved in research or who performed research this summer are encouraged to present a poster of their work. Expenses for printing posters will be covered by Undergraduate Affairs. Posters will be judged by IIT faculty in order to provide awards to the top posters in each college (CSL, Armour, etc.). Students interested in presenting should submit the title of their research poster and the authors to the Office of Undergraduate Research by Thursday, January 31, 2010.

If you have questions, please contact the Office of Undergraduate Research at undergrad\_research@ iit.edu.

## **DEADLINES:**

Files due for printing: Friday, January 28, 2011
Titles due: Monday, January 31, 2011
Poster Presentations: Tuesday, February 1, 2011

## **COMPETITION:**

Awards will be given for the top posters within every college that has more than 15 posters presented. (First place: \$150, Second Place: \$100, Third Place: \$50).

Note: If a student has class during a portion of the schedule they can attend as they are available.