

Engineering themes surface on sidewalks

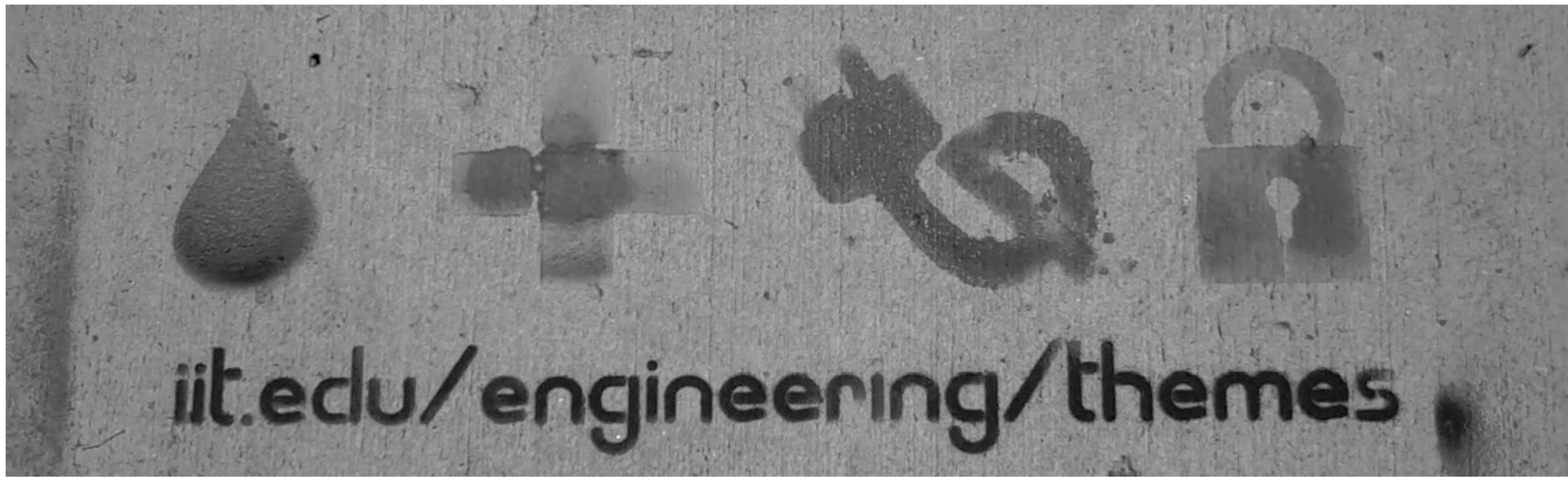


Photo courtesy of Armour College of Engineering

By Amy Henson & Lisa Stok

OFFICE OF COMMUNICATIONS
ARMOUR COLLEGE OF ENGINEERING

Have you seen these around campus and wondered what they stand for?

Here's the answer - the IIT Engineering Themes highlight issues in Water, Health, Energy, and Security through a series of activities and experiences.

"The themes are designed to give students a competitive edge and tangible experience in areas that have long-term global impact," says IIT Dean of Engineering Natacha DePaola. "The themes allow students to explore all facets of the issues - social, technical, and economic - so that when they graduate from IIT, they are already working on relevant and impactful solutions."

According to DePaola, employers know that IIT students are technically savvy, but they also seek employees who can manage

projects, work on a team, communicate, think quickly about the whole problem, and adapt to rapidly changing scenarios.

"These things are best learned outside of the classroom, so we are providing a wealth of opportunities for students to get the experience they need to be competitive," she says.

The IIT Engineering Themes offer:

- Team-intensive Engineering Projects with Project Management

- Meaningful Engineering Internships
- Panel Discussions and Career Panels
- Interactive Problem Solving
- Field Work and Site Visits
- Innovation and Design Projects
- Competitions with Presentation and Communication Components

- Leadership Pathways through Societies and Service

The themes also offer academic experience through theme-sponsored IPROs, technical electives, lecture series, forums, and

inspiring discussions with experts who are on the front line of innovation in each area.

"This initiative is meant to empower students, so we are asking them for constant input and ideas," she says. "The IIT Engineering Themes are the perfect way to bring ideas together and make it easy for students to get every ounce of exposure and experience possible during their time at IIT"

While students get involved in theme activities, behind the scenes Armour College of Engineering is partnering with progressive companies and alumni who see value in giving students these opportunities.

"By partnering with supporters who share our ambition, we can ensure that IIT students get the best opportunities for internships and employment. We have had great success with the launch this fall and you will be seeing even more exciting developments as we grow the IIT Engineering Themes."

How to Get Involved - Sign-up

Online for an Upcoming Event:

Oct. 4 - Security: Seminar by Professor Andy Longinow on strengthening courthouse security

Oct. 13 - Water: Luncheon with Debora Shore, Commissioner of the Metropolitan Water Reclamation District

Oct. 14 - Water: Adopt-a-Beach Day of Service

Oct. 20 - Security: Student Security Society meeting for all interested students

Oct. 21 - Health: Panel discussion on Diabetes, policy, and nutrition with experts Lori Andrews, Eric Brey, and Brit Burton-Freeman

Oct. 27 - Energy & Water: Site visit to The Plant a former meatpacking building, which is now Chicago's first vertical farm.

Find more information, sign-up, and submit ideas at iit.edu/engineering/themes or email them at engineering@iit.edu. Read TechNews for more information about the upcoming events!

Semester's first sustainability forum exciting, successful

By Brock Auerbach-Lynn

TECHNEWS WRITER

The first monthly Sustainability Forum hosted by IIT's Office of Campus Energy & Sustainability (OCES) this past Friday in the MTCC Ballroom was a resounding success. The event's theme focused on the interplay of global vs. local issues in sustainability, more specifically the trade-offs that businesses often face with expansion and global supply chains having significant environmental impacts.

A packed house of 105 attendees ranging from students and staff to community members and local businessmen were treated to a delectable organic lunch (even catering to the gluten-free crowd). Joseph Clair, Director of Campus Energy & Sustainability, got festivities going with a quick overview of sustainability-focused student groups on campus, recently

completed sustainability projects (the B-cycle project, compost facilities, wind turbine at Stuart Field) and presentation of an 'Excellence in Campus Sustainability' award to Jennifer Luttig-Komrosky, Director of Housing.

Professor Weslynn Ashton, who moderated the forum, gave a quick overview of the global vs. local debate bringing in her own diverse experiences in sustainability from India to the Caribbean. The two keynote speakers were Sharon Feigon, CEO of local car sharing company I-Go, and Tim Ryan, Project Manager & Business Development Executive for global audit and consulting firm KPMG.

Ms. Feigon gave a quick presentation on I-Go, focusing on their desire to serve the community and allow Chicagoans to live well without owning a car. She also discussed their plans to install a new solar-powered electric vehicle charging station on IIT's campus. They

hope to place two new electric cars at this location by the end of the year.

Mr. Ryan then gave the audience an overview of KPMG - a global audit, tax and advisory firm which, among other things, helps companies manage their sustainability reporting and decision making to take advantage of global opportunities while considering the social and environmental components of their decisions.

After the introductions, Prof. Ashton, led a spirited discussion, throwing questions at Ms. Feigon and Mr. Ryan regarding their company's strategic focus, operating decisions, social impacts and environmental externalities. Each speaker handled the questions well, outlining their company's focus and future plans, though the contrast between their local and global focus was easily observable.

The floor was then opened for audience members to submit questions to each

speaker. This fleshed out some of the more prescient points of the forum, including the trade-offs companies face between diversifying risk in their supply chains and focusing on global low-cost suppliers.

Furthermore, the idea that access to a wealth of global information allows companies to make more efficient choices in terms of low-cost production was weighed against the fact that these global supply chains are longer, riskier and more environmentally damaging. The concluding remarks from both speakers summed up how each company is striving to meet the needs of local markets while still considering sustainability on a global scale.

The thought-provoking discussion, great company and amazing food left everyone in a good mood that Friday afternoon and looking forward to the next Sustainability Forum on October 28, 2011.

Kilpatrick Lecture: IIT welcomes Dr. George Whitesides

By Utsav Gandhi

CAMPUS EDITOR

"Whitesides's contributions to science range into biology, engineering, physiology, materials science, physics, and especially these days, nanotechnology. Other scientists, government leaders, inventors, and investors worldwide want to hear from him." —Smithsonian Magazine

Dr. George Whitesides presented this year's annual Kilpatrick Lecture and thereafter led a panel discussion on Friday, September 23.

The theme this year, keeping in tune with the Homecoming Renaissance Theme, was "Reinventing Chemistry."

Dr. Whitesides is a Member of the National Academy of Sciences, the National Academy of Engineering; a Fellow of the American Association for the Advancement of Science, and the American Academy of Arts

and Sciences; along with being the co-author of more than 1,100 articles, #1 on Hirsh Index of living chemists; and the holder of more than 100 patents.

He has also served as an advisor to the National Science Foundation, NASA, Department of Defense, and NRC. As you can guess, there was significant interest in hearing him speak - it's not every day that IIT plays hosts to such extraordinary achievers.

Dr. Whitesides stressed on the fact that research universities have an obligation to fulfill - to the government, to the general public, to their students and to the profession in general. The big problems plaguing science and today's world in general, as well as their solutions, are in the field of energy, healthcare, globalization and robotics.

There is a great need to reinvent research, development and education in general at our colleges and universities if we are to

rise to cope with these problems. In a world where society is more excited about Facebook reinventing itself than advances in science, how do we achieve that?

Therein comes in the fundamental importance of projecting an image interesting enough to excite people. He gave the illustrating example that if one day at a social gathering he was to start talking about his initiative Diagnostics for All as "a nonprofit enterprise to provide low-cost, easy to use postage-stamp-sized diagnostics tools to be used onsite in developing countries" people will give him confused stares and run the other way - but if he said he was attempting to make advances in the quality of life of people in developing countries, they were more likely to be interested, hang around, and talk to him about it.

He commented that today's education is using textbooks which are designed to sell, not engage students in research - and

therein lies our stumbling block towards the goal of reinventing chemistry. If we can excite and inspire students to have awareness for tomorrow's problems and how science and engineering can help solve them, we are more likely to find the solutions to them soon.

At the end of the reception he held after the panel discussion, this editor had an enlightening conversation with him regarding how engineering can help solve the persisting problem of unorganized growth that megacities such as Mumbai, India are facing.

It was a great feeling to know that IIT's small size allows students the rare opportunities to talk to such distinguished achievers personally and take away valuable lessons outside the classroom.

The Kilpatrick Lecture will be posted online soon. Please visit the Department of Chemistry's webpage or email the office for more information.