

# Innovations

THE NEWSLETTER OF THE FRANKLIN W. OLIN COLLEGE OF ENGINEERING

## Olin Receives Accreditation from NEASC

*Decision caps four-year process*



The Franklin W. Olin College of Engineering has received accreditation from the New England Association of Schools & Colleges (NEASC). The college received a "Certificate of Accreditation" from the association on December 7, signaling that it has met the body's standards for membership.

"NEASC accreditation is a major milestone for Olin College," said Olin President Richard K. Miller. "It is recognition from our peer institutions that our academic program is sound and in good standing. This decision is also an implicit acknowledgement of the hard work and diligent efforts the Olin College community has put in to make this a first-rate educational institution."

Word of the accreditation decision caps a process that began in 2002 when the college officially opened and

applied for candidacy status from NEASC. There followed two visits by official NEASC teams under the auspices of the association's Commission on Institutions of Higher Education.

In addition, the college also produced two "self studies" detailing how it was meeting NEASC standards in such areas as curriculum and finances. These efforts culminated in the recent vote by the NEASC board of directors to grant Olin accreditation. Accreditation applies retroactively to Olin's first class, which graduated in May 2006.

The reaction in the Olin community was swift and very positive. Olin parents, who perhaps felt the lack of accreditation most keenly as they sent their talented sons and daughters off to an untested new college, were overjoyed.

"That is awesome," e-mailed Cyndi Markoch of

*(continued on back cover)*



Alumna Mikell Taylor ('06) proudly displays Olin's NEASC Accreditation certificate in her office at Bluefin Robotics.

## "NEASC accreditation is a major milestone for Olin College"

— Richard K. Miller

## National Media Outlets Recognize Olin's Success

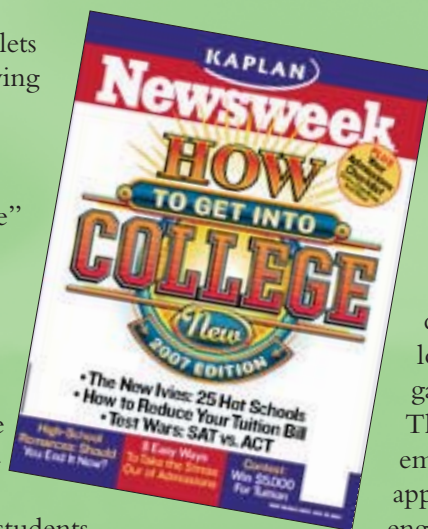
*Newsweek Counts Olin Among 25 "New Ivies" and Business Week Names Olin to its List of Best Design Schools*

Two highly regarded media outlets recently recognized Olin's growing academic reputation.

In August 2006 Kaplan/*Newsweek* published its 2007 "How to Get into College" guide, in which it named Olin College one of the 25 "New Ivies." These are schools with exceptional academic programs and campus offerings that have seen a rise in stature to rival the Ivy League and other traditional academic powerhouses in competing for the nation's top students.

The "New Ivies" list was created in 2006 to recognize the growing reputation and heightened selectiveness that Olin College and other academically outstanding schools have achieved, in light of growing popularity among top students within a booming college-bound population. This elite group was selected based on admissions statistics as well as interviews with administrators, students, faculty and alumni. Information is provided on each institution focusing on the school's unique appeal and profile.

Just a few short months later, in its October 9th issue, *Business Week* magazine



included Olin College in its first-ever list of the top design programs in the country. The eclectic list includes business schools, engineering schools and traditional design schools. The magazine noted that companies are increasingly looking for design talent to gain competitive advantage. The schools on the list emphasize multidisciplinary approaches, combining engineering, business and social sciences. They team teach, and organize students into teams as part of the learning process.

"This has been a year of many milestones for Olin," said Olin President Richard Miller. "The increased recognition we've received in the national media is undoubtedly having an impact; the number of applicants has increased significantly this year, as have the number of visitors to campus and business people expressing interest in working with Olin. We are very pleased to have made both of these influential lists as they are inherently reflective of the quality of the Olin education."



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PRESIDENT'S MESSAGE



Sometimes when I write this message, it is hard to decide what accomplishment to highlight first. This time, the choice is easy: the news that Olin has received accreditation from the New England

Association of Schools and Colleges (NEASC) definitely takes the top spot.

This long-sought recognition takes top honors because it has involved so many of us for so long, and has such wide ranging implications for the future. Although we were always confident that our academic program is top-notch, we weren't sure we would be accredited right away. But NEASC saw what we have known for some time: that Olin stands for excellence in engineering education, and has the resources necessary to deliver its unique, scholarship-funded learning program into the future. I would like to thank the entire Olin community for its dedication and hard work in reaching this important milestone.

In other news, Olin learned in August of its designation as one of the "New Ivies," 25 schools singled out by *Newsweek* as increasingly popular alternatives to the traditional Ivy League schools. This designation is emblematic of our growing reputation in the educational marketplace. Who would have thought when our first students arrived in 2002 that we would be a "New Ivy" four short years later?

We continue to bask in the glow of our first Commencement last May. Every day we receive new reports of the accomplishment of our first graduating class, who have gone on from Olin to Fulbright Scholarships, top graduate schools like Stanford and MIT, and employment with leading companies like IBM, Google and Boston Scientific. In the short amount of time since graduation, they are beginning to make a critical difference in their new environments.

This is what Olin is all about: recruiting the best students, giving them an outstanding engineering education that teaches them to be leaders, and then sending them out into the world to make a difference. I appreciate your help and support in this endeavor, which is so important for our nation's future.

Richard K. Miller, President

CLASS OF 2006 IS MAKING A DIFFERENCE IN MANY SETTINGS

Many have faith in the old saying "The proof of the pudding is in the eating." It's with that sentiment in mind that many eyes are on Olin's first graduating class. Though they've only been out of school for seven months, it's no surprise to see that they are already doing remarkable things. *Innovations* features six Olin alumni below and looks forward to sharing more about our graduates in upcoming editions.

**Jeff Satwicz, Needham, Mass.**

Jeff is currently a Product Development Engineer at Seahorse Power Company – a company that develops, manufactures and sells innovative, energy-efficient products. In this role Jeff is responsible for a number of different product development projects. Specifically he has led successful efforts to reduce manufacturing costs and improve product performance at Seahorse, which was recently named a "Green 50" company by *INC* magazine. On what he feels sets his Olin education apart: "I believe that thanks to the self-directed learning and project environment at Olin, graduates are better equipped to do more advanced jobs earlier."



**Michael Curtis, University of Oxford, Oxford, England**

Michael is working toward his Ph.D. in Atomic and Laser Physics. He is spending a great deal of time working with a team on experimental research with devices called ion traps. His team is trying to develop techniques which might one day allow these devices to be used in a fundamentally new mode of computation based on quantum theory. On lessons he learned at Olin: "The engineering mindset of deconstructing problems into manageable chunks, then integrating the various solutions into a complete system and effectively communicating those results is very well suited for experimental work, which I'm involved in now."



**Nick Zola, Hamburg, Germany**

Nick is in the midst of learning German by taking a number of intensive courses and is helping with a church in Hamburg by conducting a weekly Midweek service and coordinating the transition as his church merges with another. He will soon begin a Master's Degree program in New Testament at Abilene Christian University and from there plans to pursue a Ph.D. with the goal of becoming a university theology professor. His advice for current Olin students: "College is a time to develop who you will be for the rest of your life. Be sure to think periodically about who you are now and who you are becoming."



**Ann Marie Rynning, Air Force Base in Dhaka, Bangladesh**

Ann Marie (pictured here with Officer Nazmin) is working for Automated Sciences, a small company that provides reliable, high resolution, real-time data and imagery through weather satellite systems, software, and services. She's in Dhaka on a training trip. When she's not providing on site support to customers she's living and working in Connecticut.



On her future plans: "In June I will be volunteering with the Peace Corps in Jordan. Since I likely won't be able to play piano, which I love doing, while I'm there I've been taking violin lessons so that I can continue to play an instrument while visiting Jordan."

**Dan Lindquist, San Francisco, Calif.**

Dan works as a Software Developer at Yahoo! Sports, handling backend work for the editorial section of the site. He landed the job after competing in the 2006 Hack Day event, where 500 software hobbyists combined Yahoo's existing Web services with their own coding skills to create new products. Dan stood out for his idea of building a more intensely visual way of reading e-mail by using images loosely correlated to mail subject lines. This allows people to visually associate thoughts with emails instead of having to read and parse the full subject line. On what he misses most about Olin: "I'd probably say that besides the people, I miss the all-night working sessions that truly tested your character."



**Susan Fredholm, Boston, Mass.**

Susan is attending Massachusetts Institute of Technology (MIT). She is enrolled in the Technology and Policy Masters Degree Program within the Engineering Systems Division, where she takes a combination of engineering, law, economics and policy classes in addition to pursuing research. On staying involved with Olin: "I currently serve as an alumni representative and I intend to continue volunteering my time to serve on panels about Olin and participate in various events such as the Open Houses and Candidate's Weekend when possible."



**Career Initiatives Day**

On October 5th the office of Post Graduate Planning held a very successful Career Initiatives Day event to help students prepare for career and life decisions. The day included more than a dozen workshops on topics such as Networking; International Scholarships and Fellowships; Graduate School in Engineering, Math and Science; Exploring Non-Engineering Careers; Marketing Yourself to Employers; and Choosing an Olin Major. The workshops were complemented by an afternoon Career Fair which was attended by 24 companies including Analog Devices, BBN Technologies, Bluefin Robotics, Bose, Boston Scientific, Case New Holland, CIA, Common Point, DRS Technologies, FitSense, GE Fanuc, HP, IBM, MITRE, Natick Soldier Center, Nortel, Osram Sylvania, Pratt & Whitney, ProActive Community, PTC, RadiSys, Raytheon, SolidWorks, and Zeetoo.



Andrew Price ('09) and Matt Wootton ('09) meet with Kathleen Geist from DRS Technologies.

**The Complete Works of William Shakespeare (abridged) – Fall FWOP Performance**

This fall, the Franklin W. Olin Players (FWOP) presented *The Complete Works of William Shakespeare (abridged)*. The successful production was a fast-action, hilarious comedy in which three actors attempted to perform all 37 of Shakespeare's plays in a single 90 minute sitting.



Scott McClure ('09), Andrew Bouchard ('07), and Benjamin Small ('10) perform *The Complete Works of William Shakespeare*.

**Family Weekend 2006**

This year's Family Weekend, October 13th-15th, was one of Olin's most successful to date. More than 140 families participated and feedback from them has been great. "It's a pleasure to see so many students and families enjoying themselves and is a great reminder of how unique and tight-knit the Olin community is!" said Krissy Raposa, assistant director of Parent & Alumni Relations.

**Artwork in Autumn Event**

On October 14th, during Family Weekend, the offices of Development, Parent & Alumni Relations, External Relations and the Parent Advisory Board hosted a silent auction of artwork as part of a reception in the Academic Center. The event included students, families participating in Family Weekend, and invitees from the communities of Dedham, Needham, and Wellesley. The inaugural event was a success and the offices involved are planning to host it again next year.



The Mitchell family joins their daughter, Ryan ('10), second from left, for Family Weekend festivities.

**Fall Open House**

Olin's annual fall Admission Open House was held on October 29th. The most heavily attended open house to date included nearly 400 participants from more than 20 U.S. states and Canada. Positive energy was quite evident throughout the day and the majority of students who completed the open house survey indicated that the days' events made them want to apply to Olin. Additional feedback indicated that attendees appreciated how kind and easy to talk to the Olin students, staff, and faculty were and that they valued seeing the types of projects students and professors are working on.



The 2006 fall Admission Open House was Olin's biggest to date.

**Olin Hosts Wellesley's 125th Anniversary Finale Event**

The grand finale of Wellesley's 125th anniversary was celebrated at Olin on November 12th. Dubbed "Come Back to Needham" — a reference to Wellesley's 19th-century roots as a part of Needham — the event featured an open brunch, campus tours, and door prizes.

**SERV Auction**

The Olin College community service organization, SERV (Support, Encourage and Recognize Volunteerism), held its third annual service auction on December 1st. The auction is a completely student organized event, and raised over \$6,800 for the Chernobyl Children's Project and Partners in Health. Nearly 100 community members donated items or service offerings to the auction, which included a week-long silent auction and a live auction with Matt Donahoe ('08) and Kat Kim ('07) serving as auctioneers.



## NEW GRANTS

### INCREASE IN EXTERNALLY SPONSORED RESEARCH FUNDING SEEN AT OLIN

Since the fiscal year began last July, Olin has seen a significant increase in external funding of sponsored projects for research and research-related activities. As of January 1, awards had more than doubled, to nearly \$2.5 million, when compared to the same period last year. The number of successful grants also more than doubled.

Highlights include two sizeable NSF awards for equipment—\$478,845 to support the acquisition of a high-tech microscope and \$208,167 for a sophisticated infrared spectrometer. Another major NSF award—\$354,287—funds a study of engineering-related classroom learning methods and their effects on women. The largest single award—\$1.1 million—was from the Sloan Foundation to support the ongoing work of the Sloan Consortium, an association of online learning providers based at Olin and Babson.

“I am very pleased to see such a large increase in the number and funding of sponsored projects,” said Olin College President Richard K. Miller. “It is a welcome sign that the external funding community sees great value in the research and related activities of our faculty.”

The chart below summarizes the awards received since July, in chronological order:



(left to right) Professors Rebecca Christianson, Yevgeniya Zastavker, Debbie Chachra, and Alisha Sieminski secured a \$478,845 NSF grant for a confocal microscope

SPONSOR	PRINCIPAL INVESTIGATOR	ACTIVITY	AMOUNT
Sloan Foundation	Dr. John Bourne	Renewed funding for Sloan Consortium	\$1,060,000
NSF	Dr. Yevgeniya Zastavker	Acquisition of confocal microscope	\$478,845
Stanford University/NSF	Dr. Ozgur Eris	Using Digital Libraries to enhance engineering education (Stanford/Strathclyde collaboration)	\$34,386
NSF	Dr. Jon Stolk	Acquisition of infrared spectrometer	\$208,167
NSF	Dr. Yevgeniya Zastavker	Study of effects on women of engineering-related classrooms that emphasize project-based learning in comparison to other methods	\$354,287
University of Richmond/NSF	Dr. Sarah Spence Adams	Supports a project to increase interest in mathematical sciences through Long-Term Research Experience (LURE) model	\$209,214
University of Washington/NSF	Dr. Ozgur Eris	Year two funding of a study of undergraduate engineering students to explore how people become engineers	\$49,505
Babson/NSF	Dr. John Bourne	Educating engineering faculty about entrepreneurship	\$51,849
NCIIA/Lemelson Foundation	Dr. Mark Somerville	Supports work on an automated TB tester	\$17,250
<b>TOTAL July 1, 2006 through December 31, 2006</b>			<b>\$2,463,503</b>

## SCOPE PROGRAM

This year's SCOPE program (Senior Consulting Program for Engineering) features a total of fifteen projects ranging from Alzheimer's research to finding energy sources for oil exploration instrumentation. Sponsors of the program include four returning companies, several Fortune 500 companies, a couple of smaller enterprises and one project sponsored by the college itself. SCOPE consists of a major year-long project which Olin seniors, working in teams, undertake for a corporate or other "real-world" sponsor. Following is a brief synopsis of each project; additional information can be found on the SCOPE website: <http://www.olin.edu/scope/>.



Olin Members of the MIT-DARPA team – (left to right) Jeffrey Glickman, Zachary Brock, Alexander Epstein, Michael Siripong, Katy Moyer, and Keoni Mahelona



Pratt & Whitney team – (left to right) Matthew Tesch, Sara Marshall, Alexandra Wheeler, Christopher Doyle, and Rob Nix



Team ROCONA – (left to right) Kevin Sihlanick, Madge Dodson, Lauren Hafford, Daniel Lin, Simon Helmore, and Andrew Bouchard with their autonomous tractor



Three members of the Boeing team – Kori Haymore, Alison Schmidt, and Char Laughlin

**Boeing:** The team will conceptualize, define, and validate new and novel light weight passenger support and retention systems (seats) for commercial jet aircraft.

**Boston Scientific (two projects):** Both projects are on the leading edge of medical device technology. One team is developing a surgical instrument that can be used in many types of endoscopic procedures, while the other team is continuing a project from spring 2006 that aims to improve a device used to treat gastrointestinal diseases by addressing a known usability issue.

**DEKA:** This confidential project investigates wireless motion controllers using a rugged serial bus designed for industrial environments (CANbus).

**FW. Olin Alzheimer's Project:** The goal of this project is to design and build a device that could help people with early-stage Alzheimer's stay connected with their families and remain independent.

**Hewlett-Packard:** The team is working to develop proposals for new business areas for HP utilizing their market-leading inkjet printer technology.

**IBM:** The team will work to provide a next-generation retail store solution through the development of a cart-based store imaging system. This platform will help determine product restocking schedules as well as report on the shopping experience for store owners and product vendors.

**Lexmark:** The Lexmark team will design and prototype novel applications for their multifunction printers, improving user-interaction and identifying novel applications that address the needs of users.

**MIT-DARPA:** MIT and Olin College have formed a team to enter the next DARPA Grand Challenge, a competition that features fully autonomous ground vehicles conducting simulated military supply missions safely and effectively in a mock urban area. The team submitted a proposal to DARPA and won a fully funded grant to enter the annual autonomous vehicle competition.

**Nortel Roots II:** A continuation of the 2005-2006 Nortel ROOTS project, the Nortel ROOTS II team will use the design ideas produced last year to develop a technological solution to problems faced by network managers and information technology specialists.

**Nortel SALSA:** The team is working to leverage sensor technology, Olin's network infrastructure, and some of Nortel's research software platforms in order to create innovative applications of potential benefit to the Olin community.

**Pratt & Whitney:** The principle goal for this modularized probe project is to design and demonstrate a temperature / pressure probe that is wirelessly connected to a data acquisition system to test jet engines.

**ProActive Community:** The team is working to design and prototype a facility that addresses the need in the small events marketplace (125 persons or less) for flexible, adaptable, high impact presentation venues for corporate, private, and public events.

**ROCONA:** The team is working in conjunction with a large California-based agribusiness to develop support technologies that would improve the efficiencies of agriculture. This project is a continuation of last year's successful Vision Agribotics project.

**Schlumberger:** The team is tasked with developing energy-harvesting technologies to collect energy from various sources to provide power locally to oil exploration instrumentation.

## SCOPE TEAM



FW. Olin Alzheimer's Team – (left to right) Susan Tse, Daniel Gallagher, Kristen Dorsey, Catherine Murphie, Laura Stupin, and Alison Lee

### Spotlight: Olin Alzheimer's Team

The F.W. Olin SCOPE Team is diligently working on a project to create a device that will allow a person with Alzheimer's disease to live independently for a longer period of time. Five Olin seniors, Alison Lee, Kristen Dorsey, Catherine Murphie, Daniel Gallagher, Laura Stupin, as well as Wellesley senior Susan Tse are working on this year-long engineering project. The goal of this project is to improve quality of life by developing a device that will allow patients to live longer in their homes and remain more independent. From September to December 2006, this team of six students worked to understand the needs of Alzheimer's patients and their care givers. After initial research and user interviews, they developed a series of product ideas that would employ technology to assist early-stage Alzheimer's patients in their daily lives, such as a locating device, Alzheimer's-friendly telephone and a mental engagement device. Several design values helped guide the evolving ideas, and extensive technology research and experimentation was conducted to select a single idea to carry forward.

The selected device, Mind Scout, is a tool which can offer reminders and answer common questions. Mind Scout will accompany the patient around the house throughout the day. A flexible interface, both visual and auditory, will combine with intuitive software to make the device as user-friendly as possible for both the person using the device and for the care giver. The care giver can easily program the device to answer specific questions as well as to acknowledge daily activities that the person would do.

From January to April 2007, the F.W. Olin SCOPE team will be refining the software and hardware technologies in Mind Scout so that the team can produce a rough prototype that demonstrates the intended interface and functionality. The members will continue to gain feedback from users in order to design the device's interface and form. The client and users look forward to viewing the prototype of a device that may one day relieve some of the daily challenges experienced by families living with Alzheimer's.

- Alison Lee, class of 2007

For more information, visit: [www.olin.edu/scope](http://www.olin.edu/scope)



## OLIN RECEIVES ACCREDITATION

*continued from page 1*

Gainesville, Fla., mother of Chris Carrick '08, upon receiving the news. "I am so proud and feel so very blessed to have my son go to such an excellent school."

Members of Olin's pioneering Class of 2006, who took a chance with their futures by enrolling in the unaccredited Olin, began printing out the accreditation certificate and posting it on their cubicle walls and home refrigerators. "This is great news! Congratulations!" said alumnus Tom Cecil, who is studying law at the University of Virginia.

NEASC accreditation applies to the institution as a whole. Olin is also seeking accreditation for its three degree programs from ABET, the accrediting body for engineering programs. A decision on ABET accreditation is not expected until next summer.

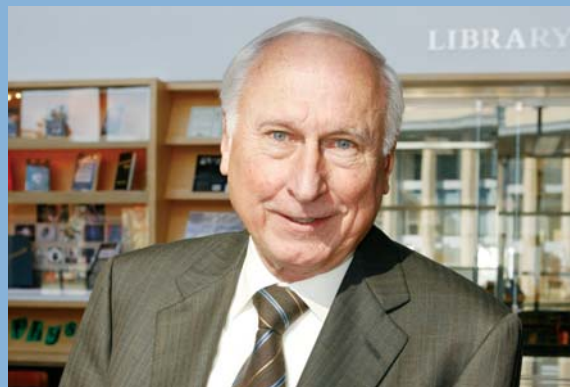
Founded in 1885, NEASC is the nation's oldest regional accrediting association. Focusing on New England institutions, NEASC has as its mission the establishment and maintenance of high standards for all levels of education.

## FEBRUARY JOB AND INTERNSHIP FAIR

On February 21, 22 and 27 from 11:00 am to 2:00 pm Olin College will host a Job and Internship Fair where organizations will have the opportunity to meet with Olin students to discuss opportunities for full-time jobs and summer internships. The College welcomes hiring managers, engineers, and HR recruiters to attend. Space is limited to 10 companies per day. We still have space for a limited number of additional participants. To inquire about open slots, please contact Lisa Frusztajer at 781-292-2283 or [lisa.frusztajer@olin.edu](mailto:lisa.frusztajer@olin.edu).



## PRESIDENTIAL LECTURE SERIES ON LEADERSHIP AND PHILANTHROPY FEATURES RAY STATA



Ray Stata of Analog Devices

Ray Stata, Chairman and CEO of Analog Devices since 1973 and a leader in the high tech industry, spoke at Olin College on November 1st. In a wide-ranging talk in the Olin Center auditorium, Stata outlined his people-centered business philosophy and pointed to Olin as a model for the kind of innovative thinking needed in the emerging business environment.

Stata described how his company, a maker of analog and digital signal processing equipment, evolved since its founding in the mid-1960s, noting the shift to integrated circuits in the early 1970s and the move into consumer markets in the 1980s and 1990s. Stata said the high tech industry as a whole is approaching a key "inflection point," as customer needs become much more complex. "Customers want more highly integrated solutions," said Stata. "You need to know much more about customer needs." Among the factors driving change today are relentless price pressure, soaring design costs and shorter product life cycles. "The challenge now is that we must be good at a lot of things."

He expressed the hope that colleges like Olin might help provide the leaders and innovators for the new business environment. "The question on the minds of people is what can engineering schools do to better embed entrepreneurial thinking into the souls of graduates," said Stata. "They're looking to Olin to point the way."

## UPCOMING ACTIVITIES AND EVENTS

February 21-22, 2007  
Job and Internship Fair

February 23-24, 2007  
Candidate Weekend I

February 27, 2007  
Job and Internship Fair

March 2-3, 2007  
Candidate Weekend II

April 4, 2007  
Big Conversations

May 3, 2007  
Last Day of Instruction

May 14, 2007  
Olin Exposition

May 15, 2007  
SCOPE Presentations

May 20, 2007  
Commencement for Class of 2007

## Innovations

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