

UH EE Newsletter



Summer 2010

Issue 6

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<http://ee.hawaii.edu>

Department Chair's Message



Greetings to friends and alumni,

The 2009-2010 academic year has been challenging but successful. The University of Hawaii, the College of Engineering, and our department were confronted with unprecedented budget cuts and hiring freezes. By working with the College administration and instituting College lab fees these impacts will be minimized.

In November 2009, we were visited by the Accreditation Board for Engineering and Technology (ABET) to evaluate our program. We are awaiting the final report but preliminary indications are positive.

We are pleased to announce a new Computer Engineering Bachelor of Science degree, two Department of Energy grants, professional faculty and student awards, and an outstanding Eta Kappa Nu chapter award.

On June 1, 2010 Professor James Holm-Kennedy is retiring after 34 years of dedicated service to the department. Jim has been instrumental in building up and maintaining the Physical Electronics Lab (PEL) and conducting education and research in the device area. Many undergraduate and graduate students have been trained by Jim in the device area. These former students are now productive engineers working in many companies both here and on the mainland. Some of his students now serve on our department's Industrial Advisory Board.

If you have any questions or comments feel free to email me at kuh@hawaii.edu or call me at 808-956-7527. We also have a University of Hawaii Electrical Engineering Alumni site on linkedin.

Tony Kuh

Aloha Professor Holm-Kennedy!



Professor James W. Holm-Kennedy will be retiring after 34 years of service to the Department. We talked story with him at the Waioli Tea Room in Manoa valley.

Dept EE: How are you doing?

JHK: Great!

Dept EE: How did you get interested in EE?

JHK: I actually studied physics as an undergraduate

Continued on next page

Aloha Professor Holm-Kennedy-- continued

at UC Riverside. Then I went to graduate school at the University of Minnesota. I started to take EE courses and found that I liked them more than the physics courses. There were semi-conductor courses that were in the EE department that the physics department just didn't have. My PhD was in electrical engineering on semi-conductor microwave devices.

Dept EE: When did you arrive at UH?

JHK: 1976. Previously I was on the faculty at UCLA and UC Santa Barbara. Paul Weaver (then UH EE Dept chair) recruited me to the UH. I really liked the local students here, I thought they were great.

Dept EE: What was it like when you arrived at UH?

JHK: Primitive by my standards. There were no lab facilities nor a program in semi-conductors. No industrial recruiting I recall. It took a lot of effort to get the program going. I made many trips to mainland companies like Intel, Motorola, HP, and Fairchild. I started building the PEL (Physical Electronics Lab) assisted by Kazu (Professor Najita). Since we didn't have the budget, I successfully solicited many equipment donations from industry.

The PEL student experience provided hands-on opportunities which were previously nonexistent here in semi-conductors. And we had high quality local students. They just excelled. Hawaii is a special place with its culture. Work ethic is really high, and I know a lot of the students have a great sense of humor. First rate technically, and have a way of getting along very well with others.

It's really the high quality students and their preparation that helped give the PEL its industrial credibility. Students like David Okada, my first PhD student, Gordon Lee, Noel Fernandez, Donald Umemoto, Aaron Oki, Nobu Nakamoto, Djoko Hartanto, Lynelle Yoshimi, Richard Ida, and many many others, all great students and now superb and successful professionals. Those well prepared, high quality students helped me bring in mainland companies, like HP, Intel, and Motorola, to our department to recruit. The quality and preparation of students was so high that we almost got Motorola to build a facility here.

Dept EE: How has the department changed over the years?

JHK: For students, there are more diverse opportunities than ever. Our new faculty are all first-rate. David (Garmire), Aaron (Ohta), and Alek (Kavcic) are some of the faculty that give us great diversity. So I think the quality of the department is higher than it's ever been. A real challenge for the department and the university is to retain our current faculty, ensuring that salaries and resources are adequate and competitive.

I think students today have to know and do more than ever before, and be able to cross disciplines. The multi-disciplinary feature is so important.

Dept EE: What do you like most about living in Hawaii?

JHK: Working with the local students has been a joy. I also love the life style and people here, the fresh air and great weather.

Dept EE: How is your son doing?

JHK: Robert's doing great. He's in premed at UCSD. We see him during the breaks and the summers. He and I have a father-son fishing trip every year in Oregon.

Dept EE: What are your future plans?

JHK: I'll continue my research in biomedical sensors. I have collaborators at JABSOM (UH School of Medicine) and a foundation for collaborations at the University of Indonesia and the University of Singapore. I have been invited to help start a new university in Asia.

I'd like to spend more time on traveling, maybe Spain, Brazil, Italy. The fishing trips with Robert.

I have an interest in making musical instruments, like guitars, using my technical knowledge of fields and waves so that's something I may get into. I'm also thinking about writing children's books. I've recorded some tales when my son was very young. Children's stories can provide early education. I have an interest in recruiting top local high school students to our EE program through special activities. The kinds of things I'm interested in involve the creative process.

Dept EE: Well it looks like you'll be even busier in the future. Thank you for this interview, and congratulations on your retirement!

JHK: Mahalo!

New Bachelor of Science Degree in Computer Engineering

A new Bachelor of Science Degree in Computer Engineering will be offered by the Department of Electrical Engineering in Fall 2010. It covers computer hardware and software, computer organization and architecture, computer and network security, software engineering, computer networks and Internet technology, embedded systems, computer-aided design, multi-core and parallel computing, wireless networks, and other topics. The program was jointly sponsored by the Department of Electrical Engineering and the Department of Information and Computer Sciences, and was approved by the UH Board of Regents on November 2009.

College of Engineering Awarded \$2.5 Million to Develop Clean Energy Program

UH Mānoa's College of Engineering, with the support of Hawaiian Electric Company, has been awarded a \$2.5-million American Recovery and Reinvestment Act stimulus grant from the U.S. Department of Energy to train students and current workers for emerging jobs in clean and renewable energy technologies in the electric power industry.

Officially titled, "Integrated Education and Research in Clean Energy and Island Sustainability," the project is a major component of UH Mānoa's Renewable Energy and Island Sustainability (REIS) program. Led by Electrical Engineering Professor Anthony Kuh, REIS seeks to establish a prominent national and international program in renewable energy at the university. UH Mānoa will use these funds to create a multi-disciplinary program of formal courses and hands-on research experience in clean energy technologies, renewable energy production, energy storage, integration and smart grid technologies.

"This funding from the U.S. Department of Energy will enable UH Mānoa to play a key role in the education and research in developing clean energy technologies in Hawai'i and the United States," said professor Kuh. "We are delighted to have a proactive partner like Hawaiian Electric to help us develop this ambitious program."

Utility companies like Hawaiian Electric will benefit from better informed consumers, educators and a future workforce trained in renewable energies. In addition to creating a pipeline to support the integration of new wind, solar, wave and smart grid technologies, the project aims to enhance the training of the existing workforce in these areas.

To read more: <http://www.uhm.hawaii.edu/news/article.php?aId=3553>

Team Hawai'i to Compete in US Department of Energy's 2011 Solar Decathlon

The U.S. Department of Energy has announced that Team Hawai'i, made up of representatives from UH Mānoa and Honolulu Community College, is one of 20 teams selected to compete in the 2011 Solar Decathlon. The design-build competition will take place on the National Mall in Washington, D.C., in Fall 2011. The team includes EE Assistant Professor David Garmire and former EE student (BS, MS) Jason Akagi.

The competition challenges teams of college and university students from across the nation and the world to create and operate solar powered houses that are affordable, energy-efficient, and attractive.

To read more: <http://www.uhm.hawaii.edu/news/article.php?aId=3553>

Wayne Shiroma is the 2009 Recipient of the N. Walter Cox Award



Professor Wayne Shiroma was named the 2009 recipient of the N. Walter Cox Award, in recognition of his service to the Institute of Electrical and Electronics Engineers (IEEE) Microwave Theory and Techniques Society (MTT-S). IEEE is the world's largest professional association with more than 375,000 members in more than 160 countries.

The N. Walter Cox Award established in 1989, recognizes an individual who has given "exemplary service to the IEEE MTT-S in a spirit of selfless dedication and cooperation," and is given in memory of N. Walter Cox, a longstanding MTT-S volunteer.

To read more: <http://manoa.hawaii.edu/news/article.php?aId=3278>

Eta Kappa Nu Delta Omega Chapter Honored Again

The University of Hawaii at Manoa Delta Omega Chapter of Eta Kappa Nu (HKN), the electrical and computer engineering honor society, was awarded the Outstanding Chapter Award at the Electrical and Computer Engineering Department Heads Association (ECEDHA) meeting this past March in Clearwater, Florida. This is the fourth consecutive year that our chapter has been honored. This year 22 out of 175 active university chapters received the Outstanding Chapter Award for the 2008-2009 academic year.

To read more: <http://www.uhm.hawaii.edu/news/article.php?aId=3564>

Student Awards

- Reece T. Iwami, a graduate student, will receive a prestigious Graduate Fellowship from the Microwave Theory and Techniques Society (MTT-S) of the Institute of Electrical and Electronics Engineers (IEEE). He will receive the award at the IEEE MTT-S International Microwave Symposium in Anaheim, California later this month. The IEEE MTT-S Graduate Fellowship is an internationally competitive award whose recipients are selected on the basis of a research proposal and academic potential.

To read more: <http://www.hawaii.edu/news/article.php?aId=3609>

- Larry Martin, an electrical engineering undergraduate, has been selected by the National Consortium for Measurement and Signature Intelligence (MASINT) Research (NCOMR) as the recipient of its prestigious scholarship. The NCOMR scholarship is bestowed upon students who have achieved an outstanding academic record, personal success, and an interest in participating in national security research.

To read more: <http://manoa.hawaii.edu/news/article.php?aId=3119>

- UH Outstanding Graduating EE Seniors: Jianwei Zhou, Fall 2009; and Bao Jun Lei, Spring 2010
- Professor Tep Dobry received the 2010 Hi Chang Chai Excellence in Teaching Award

Alumni and Friends

Mahalo!: We would like to thank our alumni and friends who have supported our faculty recruiting and academic activities through their generous donations:

- University of Hawaii College of Engineering banquet funds will be used to upgrade the COE HP computer lab and upgrade equipment and computers in EE undergraduate instructional labs.

Make a Donation: If you would like to make a donation to our program, please go to

<http://www-ee.eng.hawaii.edu/alumni/index.php?all=3>

where you will find information about charitable giving. To ensure that your contribution goes directly to the Department of Electrical Engineering, be sure that this is indicated on your donation.

Social Networking: The Department has a "group" in www.linkedin.com, which is a social networking site for professionals. The group is for alumni interested in finding classmates and connecting with the Department. The group is named

"University of Hawaii Electrical Engineering Alumni".

To join the group, you must be a member of www.linkedin.com. Use the search engine to find the group and then request to join. The group was created in July 2009 and currently has 160 members. Please join!

Pictures

Professor Holm-Kennedy's Retirement Party at the Willow's Restaurant



Jim talking with Jean Imada



Jim (reading card) and Gail



Jim and K. Najita



Physical Electronics Laboratory (PEL) Team from the Past



EE People



Tom Gaarder and Bharat Kinariwala
at the Honolulu Academy of Arts



Bert Oyama
Recipient of the College of
Engineering Distinguished Alumni
Award at the 2010 College of
Engineering Banquet



Keith Oshiro and Jeff Battles
from Spirent
2010 College of Engineering
Banquet

Campus Buildings



Frear Hall (New) and Gateway Hall



Frear Hall



Johnson Hall

See the plans for the Campus Center renovation: <http://www.hawaii.edu/campuscenter/renovation/>