

# CONNECTIONS

NEWSLETTER OF THE DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING AT THE UNIVERSITY OF MARYLAND  
GLENN L. MARTIN INSTITUTE OF TECHNOLOGY • A. JAMES CLARK SCHOOL OF ENGINEERING

## MERIT Program Now One of the Largest Structured Internship Programs in the Country

The Department's undergraduate Maryland Engineering Research Internships Team (MERIT) Program is now one of the largest of its kind in the country, thanks to a new research component and additional funding from the National Science Foundation.

The MERIT Program, which offers students the opportunity to engage in cutting-edge, team-based research, was initiated in 1998. The program has expanded every year since its inception.

The newest component to MERIT is the Internships in Computer Engineering (ICE) program, which features research projects in areas such as Computer Architecture, Embedded Systems, Software Engineering, Real-Time Systems and VLSI Design. The MERIT Program also includes the Research in Telecommunications Engineering (RITE) Program, which is funded by NSF, and the Microelectronics Research Agreement (MICRA) Program, which is funded by the Army Research Laboratory. All three components are unified under the MERIT Program umbrella.

Last summer, 28 students from schools such as Princeton, Carnegie Mellon, Case Western, Duke, RPI and



*Pictured: The entire 28-student group of participants in last year's MERIT Program, in a photograph taken just after the MERIT Fair.*

Maryland participated in the 11-week MERIT Program. In addition to their research activities, students attended a variety of academic and research-related seminars, and visited several local high-tech companies. On August 13, students presented their projects during the annual MERIT Fair, during which ECE faculty and representatives from industry served as judges and recognized the top three MERIT research projects.

MERIT students receive a stipend for their work during the summer, as well as housing expenses if they reside outside of the Greater Washington Metropolitan Area. Students who are eligible to continue their research during subsequent academic semesters also receive a stipend while they are a part of the MERIT Program.

The goals of the MERIT Program are to: involve talented students in a diverse research program; introduce them to team-based and cross disciplinary research; and to help them prepare for graduate school and define their career goals.

The Department plans to expand the MERIT Program even further in coming years, in terms of both the breadth of the research areas students participate in, as well as extending the program's focus to include partnership with industry.

## Department Launches Innovative Program to Enhance Learning on the World Wide Web

The Department received funding during the Fall '99 semester for a new, web-based electronic textbook program.

This initiative, called the Hierarchical, Asynchronous and Multimedia Learning using Electronic Textbooks (HAMLET) Program, is supported by the GE Fund and will be developed for an initial period of three years. The program aims at using information technology and web-based tools to create electronic learning environments (or e-texts) that will complement traditional modes of teaching and learning. The e-texts will supplement students' classes and textbooks by reinforcing concepts with advanced visualization, simulation and animation tools, by enabling them to conduct virtual experiments, and by giving them an environment to test and apply the knowledge they have gained as they progress through their course work.

Students will be able to complete the experiments and exercises in the e-texts at their own pace, so if they feel as though certain material was covered too quickly during class, they can go back and review it through the e-text environment. Conversely, if students want to move forward with their course work or explore certain concepts at a greater depth, they will easily be able to do so in the e-text learning environment.

Each e-text will consist of a hierarchical structure specific

for a particular electrical engineering course. This structure will include high-level slides, along with hyperlinks, to lower levels of the text that will include detailed lecture notes, mathematical derivations, graphical illustrations, tabulated data and other supplementary information. Each of the above-mentioned hyperlinks will also be linked to additional material to assist students in fully understanding the concepts presented during a given class.

Each module will include, where applicable, images, graphic files, digital video clips, and other pertinent multimedia materials. An e-text will not simply contain the theoretical information necessary for students to progress through the undergraduate curriculum, rather it will provide them with a medium through which they can apply and experiment with the theories they have learned.

E-texts will be sequenced in a way that allows for common threads to develop between sub-discipline areas. These connections will assist students with comprehension, as well as support a variety of learning

*continued on page 2*

### Inside

- 2.....Message from the Chair
- 2.....Fall Distinguished Lecturers
- 3.....Jasmine Labs Open
- 3.....Motorola Joins IAP
- 3.....General Dynamics Joins IAP
- 4.....Staff News
- 4.....Student News
- 5.....Faculty News
- 7.....Alumni News
- 8.....Destler Named VP for Research and Dean of the Graduate School



*Pictured: Professor and Chair Nariman Farvardin*

## MESSAGE from the chair

Welcome to the Fall 1999 edition of *Connections*. I am delighted to have this opportunity to share with you some of the progress the Department has made this semester.

Rather than summarize all of the wonderful accomplishments that we have featured in this newsletter, I thought it might be useful if I review for you in brief the status of our academic programs. I do, however, encourage you to read through the items in this issue of *Connections*, about our new electronic textbook program, the new component we have added to the MERIT Program, about the new initiatives created by our alumni, about our new laboratory, the new members of our industrial affiliates program, our new faculty and staff members, and about our recent faculty and student awards.

At the graduate level, the Department set new records in the number of applications received, in student selectivity, in yield, and in the average GRE score of the students who enrolled in our program. Of the nearly 1,300 applications received, only 208 were admitted and 126 ended up joining our department. Further, our efforts in recruiting a more diverse pool of students are bearing fruit: This year, the number of U.S. students and the number of women rose sharply. The quality of students joining the Department has risen as well, as represented by an average Quantitative+Analytical GRE score of 1491. Over the past five years, the number of applications has increased 70%, the student selectivity has improved from 47% to 16%, the yield has increased from 26% to 61%, and the average Quantitative+Analytical GRE score of incoming students has gone up from 1406 to 1491.

The Department's undergraduate programs continue to grow, both in number and in quality, as reflected by this year's increased enrollment and rising SAT scores. With new courses offered each year, the expansion of the Department's honors program, new laboratory and classroom facilities, and innovative programs such as the Maryland Engineering Research Internship Teams (MERIT) Program, the Department's undergraduate programs offer students some of the best opportunities in the country for acquiring a first-class education.

The demand for the computer engineering degree program continues to exceed all previous expectations, presenting exciting new opportunities and challenges for the Department. In just its third year, the computer engineering program has become the most popular degree program in the Clark School of Engineering. In Fall '99, 132 freshmen in computer engineering (with average SAT scores of 1306), and 86 freshmen in electrical engineering (with average SAT scores of 1326) joined the Department. In addition, compared with one year ago, not only has the number of newly enrolled freshmen in computer engineering risen, but the number of students entering electrical engineering has followed suit. The aggregate freshman enrollment in these two programs experienced a growth of 19% in one year, 57% in two years and 109% in three years! As a result, the total undergraduate enrollment in the Department has taken a sharp upward turn. While this growth in enrollment is impressive, what

### Distinguished Lecturers Varaiya, Ning Visit Department



*Pictured: Professor and Chair Nariman Farvardin and Dr. Pravin Varaiya, from the University of California, Berkeley, who visited last fall as part of the Department's Distinguished Lecturer Series.*

The Department continued its successful Distinguished Lecturer Series this past semester with two esteemed speakers in electrical and computer engineering.

Dr. Pravin Varaiya, from the Department of Electrical Engineering and Computer Science at the University of California, Berkeley, delivered a talk entitled "Demand and Provisioning of Quality-Differentiated Internet Access," on Friday, November 19.

Dr. Tak Ning, from the IBM T.J. Watson Research Center, delivered a talk entitled "With SiGe, Who Needs Gas?" on Friday, December 10.

Both lecturers also hosted a round table discussion for faculty and students during the afternoon of their lectures.



*Pictured: The new Jasmine International Telecommunications Computer Assisted Instructional Facility, a specialized learning environment for communications-related research and course work.*



**GENERAL DYNAMICS**  
Advanced Technology Systems

*General Dynamics, continued from page 3*

Department of Defense as well as for commercial customers. GDATS is a diverse business consisting of three business units, each providing products and services to a different customer base: Defense Programs, Commercial Programs and Advanced Projects.

The business that became GDATS in 1997 was founded just after World War II, when the U.S. government needed the world's best technologies for undersea communications and acoustic processing for national defense. As the premier research company for Western Electric and later AT&T and Lucent Technologies, the company that is now GDATS led the way in technological advancement by developing fiber optics and specialized systems that have helped the U.S. Navy track enemy submarines. GDATS has designed and built these and other communications systems for more than 50 years.

## STUDENT news

### ECE Students Receive Honorable Mention in Computer Research Association's Undergraduate of the Year Award Competition



*Pictured: Students Elaine Cheong and Tom Carley (third and fourth from left), along with (from left to right) Dr. David B. Stewart, Dr. Lisa Kiely, and Julian Requejo.*

Students Thomas Carley and Elaine Cheong received honorable mention in the Computer Research Association's "Outstanding Undergraduate Award" competition for the year 2000. This award is given as a recognition of "undergraduate students who show outstanding research potential in an area of

importance to computing research."

Thomas Carley is a senior in the Department. His research, conducted in the Software Engineering for Real-Time Systems (SERTS) Laboratory under Dr. David B. Stewart, has included projects such as "Computer Controlled Electric Trains: A Testbed for Real-Time Software Experimentation," and the "EchindaTM Real-Time Operating System," which is being designed for microcontrollers and DSPs.

Elaine Cheong is also a senior in the Department. She has worked with Dr. Stewart in the SERTS Laboratory since the beginning of her sophomore year as an undergraduate research assistant. Research projects she has been involved with include the development of a Java Pre-Processor and the "EchindaTM Real-Time Operating System."

The CRA Outstanding Undergraduate Award was sponsored this year by the Mitsubishi Electric Research Laboratory.

### Milchberg's Student Receives 1999 APS Plasma Physics Division Dissertation Award

Mr. Tom Clark, a former doctoral student studying under

Prof. Howard Milchberg, received the 1999 APS Plasma Physics Division Dissertation Award.

Tom Clark's dissertation, entitled "Hydrodynamical and Optical Properties of the Plasma Waveguide," involves the investigation of plasma fibre, a long thin cylinder of explosively ionized gas that is perfect for focusing and then carrying a high intensity laser beam over long distances, at intensities many orders of magnitude higher than those capable of destroying an ordinary glass optical fibre. Plasma fibre is of interest as a basic plasma physics phenomenon, but also holds great promise for its possible application to the development of a laser-driven GeV electron accelerator on a table top, a project that Milchberg's research group is also currently pursuing.

Tom received his doctorate in June 1998 from the Department of Physics and is currently at the Naval Research Laboratory, where he is involved in laser research related to communications. There were approximately 30 other students nominated for the award, from institutions such as Princeton, MIT, UCLA, UC Berkeley, Cal. Tech., the University of Michigan, and the University of Texas.

## STAFF news

### Mr. Tien Doan

Mr. Tien Doan joined the Department last summer as a System Engineer.

Before joining the Department, Doan worked as a Senior Project Engineer for General Motors Global Research and Development, in Rochester, NY. Doan received his bachelor's degree in electrical engineering from the University of Pennsylvania, and his master's degree in computer science from the Rochester Institute of Technology.

Doan supports software installations in the Department for both the Windows NT and UNIX environments. He is also the lead designer for the HAMLET Project (see page 1).

### Mr. Clifford Russell

Mr. Clifford Russell joined the Department in August as a Systems Analyst.

Prior to joining the Department, Russell worked for four years at the NASA Goddard Space Flight Center as a PC and UNIX Administrator, as well as in the area of IT Procurement.

As a systems analyst, Russell provides the Department with IT infrastructure support and implementation.

### Ms. Nenita Ronquillo-Harris

Ms. Nenita Ronquillo-Harris joined the Department during the Fall '99 semester as a Coordinator for Research Grants.

Before joining the Department, Ronquillo-Harris worked for six years as a Business Manager in the University's Art History and Archeology Department, as well as five years as an Accounting Clerk in the University's Department of Physical Plant Payroll Services.

Ronquillo-Harris's responsibilities include helping to manage the day-to-day business operations and various research grants in the Department.

## FACULTY news



*Pictured: Prof.  
Timothy Horiuchi*

### Prof. Timothy Horiuchi Joins the Department, Strengthens the Research Area of Computation and Neural Systems

Prof. Timothy Horiuchi joined the Department during the Fall '99 semester. Horiuchi, who has a joint appointment with the Institute for Systems Research, earned his doctorate from the California Institute of Technology, where his research was in the general area of computation and neural systems.

Horiuchi spent several years in industry, as a Technical Support Engineer at Tanner Research in Pasadena, Calif.; a Robotics Engineer at Hughes Aircraft Research Labs in Mailbu, Hawaii; and as an Analog Design Engineer at the Boeing High Technology Center in Seattle, Wash. He also worked as a postdoctoral scholar for the Zanvyl Krieger Mind/Brain Institute at Johns Hopkins University.

The primary focus of Horiuchi's doctoral work was the construction of a one-dimensional model of the primate oculomotor system using neuromorphic analog VLSI techniques. In this project, he built a visual tracking system and a simple auditory localization system for detecting and tracking stimuli with saccadic and smooth eye pursuit movements. Just prior to his arrival at Maryland, his research focused on asynchronous digital, spike-based interchip communication and on-chip learning techniques using non-volatile analog memories.

Horiuchi's main research interest continues to be hardware modeling using neuromorphic analog VLSI techniques; however, he also plans to expand this work to include modeling collaborations with neurophysiology labs. In addition to biological modeling work, he plans to pursue various engineering projects related to using neuromorphic analog VLSI sensors and processors for building very small, low-power, autonomous robotic creatures for use in special purpose applications such as planetary exploration and biomedical devices.

Horiuchi is the Director of the Computational Sensorimotor Systems Laboratory here at Maryland, which currently focuses on the modeling and implementation of biological sensorimotor systems for both scientific and engineering purposes.



*Pictured: Prof.  
Steven Marcus*

### Marcus Named Editor-in-Chief of *SIAM Journal on Control and Optimization*

Professor Steven Marcus has been selected as the new Editor-in-Chief of the *SIAM Journal on Control and Optimization*, one of the most prestigious journals in the research area of controls.

The *SIAM Journal On Control and Optimization* contains research articles on the mathematics and

applications of control theory and on those parts of optimization theory concerned with the dynamics of deterministic or stochastic systems in continuous or discrete time or otherwise dealing with differential equations, dynamics, infinite-dimensional spaces, or fundamental issues in variational analysis and geometry.

Dr. Marcus received his doctorate from the Massachusetts Institute of Technology in 1975. From 1975 to 1991, he was with the Department of Electrical and Computer Engineering at the University of Texas at Austin, where he was the L.B. (Preach) Meaders Professor in Engineering. He was Associate Chairman of the Department during the period 1984-89. In 1991, he joined the University of Maryland, where he served as Director of the Institute for Systems Research until 1996. He is currently jointly appointed with both the Department of Electrical and Computer Engineering and the Institute for Systems Research.

Marcus is a Fellow of the IEEE, and a member of SIAM, AMS, and the Operations Research Society of America. He is Associate Editor of *Mathematics of Control, Signals, and Systems*, the *Journal on Discrete Event Dynamic Systems*, and *Acta Applicandae Mathematicae*. He has written or co-authored more than 100 articles, conference proceedings, and book chapters.

Dr. Marcus' research interests lie in the areas of control and systems engineering, analysis and control of stochastic systems, Markov decision processes, stochastic and adaptive control, learning, fault detection, and discrete event systems, with applications in manufacturing, acoustics, and communication networks.



*Pictured: Prof.  
Mario Dagenais*

### Dagenais Receives *R&D Magazine* 1999 R&D 100 Award

Professor Mario Dagenais received the *R&D Magazine* prestigious 1999 *R&D 100 Award* last year for the Optical Modulator/Switch (OMS), a product he recently co-developed with a team of researchers from the DOE's Lawrence Livermore National Laboratory and from AlliedSignal Federal Manufacturing Technology. The *R&D 100 Award* is given in honor of "the 100 most technologically significant new products and processes of the year."

The OMS can both modulate and amplify optical communications signals, and is not only smaller, but also costs hundreds of dollars less than current devices used to modulate and amplify signals. The OMS modulates a low-level laser light source by switching it on and off at nanosecond rates. In the switched configuration, the OMS switches optical signals on and off. When it passes these signals, it amplifies them. The device occupies the space of a medium-sized integrated circuit.

*The Chicago Tribune* called these awards "The Oscars of Invention," while others have referred to the *R&D 100 Awards* as the "Nobel Prizes of Applied Research." Past winners have included breakthroughs such as the flashcube, the digital wristwatch, anti-lock brakes, the automated teller machine, the liquid crystal display, the halogen lamp, and the fax machine.

For information about the award, visit *R&D Magazine's* 1999 *R&D 100 Award* announcement page, at <http://www.rdmag.com/rd100/100award.htm>.

## Antonsen, Lawson Receive Award in Vacuum Electronics



*Pictured: Prof. Thomas Antonsen*



*Pictured: Prof. Wesley Lawson*

Professors Thomas Antonsen and Wesley Lawson are members of a team that received the 1999 *Robert L. Woods Award* for "Excellence in Vacuum Electronics." The awardees were recognized for their contributions to the development of a high average power, 95 GHz, gyrokystron amplifier. The development program included teams from the Naval Research Laboratory, Litton, Communications & Power Industries, and the University of Maryland.

The *Robert L. Woods Award* was established in 1993 by the Office of the Secretary of Defense and the Advisory Group on Electron Devices to recognize outstanding performance by an individual or a team from industry, government, or academe in the development of vacuum electronic devices and technology for defense systems applications.

## Maryland Faculty Dominate Papers in Prestigious Computer Architecture Workshop

Professors Shuvra Bhattacharya, Manoj Franklin, Bruce Jacob, David B. Stewart, and Sujaya Srinivasan (recent graduate, master's in EE) each had papers in the recent Workshop on Compiler and Architecture Support for Embedded Systems (CASES). Seven out of the 36 papers accepted for this prestigious conference were from the University of Maryland.

The presence of so many papers from Department faculty in this conference is an excellent indication of the growing strength of computer engineering-related research within the Department.

For a complete listing of papers accepted for the conference, please visit CASES's web site at <http://www.capsl.udel.edu/conferences/cases99/cases99/program.html>. CASES'99 provides a forum for researchers to discuss ideas at the crossroads of domain-specific embedded system design, compiler and architecture research for high-performance computing, high-level synthesis, and emerging application domains enabled by these technologies.

## Stewart One of Five Winners in "Real-Time Architecture Challenge"

Prof. David B. Stewart was selected as one of five winners in the "Real-Time Architecture Challenge," held at the 10th Annual Embedded Systems Conference this year. The challenge was a real-time design problem with ten possible scenarios.

More than 14,000 members of the embedded systems community attended the conference this year in San Jose, Calif. The conference featured the world's largest exhibition of embedded products and services and more than 156 technical courses and tutorials on designing embedded systems.

## Liu, Two Students Receive Best Paper Award for the IEEE 50th Vehicular Technology Conference

Professor K. J. Ray Liu, along with students Ying-Chang Liang and F. P. S. Chin, received the *Best Paper Award* at the IEEE 50th Vehicular Technology Conference, held in September in Amsterdam, the Netherlands. The paper was selected from among 700 papers in the conference proceedings.

## Patents

Prof. Christopher Davis (ECE/ISR) was awarded two patents last semester: U.S. Patent # 5,982,174, for an External Cavity Fiber Fabry-Perot Magnetometer, invented with Richard Wagreich; and U.S. Patent # 5,990,474, for a Near Field Optical Probe. Davis collaborated on this device with former postdoctoral researchers Walid Atia and Saeed Pilevar.

Affiliate Prof. Joseph B. Bernstein was awarded the following patents during the Fall '99 semester: U.S. Patent # 05861325, for a Technique for Producing Interconnecting Conductive Links; U.S. Patent # 05940727, for a Technique for Producing Interconnecting Conductive Links; U.S. Patent # 05920789, for a Technique for Producing Interconnecting Conductive Links; and U.S. Patent # 05585602, for a Structure for Providing Conductive Paths.

Prof. K. J. Ray Liu, David Walnut, Prof. Carlos Berenstein (Math), and ISR doctoral student Farrokh Rashid-Farrokh were awarded U.S. Patent # 5,953,388 for their invention, Method and Apparatus for Processing Data from a Tomographic Imaging System.

## Invited Talks

Prof. Diana Marculescu gave an invited talk entitled "Information-Theoretic Bounds for Switching Activity Analysis in Finite-State Machines under Temporally Correlated Inputs," at the Asilomar Conference on Circuits, Systems and Computers, in Pacific Grove, Calif., October 1999.

Prof. Jon Orloff gave an invited lecture entitled "Theory of Operation of High Resolution Liquid Metal Ion Source Focused Ion Beam Systems," at the 1999 Intl. Symposium on Testing and Failure Analysis, in Santa Clara, Calif., November 1999.

## Books

Affiliate Prof. Azriel Rosenfeld coauthored a book entitled *Content-Based Access to Multimedia Information—From Technology Trends to State of the Art*, by B. Perry, S. K. Chang, J. Dinsmore, D. Doermann, A. Rosenfeld, and S. Stevens, Kluwer, Boston, 1999.

## Levine Named Editor for New Series of Control Engineering Books

Prof. William Levine is the editor for a new series of Control Engineering books published by Birkhauser. The first book in the series, *Robust Kalman Filtering for Signals and Systems with Large Uncertainties*, by Ian Petersen and Andrey Savkin, was recently published.

In addition, *The Control Handbook*, which was also edited by Levine, was recently repackaged into two new publications: *Control System Applications* and *Control System Fundamentals*. All three publications were published by CRC Press LLC, in cooperation with IEEE Press.

# ALUMNI news



## ECE Alumnus Helps Launch New Scholarship Endowment for ECE Students in Memory of Prof. David Simons

The David Simons Endowment was established during the Fall '99 semester by Michael Herson, an ECE alumnus who is now the Director of the Electrical Division for Clark Construction.

The scholarship fund was created in memory of the late Prof. David Simons, who taught in the Department from 1950 through 1985. Simons was Herson's advisor when he was an undergraduate student here at Maryland.

"Electrical engineering was really tough," said Herson. "Prof. Simons was a good guy. He helped bring me along."

Herson graduated from Maryland with a bachelor's degree in electrical engineering in 1972. After playing professional baseball for both the Baltimore Orioles and Milwaukee Brewers, he joined EC Ernst in 1974, and Clark Construction in 1978, where he has remained since.

Simons, who passed away in 1998, sustained a record of strong performance with many contributions to the Department during the 35 years he spent teaching at Maryland. Among the awards he received are: the George Corcoran Award for Significant Contributions to Electrical Engineering Education, the Student Award for Outstanding Electrical Engineering Professor, and the Department of Electrical Engineering Award for a Distinguished Record in Electrical Engineering Education.

The newly-established scholarship fund will support annual awards to electrical engineering students enrolled at Maryland, Herson said.

Herson also said that he hopes other alumni will contribute to the fund. "Simons was a good guy," said Herson, "this is for a good cause, and hopefully we'll be able to keep his memory going."

If you are interested in contributing to the David Simons Endowment, please contact Sandra George, in the Clark School Development Office, at (301)405-3870.



**Prof. Yung-Shan Chou**, who received his doctorate in electrical engineering from the Department in 1996, accepted a position as an assistant professor in the Department of Electrical Engineering at Tamkang University, in Tamsui, Taipei Hsien, Taiwan. Chou's advisor here at Maryland was Prof. André Tits.



**Prof. Eytan Modiano**, who received his doctorate in electrical engineering from the Department in 1992, recently began a tenure track assistant professor position in the Department of Aeronautics and Astronautics at MIT. Modiano completed his doctoral thesis under the supervision of Prof. Anthony Ephremides.



**Prof. Nikos Sidiropoulos**, who earned both his master's and doctoral degrees in electrical engineering at the University of Maryland in 1990 and 1992, respectively, joined the Department of Electrical and Computer Engineering at the University of Minnesota recently, as an associate professor with tenure. Sidiropoulos completed his doctoral thesis under the supervision of Prof. John Baras.

## ECE Alumnus Funds the World's First Living-Learning Entrepreneurship Program Here at Maryland



*Pictured: Mr. Brian Hinman, ECE Alumnus and President and CEO of 2Wire, Inc.*

Thanks to ECE alumnus Brian Hinman, Maryland students will be able to participate in the nation's first living-learning program for entrepreneurship next fall.

The Hinman Campus Entrepreneurship Opportunities (CEO's) Program, initiated with a \$1.7 million gift from Hinman, will bring together undergraduate students from different disciplines to study entrepreneurship, live and work together in a specially equipped dorm, and perhaps even create their own startup businesses.

The program will launch during the Fall '00 semester, when 60 select upperclass students from business, engineering, computer science, life sciences and the liberal arts will learn how to create and manage new technology or business ventures. The students, working both individually and in teams, will live and do much of their learning in a special dorm that, in addition to residence rooms, will have offices, laboratories, and conference facilities with state-of-the-art computing, communications, and laboratory equipment.

Top Hinman entrepreneur teams will have the opportunity to start companies in the Clark School of Engineering's Technology Advancement Program (TAP), an internationally-acclaimed incubator for technology-based companies. TAP is a part of the Clark School's Engineering Research Center, which assists companies by facilitating their access to research, technical assistance and other resources offered by the University.

Hinman, who graduated from the Department with a bachelor's degree in electrical engineering in 1982, is now President and CEO of 2Wire, a California-based developer of home-networking equipment. He is also the Chairman of Polycom, a company he founded, which is a leading provider of teleconferencing equipment. Prior to founding Polycom, Hinman started PictureTel, a leading provider of video conferencing equipment.

The CEO's Program is a joint initiative of Maryland's highly-ranked schools of business and engineering. The program will build upon the Robert H. Smith School of Business's Entrepreneurship Citation Program, which consists of a curriculum of four undergraduate courses that will culminate in a business plan for each new student venture. Hinman entrepreneur students will be able to participate in the Citation Program, as well as take advantage of other relevant programs, such as the University's Dingman Center for Entrepreneurship in the Smith School of Business.



**Destler Named Vice President for Research and Dean of the Graduate School**

Dr. William W. Destler was named Vice President for Research and Dean of the Graduate School last summer.

*Pictured: Dr. William W. Destler, Vice President for Research and Dean of the Graduate School*

Destler, who served on the faculty in the Department for 25 years as Professor and then Chair, took a position as Dean of the Clark School of Engineering in 1994. He led the College of Engineering on a fast-track march to prominence over the past few years, most notably raising research funding to top

ten status among American engineering schools. The school also rose in the *U.S. News and World Report* rankings from 37th to 17th among graduate engineering schools in just four years.

As Vice President for Research, Destler provides leadership in developing the university's research policy, managing the university's relationships with funding agencies, business and industry, and providing the leadership needed to sustain the University's strong growth in research programs.

As Dean, he is responsible for policy development and administration of the decentralized Graduate School, which offers more than 70 advanced degree programs and enrolls more than 8,000 students.

The University of Maryland is a Carnegie Research I institution and a member of the Association of American Universities, a prestigious group of the top research universities in the United States. The University had more than \$217 million in sponsored research expenditures last year.

**Maryland's IEEE Student Chapter Receives Web Page Site Award**

Maryland's student chapter of The Institute of Electrical and Electronics Engineers (IEEE) was given a Silver Award in the IEEE International Student Branch Web Site Contest. Each web site was evaluated by IEEE's Student Activities Committee, and awards were presented for "professional and innovative web pages developed by IEEE student members." Winning IEEE student branches were each awarded a \$200.00 cash prize and a customized certificate.

The faculty advisor for the IEEE group which won the award was Prof. William Levine.

**CONNECTIONS**

*Connections* is published twice yearly for alumni and friends of the Department of Electrical and Computer Engineering, the A. James Clark School of Engineering, and the Glenn L. Martin Institute of Technology at the University of Maryland, College Park.

Comments and questions are welcome. Please send any inquiries to Connections Editor, 2409 A.V. Williams Bldg., University of Maryland, College Park, MD 20742, by phone at (301)405-3516, by fax at (301)314-9281, or E-mail at [schurr@eng.umd.edu](mailto:schurr@eng.umd.edu).

Chair: Nariman Farvardin  
 Editor: Eric Schurr  
 Coeditor: P.T. Ho

No Profit Org.  
 U.S. Postage  
 PAID  
 College Park, MD  
 Permit No. 10

Department of Electrical and Computer Engineering  
 Glenn L. Martin Institute of Technology  
 A. James Clark School of Engineering  
 College Park, MD 20742