April/May 2000 (last newsletter til September - Have a good summer!)

New "Microelectronics Scholarship Consortium" awards 13 scholarships at ECE Spring Banquet

ECE Spring Banquet, 2000

Fairchild Semiconductor, National Semiconductor, and Quadic Systems have announced the formation of a consortium to grow the number of engineers interested in the semiconductor industry. Eight full-tuition and fees ($4656) scholarships were awarded to upper class students and five $1000 scholarships were awarded to high school seniors who will attend UM. The scholarships are administered by the ECE Department, but any student at UM is eligible to apply. The consortium intends to provide outreach to high school students interested in microelectronics who would like to study at the University of Maine.

Scholarship or Award Title	Amount for 2000-01	Recipients
Fairchild Semiconductor	**$4656**	**Rachel Morehouse, Lisa Wellman, Alfred Blaise, Jeremy Thiele**
Fairchild Semiconductor First Year Scholarships	**$1000**	**Michael Chasse, Presque Isle; Nathan Haskell, E. Sullivan; Roxie Payne, Skowhegan; Greg Sinnett, Falmouth; Pat Spinney, Eastport;**
National Semiconductor	**$4656**	**Prashanth Chandrasekar, Sara McCabe**
Quadic Systems	**$4656**	**Ryan Bethel, Steven Turner**

The Edmund M. Sheppard Scholarship	**$1000**	**Benjamin Davis, Nicholas Caler**
The David Dunlap Holmes Scholarship	**$1000**	**Kirill Tsybin, Marcus Soule**
The Carlton M. Brown Scholarship	**$1000**	**Hilary Flinkstrom**
The Walter W. Turner Scholarship	**$1000**	**Erik McCarthy**
The Waldo M. Libbey Scholarship	**$1000**	**Aaron Strange**
The Harold H. Beverage Award	**$500**	**Alma Delic-Ibukic**
The Walter Joseph Creamer Awards to outstanding students in each class	**$500**	**Russ Drazak, Sr Aaron Johnson, Sr Rob Reynolds, Sr Alfred Blais, Jr Steve Turner, Jr Brandon Atkinson, Jr Janelle Tonti, So Ryan Bethel, So John Roberts, Fy**
Francis J. Hovey Award - Outstanding Senior	**$500**	**Russ Drazak**

Alumni/ae Spring Campaign Begins

We encourage all alumni to participate in our Annual Campaign. We are very much trying to establish a community of former, future, and current students. We'd like your help. If you would be interested in allowing us to host a barbeque for potential students or other alumni/ae this summer in your backyard, would you please contact me? (musavi@eece.maine.edu) Thanks.

We found some old photos of faculty that might be of interest to you. I'd love to have alumni send me photos they don't mind sharing. We'll post them on our web page.

Fuzzy Logic Distance Ed Grad Course dates finalized for this summer.

We had a large number of people respond to the last newsletter piece indicating interest in Dr. Bruce Segee's Fuzzy Logic course this summer. The course will be held on the Orono campus. However, the class lecture and discussions will be recorded and distributed, along with notes, on the web using streaming video at 56 kbps. You can take the course over the web!

The course will begin June 12 and run until August 4. There is an enrollment cap of 20 students. To register, go to Summer Registration, click on Session 4, and look for ECE 598 (990) Selected Topics in Electrical and Computer Engineering-Fuzzy Logic. Cr 3. Instructor: Bruce Segee. (For questions about course content, email segee@eece.maine.edu. For questions about registration, contact Wanda.Westley@umit.maine.edu.)

And finally ...

The hot air balloonist is obviously lost. The only option is to reduce height and ask directions. Spotting a possible source below, the balloonist shouts, "Excuse me, can you tell me where I am?"

"Yes, you're in a hot air balloon, hovering 30 feet above this field."

"You must be an engineer," said the balloonist.

"I am, how did you know?"

"Well," said the balloonist, "everything you have told me is technically correct, but it's of absolutely no use to anyone."

"You must be in management."

"I am," replied the balloonist, "but how did you know?"

"Well, you don't know where you are, or where you're going, but you expect me to be able to help. You're in the same position you were before we met, but now it's my fault."

Publications, proposals, etc.

INDUSTRY/SCHOOL VISITS:
Musavi 4/5 SAPPI, Skowhegan
Patton 4/8 Fairchild Semiconductor, Portland

PROPOSALS SUBMITTED
Musavi and Ressom, "Prediction of Paper Opacity and Brightness," (DIC project) SAPPI Fine Paper.

Musavi and Ressom, "Enhancement of Scanned Color Maps," (DIC project) Delorme.

GRANTS RECEIVED
Kotecki received a Teaching and Technology Fellowship for the 2000-2001 academic year sponsored by the Academic Computing Advisory Committee and administered by the Center for Teaching Excellence. The Fellowship program will officially begin in July 2000.

PUBLICATIONS and PATENTS
C. Cabral, Jr., K.L. Saenger, D.E. Kotecki, and J.M.E. Harper, "Optimization of Ta-Si-N thin films for use as oxidation-resistant diffusion barriers," J. Materials Research, Vol. 15, pp. 194-198, January 2000.

F.H. Irons, D.M. Hummels, K.J. Riley, & G.A. Friel, Paper No. 99-9533 - "The Noise Power Ratio -Theory and ADC Testing," accepted for publication in the IEEE Transactions on Instrumentation and Measurement, April.

Duncombe, P.R., Kotecki, D., Laibowitz, R., Natzle, W. and Yu, Chienfan, U.S. Patent #6,054,328, "Method for Cleaning the Surface of a Dielectric," issued April 25.

PROFESSIONAL ACTIVITY
Irons completed a review of paper IM-2148, "A Calibration Procedure for Imperfect Quantizers," for the IEEE Transactions on Instrumentation & Measurement, April 26.

Vetelino attended National Science Foundation Review Meeting, Washington, D.C., April 27-30.

Irons attended the International Symposium on Instrumentation and Measurement Techology and participated in a Standards Committee Meeting and workshop, Baltimore, MD, April 30-May 6.

Musavi attended American Society of Electrical Engineering Meeting at the University of Massachusetts at Lowell, April 28.

Patton attended 2nd Annual Education for Life, Work & Citizenship in the 21st Century: a University of Maine System Initiative Conference, Bethel, April 28-29.

Vetelino met with Yoshio Shimata from Shimadzu Instruments, Japan and collaborated on the ethylene sensor, May 1.

PRESENTATIONS

D.E. Kotecki gave an invited talk entitled "High-Dielectric Thin Films for DRAM - Continued Challenges" at the International Conference on Metallurgical Coatings and Thin Films, in San Diego on 11 April.