

ENGINEERING

By Design

News from Rowan University College of Engineering

Volume VI No. 1
December 2002

New Partnership Brings Rowan Engineering on Board with Navy Facility

The Memorandum of Agreement

October 3, 2002 - A partnership was signed between the Rowan College of Engineering and the U.S. Naval Surface Warfare Center, Carderock Division's Ship Systems Engineering Station (NSWCCD-SSES), Philadelphia.

The Memorandum of Agreement commits both organizations to jointly pursue research, development and technology projects in areas of mutual interest; collaborate in the utilization of both sites' current physical and intellectual capability; and provide mutual support to extend capabilities for their respective programs.



John Senkarik of NAVSEA checks out a testing apparatus designed by Rowan Engineering.

Test Build Design Analyze

2001-2002 Clinic Project:
Design an experiment to test materials as replacements for a mechanical part in a submarine's antenna assembly.

"This NSWCCD-SSES-sponsored project was ideal for our students. They were presented with a real-world problem that had no single, simple solution," said ME Professor John Chen. **"They were challenged to consider various design options, weigh the benefits and costs, and converge on the best design."**

The Navy is looking for a few good engineers. Two years ago, campus recruiter Richard DiCintio came to the College to talk about employment opportunities at the NSWCCD-SSES. It didn't take him long to realize the potential of a long-term relationship with Rowan Engineering.

The NSWCCD-SSES, a 1,700-employee command located in South Philadelphia, has the responsibility for all Research and Development (R&D), Test and Evaluation, In-Service Engineering, and Fleet Support for all hull, mechanical and electrical systems including logistics R&D for the U.S. Navy.

DiCintio, who heads the Department for the Machinery Integration, Communications and Networking at the South Philadelphia facility, invited Rowan's Engineering faculty to visit the site. "We began talking about internships and clinic projects," DiCintio recalled. "I talked about some of our needs and asked about theirs." It was evident that a partnership would be mutually beneficial. The Memorandum of Agreement evolved from discussions about sharing facilities and expertise - and about developing the talents of future engineers.

Engineers will drive new initiatives that will bring automation and new technology to the Navy's fleet of surface ships and submarines, DiCintio explained. The Philadelphia facility has a direct impact on future ship designs. There are 17 Rowan alumni currently employed at the NSWCCD. Undergraduate students are involved in summer internships and clinic projects. "I knew that Rowan Engineering would be a perfect fit for us," DiCintio said.

Inside This Is-

Thoughts from the Dean.....2

Partners in Education.....3

College Notes.....4

Grants and Awards.....6



Thoughts from the

The College of Engineering continues to pursue national recognition as a leader in engineering education. We share a sense of mission and collective responsibility because we are more than just an aggregate of individuals with combined strengths, interests and experience. Our shared understanding, coupled with our engineering curriculum, provides a unique experience for our students. Part of our challenge is to promote critical inquiry, searching for new ways to contribute to the good of our students, our institution and engineering education.

The challenge requires strategic planning at all levels: department, college and campus. Continued development of our strategic plan is timely and necessary as the University responds to change and growth. Because of the significant developments rapidly occurring around us, it is critically important that our plans consider potential opportunities for Rowan University. These developments include Rowan's expanded presence in Camden; the possible merger of Rutgers, UMDNJ, and NJIT; and the expansion of the campus, both in Glassboro and at the US Route 322 and State Route 55 interchange site.

Good plans, for both academics and infrastructure, will make Rowan highly visible. In the past two years President Farish has led the development of a 10-year master plan and a five-year plan for achieving academic excellence. We intend to annually revisit these plans and incorporate new and dynamic events that impact us. Physical campus expansion requires us to assess and affirm our mission and goals (such as quality education, multidisciplinary experience, industrial interaction, engineering clinics, entrepreneurship), and to consider a broad array of opportunities. With the addition of the South Jersey Technology Park and the Technology Business Incubator, new academic programs that can take advantage of those unique resources may be suggested. In order to attract resources and investment that will support new growth, we must have a clear vision of our mission and how we choose to develop. As resources are identified, pursued, and become available, we will then be able to implement our plans.

Future expansion could take many forms, including growth in current programs, new program development, and enhanced graduate programs. Being proactive and developing a sound collegiate plan, with an appropriate timeline, best serves our present and future needs. A small group of dedicated engineering faculty, the College Planning Committee, is leading the rapid development of a draft expansion plan. As alumni and interested partners, if you would like to provide comments or suggestions in this strategic planning process, please email engineering@rowan.edu or contact the Dean's Office at 856-256-5300.

I continue to have a clear sense that the College (as well as the University) is invested in being a premier leader in teaching and learning, with an emphasis on undergraduate education. As you all know, it is one of the underlying principles that attracted me to Rowan. Our challenge is to manage future opportunities for optimum benefit – a strategy for legacy – and Rowan Engineering accepts that challenge.

Regards,

A handwritten signature in cursive script that reads "Dione Doland".

Two Articulation Agreements Bring Opportunities to High School Students

This year two South Jersey high schools signed articulation agreements with Rowan University that will enable qualified students to automatically land a seat in the Rowan Engineering program. On February 20, the Engineering Academy of Williamstown High School entered into the first such agreement between a New Jersey college engineering program and a high school program. On November 22, students enrolled in the Salem County Arts, Science, and Technology High School's Chemical Engineering and Technology Academy hosted at Penns Grove High School were granted the same opportunities when the Academy entered a similar agreement with Rowan.

Established just 5 years ago, **Williamstown High School's Engineering Academy** represents an incredible academic opportunity, allowing students to explore their interests in math and sciences far beyond what mainstream public education offers. This articulation agreement with Rowan College of Engineering elevates the challenge, raising the bar for academic achievement. Their association with the University presents some different and unusual learning experiences. It also presents the opportunity for high school students to be assimilated and accepted into the academic culture of the University. This heightens their awareness of their responsibilities for academic achievement back at the high school. It also entices students to consider possibilities for themselves that they might not otherwise have ever dreamed of.

- **Dr. Charles Ivory**, Retiring Superintendent of Schools
Monroe Township Board of Education



To qualify for one of Rowan Engineering's 120 freshmen slots, Academy students must:

- ◆ earn at least 1200 on their SATs.
- ◆ maintain a minimum 89 GPA.
- ◆ graduate in the top 20% of class.

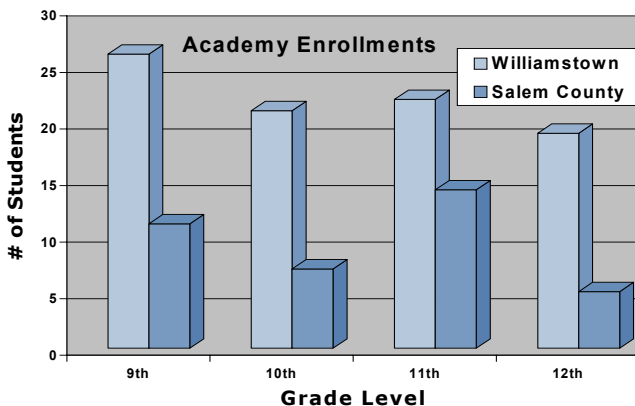


This is an enhancement of the value of the Academy. The broad opportunities offered through this agreement with Rowan will be a real payoff for our students' hard work in math and science.

- **Joseph Massare**, Assistant Superintendent
Penns Grove-Carneys Point Regional School District

Salem County's Academy of Chemical Engineering and Technology was established in 1998, with three full-time students. Two of those students are currently enrolled at Rowan University; one attends NJIT. The articulation agreement between the Academy and Rowan Engineering formalizes a collaborative venture that has existed for several years. Rowan's Engineering faculty has participated in the development of the Academy's programs. Academy students have had opportunities to work with engineering faculty and students at their school and on Rowan's campus. They have participated in summer engineering experiences. As seniors, they travel to Rowan University for classes in English composition and Calculus-based physics.

Collaborative ventures with secondary schools like the Academy will not only help provide a more technically-advanced education for the high school students but will also provide the trained, talented workforce for the South Jersey region, explained Professor Stewart Slater, Chair of Rowan's Chemical Engineering Department. "These students will have ability to enter the chemical processing fields and work in emerging areas of pharmaceuticals, biotechnology, food processing, and chemical manufacturing. Programs like these are important because they give students something to be excited about."



“The NJDOT Research Showcase provides a forum for knowledge exchange on ways that technology can be applied for the betterment of the State and more broadly, the nation,” said Associate Dean Steven Chin in his opening remarks at the NJDOT 4th Annual Research Showcase.

Chin spoke about plans for a South Jersey Technology Park that will be built near the intersection of Route 322 and 55. Slated for completion within the next two years, this complex will allow Rowan to more easily collaborate with agencies like NJDOT. “Just as technology is reshaping the transportation landscape,” Chin said, “it is also reshaping South Jersey as the high tech frontier.”

NJDOT Annual Research Showcase

The 4th NJDOT Research Showcase, hosted by Rowan University, was an opportunity for university research partners to highlight projects that will help deliver a safe, reliable, affordable and environmentally responsible transportation system for the citizens of New Jersey.



Intelligent Response Vehicle or BearCat: To create an "intelligent" vehicle that could help save lives, Rowan engineering students are working to integrate chemical sensors, infrared cameras, and other technologies.



Troop Car:

A team of ME and ECE students demonstrated the improvements made to a police troop car. With so much technology, the interior of the car was cramped, explained ECE Graduate Student Project Managers Anthony Marino and Edward Guest. The Rowan team is working to "clean up" the cockpit without losing any functionality within the car. In addition to repackaging their current technologies, the team was asked to research emerging technologies. If there were viable choices, the team will implement these technologies in the car.

Enhanced Emergency Location Transmitter for General Aviation: NJDOT's Division of Aeronautics is sponsoring a clinic project that will improve the reliability of crash detection in small aircraft. A prototype, similar to a car's onboard crash detector, is now being tested.

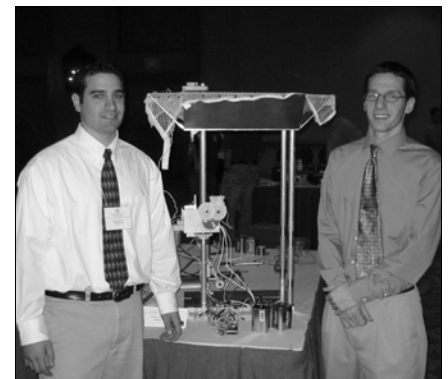


ASME Conference at Rowan

The Rowan Student Chapter of the American Society of Mechanical Engineers hosts the 2002 ASME Regional Student Conference on April 13-14. More than 200 engineering students from New Jersey, Pennsylvania,

Delaware, New York, and Maryland participated. The conference featured speakers, presentations and an awards ceremony, but the highlight of the conference was the pitching machine competition.

“The ASME RSC was a tremendous opportunity for Rowan to showcase its College of Engineering,” said Professor Clay Gabler, Rowan's Chapter Advisor. “The conference was a huge success. In fact, we have been told by the ASME Regional Office that our conference is now the model for future RSCs at other colleges.” Professor Gabler attributed the success of the event to Rowan's enthusiastic ME student volunteers and the leadership team of Amip Shah, Rodney Johnson, and Jeremy Lamb. The teams attended the ASME International Conference in New Orleans.



The pitching machine competition: The machines had to automatically pitch 30 balls into three holes. Participating teams came from Penn State/Altoona, Penn State/University Park, College of NJ, Union College, US Naval Academy, Univ. of Maryland/College Park, and Villanova. Rowan's A Team (Michael Resciniti and

This Bell Rings Against Hunger

Construction® is a national design/build competition in which teams of architects create giant sculptures entirely of canned and packaged foods. It is a nationwide community service project to feed the hungry.

"M'm! M'm! Good!" Humming the Campbell's Soup Company's jingle seemed appropriate. The larger-than-life liberty bell, constructed with 7200 of the familiar red and white cans, would provide good-for-the-soul soup to the hungry of South Jersey.

A team of Rowan engineering students, sponsored by the Campbell's Soup Company, created the symbolic bell for the first South Jersey *Construction*® competition. Organized by the American Institute of Architects – New Jersey Chapter (AIA-NJ), the competition was held in Rowan Hall in early November. The competition gives engineering students the potential to be creative while they try to figure out how to build a stable, recognizable structure, explained Associate Dean Steven Chin. And more than that, it provided the team, all members of the Engineering Honor Society, an opportunity to serve the local community. After the competition, every can was donated to the Food Bank of Southern New Jersey.

Many hands were needed to bring all those cans into Rowan Hall. More help was needed to disassemble the structure and load the cans into the Food Bank trucks. Several campus organizations, including Kappa Sigma Fraternity and Delta Zeta Sorority, volunteered their help. "Hosting *Construction* for the first time was exciting," said Julie Peterson, Coordinator for Rowan University's Center for Service and Learning and Volunteering. "It provided another opportunity for our students, faculty and staff to join forces and be part of an on-going effort to reach out to the community," Peterson said.

Ringin' Against Hunger was created by Rowan's first *Construction* team: Stacey Bush, Johanna Kline, Thomas Smith, Laura Coleman, Michael Lynch, Scott Papson, Disha Sheth, Brooke Sirchio, Thomas Smith, Rose Tortorice, Matthew Hammill (captain), faculty advisor Professor Jess Everett and AIA Advisor Kimberly Bunn.



Associate Dean Steven Chin with *Construction* entry created by Rowan's Engineering Honor Society. Campbell's Soup Company sponsored the project.



Winners of the 2002 South Jersey *Construction* Competition:

Structural Ingenuity/ Juror's Favorite
Rowan - Ringing Against Hunger

Best Use of Labels

Paritosh Kumar - A Tribute to 9/11

Best Meal

Hillier - Sweet Reward



New Venture Development Course

College of Business Helps Engineers Take Product to Market

Engineering students will be able to sharpen their entrepreneurial skills in a new course being offered this spring. Rowan's Colleges of Business and Engineering have teamed up to create a New Venture Development Course. The course is open to junior and senior engineers and business students who are engaged in Undergraduate Venture Capital Fund (UVCF) projects. Professor Mark Weaver, Rohrer Chair for Entrepreneurial Studies in the College of Business, will help students convert their product ideas into viable business opportunities. Engineering students who are undertaking a UVCF project will automatically be enrolled in the new course, giving them the opportunity to not only develop a product, but also learn how to develop a business plan for that product. The Colleges are planning to make this course the first of a four-course sequence that will lead to a certificate in Entrepreneurship and Technology. "The driving force behind this is Engineering's successful clinic sequence," said Weaver.

For their junior/senior clinic, student teams can compete for funding from Rowan's NCHIA Undergraduate Venture Capital Fund (UVCF), which is specifically ear-marked for the development of original student inventions, explained Engineering Professor Anthony Marchese (ME). Funding of up to \$2500 per student team per semester is competitively awarded based on student-generated proposals. To qualify for funding, a multidisciplinary student team must propose, plan and implement an original, semester-long product development enterprise.

Nurturing the Entrepreneurial Spirit

Four years ago, Rowan Undergraduate Capital Venture Fund (UCVF) was established. The fund, with over \$50,000 in NCHIA grants, has netted 18 projects and resulted in 2 student patent disclosures and 3 startup companies.

What's an idea worth?

Does a good idea equal a good business opportunity?

Are you the right person or team to capitalize on it?

In the New Venture Development Course engineering students will think like entrepreneurs, said Professor Mark Weaver. "This is a way of thinking, as much as a way of executing," he said. Students will learn to assess their ideas, determine feasibility, and if applicable, draft a viable business plan to carry it to the marketplace

Mechanical Engineering**STUDENT ACHIEVEMENTS****Awards****ASME Awards**

Amip Shah ('02)

2002 National Charles T. Main Award

Jennifer Demetrio

Regional Student Conference Presentation - Third Place

Joe Plitz and Mike Resciniti

*Regional Student Conference Design Contest - First Place***ASEE Awards**

Aditya Chaubal, Frank Brown, Joe Plitz, Mike Resciniti

*Mid-Atlantic Region, Student Presentation - First Place***NJDOT Award**

Edward Guest

*Research Showcase Student Award***Presentations**

Michael Duffy, William Engisch, David Heritage,

Rabon Jones, and Brent Mitchell, (Presenter)

Development of a Passive Jet Blast Deflector for US Naval Air Craft Carriers
2002 ASME International Mechanical Engineering Congress & Exhibition.
New Orleans, LA**FACULTY NEWS****Recognitions**

Professor Clay Gabler

2002 Outstanding ASME Faculty Award ASME Philadelphia Section
Dwight D. Eisenhower Faculty Fellow - US DOT**Presentations**

Professor Jennifer Kadlowec, (Kadlowec, J. and Gerrard, D.)

Coupled Axial-Torsional Response of Elastomer Bushings
Proceedings -American Chemical Society Rubber Division
Pittsburgh, PA - Oct. 2002

Professors Jennifer Kadlowec, Paris von Lockette,

Eric Constans, Beena Sukumaran, and Doug Cleary

Hand-on Learning Tools for Engineering Mechanics

Proceedings -ASEE Conference. Featured in the NSF Grantees' Showcase

Recent Grants

Professor Clay Gabler (PI):

National Highway Traffic Safety Administration, US DOT
Event Data Recorders (EDR): Engineering Evaluation of Initial Field Data

National Academy of Science, Transportation Research Board

Use of EDR Technology for Roadside Crash Data Analysis

National Highway Traffic Safety Administration, US DOT

Evaluation of Advanced Occupant Restraint Systems Using EDR

NJDOT

Evaluation of Videoconferencing Systems for Transportation Applications

Amip Shah is honored for his achievement in

Civil and Environmental Engineering**STUDENT ACHIEVEMENTS****Awards****ASCE Awards**

Rosie Tortorice

Samuel Fletcher Tapman Scholarship

Stacey Bush

Student Award - NJ Section

Margaret Jacques (02)

*Undergrad Student Photo Competition (ASCE-EWRI) -First Prize***Master Builder's Concrete Canoe Regional Competition****Rowan Engineering - First Place****American Society of Highway Engineers -Southern NJ**

Stacey Bush , Rosie Tortorice

*2002 William Reeves Memorial Scholarship***NJWEA Awards**

Jesse Condon (02)

Daniel Bigler Award

Agnieszka Pierkiel

*Louis Fontanelli Award**Graduate Poster Award - First Prize*

Margaret Jacques, Shira Perlis, Nora Han, Laura Sorrentino,

Jesse Condon, Mike Sterner (ECE), Mellissa Reinfeld (Biology)

*Undergraduate Poster Award - Second Prize***NJAWWA Awards**

Agnieszka Pierkiel

Graduate Poster Award

Jesse Condon, Laura Sorrentino, Dale Snyder, Paul Witthohn,

Greg McGrath, Julie Oropalo, Dan Zelechowski

*Undergraduate Poster Award***Delaware Valley Engineer's Week Council**

Amip Shah (02), Disha Sheth

*Best Undergraduate Student Paper - Junior/Senior Category**Suitability of using California Bearing ratio values to predict resilient modulus***New Jersey Sea Grant Senior Research Award**

Johanna Kline (ChE) Project advisor: Professor Kauser Jahan

Mathematical modeling - autotrophic denitrification kinetics

Presentations**ASCE – EWRI**

Gordan Williams (Presenter, REU Project), Lisa Callahan,

John Witthohn, Faculty advisor Professor Joseph Orlins

Assessment and Restoration of Chestnut Branch of Mantua Creek: An Educational Partnership

2002 International Conference on Urban Drainage

Portland, Oregon Sept. 2002

FACULTY NEWS**Recognitions****ASEE Environmental Engineering Division**

Professor Joseph Orlins

Faculty Early Career Award

Conference Paper: Community-Based Hydrologic Design Project

Professor Joseph Orlins

Appointed Bd. of Supervisors: Glou. Co. Soil Conservation District

Recent Grants

Professors Kauser Jahan (CEE) and Robi Polikar (ECE)

Students: H. Mualem (ChE), P. Witthohn (CEE), M. Faith (ECE)

Innovative Biosolids Research Grant - USFilter

North American Technology Center for Biosolids

Electric and Computer Engineering

STUDENT ACHIEVEMENTS

Awards

IEEE Awards

Aditya Chaubal - *Student Paper Contest - Third Prize*
Design of a Customizable Low Cost Digital Storage Oscilloscope

IEEE Worldwide Web Page Contest-Student Branch Web Site Contest

Rowan Chapter Web Site Design Team:

Jeff Tisa, Disha Sheth, Vishal Shah

2002 First Place - Region 2

2002 Runner-Up - Certificates of Merit - International Competition

2002-03 IEEE Student-Branch Leadership Scholarship-Philadelphia Section

Kevin O'Hanlon and Jon Morris

Presentations

Stefan Krause and Mike Moreton - Project advisor: Professor Robi Polikar

Results on incremental machine learning algorithms.

IEEE International Joint Conference on Neural Networks

Honolulu, HI - May 2002

Jeff Byorick (Grad Student), Supervised by Professors Polikar and Ramachandran

Results on vowel recognition using neural networks.

IEEE International Conference on Information Fusion

Annapolis, MD - July 2002

FACULTY NEWS

Recognitions

Professor Robi Polikar

Whitaker Foundation Travel Award for ASEE Annual Conference and Exposition

Professor Bernie Pietrucha

Appointed Associate Editor - *Reliability of the IEEE Transactions on Semiconductor Manufacturing*

Appointed to Board of Directors - *IEEE InteReliability Physics Symposium*

Presentations

Professor Bernie Pietrucha - *Implementation of Experience-Based Design Guidelines to Improve Product Reliability*

International Military and Aerospace/Avionics COTS Conference

San Diego, CA - Aug. 2002

Professors R. Polikar and S. Mandayam - *A modified Neyman-Pearson technique for radiodense tissue estimation in digitized mammograms*

(Mandayam, Neyhart, Polikar, Eckert, Tseng)

24th Annual Internat'l Conference -IEEE Engineering in Medicine and Biology Society

Houston, Texas - Oct. 2002

Professors R. Polikar and S. Mandayam - *Neural and decision theoretic approaches for the automated segmentation of radiodense tissue in digitized mammograms* (Eckert, Neyhart, Burd, Polikar, Mandayam)

29th Annual Review of Progress in Quantitative NDE, American Institute of Physics, New York - July 2002

Recent Grants

Professors Shreekanth Mandayam (PI) and John Schmalzel (Co-PI)

ExxonMobil Inc. Houston, TX,

Development of an Acoustic Emission Test Platform with Biaxial Stress Loading System

Professors Shreekanth Mandayam (PI), Robi Polikar and John Chen (Co-PIs),

Department of Energy

A Data Fusion System for the Non-Destructive Evaluation of Non-Piggable Pipes

Professors Shreekanth Mandayam (PI), John Schmalzel, Robi Polikar (Co-PIs)

National Science Foundation

Acquisition of a Portable Large Scale Visualization for Nondestructive Evaluation

Chemical Engineering



Dean Dianne Dorland congratulates Professor

STUDENT ACHIEVEMENTS

Awards

AIChE Award

Rebecca Santiago

2002-03 Scholarship Award

Presentations

2002 AIChE Annual Meeting

Mike Gifford, Megan Spence, Andy Toback,

David Urban, Eduardo Cervo, Steve Duke

Chem E Car Competition - Best Poster Presentation

Andrew Toback, Jamie Ginn, Clifford Amundsen

Advisors-Professors R.Hesketh and A. Marchese

EPA Green Engineering Research Paper - First Place

Reduction of Idle Emissions from Semi-trucks

FACULTY NEWS

Recognitions

Professor C. Stewart Slater -

AIChE Fellow Member

Professor Stephanie Farrell -

2002 Ray Fahien Award

ASEE Outstanding Zone

Campus Representative

Professor Robert Hesketh -

ASEE Robert Quinn Award



Professor Slater was recognized for his innovations in engineering education and for his vision and



Rowan University Honors Engineering Faculty

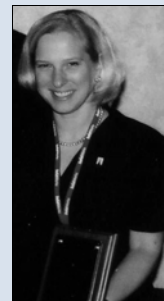
Three Rowan engineering faculty were initiated into the Rowan University "Teaching Wall of Fame."

Robert Hesketh, ChE

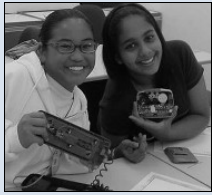
Eric Constans, ME

Clay Gabler, ME

In his annual report, University President Donald Farish named ChE Professor Stephanie Farrell one of Rowan's "Rising Stars."



Attracting Women Into Engineering



Rowan faculty and students conducted workshops for the 7th and 8th grade students.

July 2002 - Rowan University held its 4th annual AWE Program. The goal of the week is to provide teenage girls with hands-on opportunities to explore various areas of engineering while re-enforcing the need for them to stay focused on science and math studies.



Sony Music and Biothane Corp. teamed up with Rowan University to sponsor the 2002 AWE Program.

Alumni Corner

2002 Class Notes

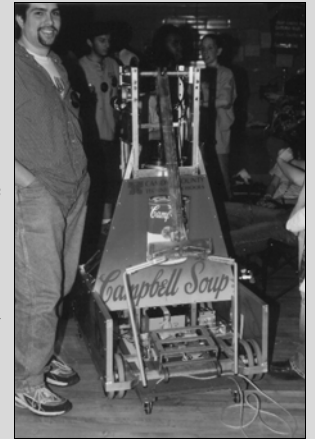
Amip Shah - U of CA, Berkley
Brianne Wissel -Exxon Mobil, U of Penn
Shira Perlis - Cornell
Michael Resciniti - Univ. of Michigan
Joseph Plitz - Carnegie Mellon
David Browning - Colorado State
William McCorkle - Lockheed Martin, grad school
John Kerchner - Naval Nuclear Officer's Training
Pat Kane - NAVSEA
Tom Kurzeja - NAVSEA

FIRST Robotics Competition

Five years ago, Rowan Engineering teamed with students from Camden County Tech School for a FIRST Robotics Competition, a nationwide competition that brings professionals and young people together to solve an engineering design problem. The task: to build a robot using a standard "kit of parts" and a common set of rules.

Professor Anthony Marchese (ME) supervisor of the 2001 team, noted that Rowan's involvement began with a handful of engineering faculty consulting with CCTS. Later, Rowan's ASME chapter held workshops for local FIRST teams to teach them some engineering and science principles. During the past two years, Junior/Senior clinic teams worked directly with students and teachers at CCTS for the competition.

The 2002 competition included 650 teams and over 20,000 participants. Rowan team members were: Jack Gamble, Jason Friedberg (02) Mike Duffy (02) and ME faculty supervisor



Pete Ferrara (01) with the 2001 Robot

Send us an update!

Help us stay in touch!
 Let us know where you're working or going to school. Send contact information to Dr. Heidi Newell at hnewell@rowan.edu

Order of the Engineer Ring

The College of Engineering at Rowan University will host the second annual **Order of the Engineer Ring Initiation Ceremony** during Engineers Week 2003. The purpose of the Order is to stimulate formal public recognition by engineers in the United States of two basic principles: that the primary purpose of engineering is service to the public, and that all members of the engineering profession share a common bond.

We invite all alumni to become members of the Order of the Engineer. The induction ceremony will be held on Friday, February 21, 2003. For more information about the Order, or to sign up to participate, please contact Professor Joseph Orlins, the Faculty Coordinator for the Lower Delaware Valley Link of the Order of the Engineer at orlins@rowan.edu.

Keeping Track...

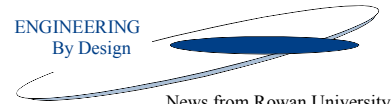
Amol Shah (Rowan '00) - (Stanford University '02 - MS in EE) Living in Denver; working for Qwest, designing software systems.

Jim DeFuria (Rowan '00) - (Univ of Washington '02) - MS in EE) Living In Hillsboro, OR; working for Intel Corp., Logic Technology Development, as component design engineer doing VLSI circuit design for 32-bit desktop processors.

Catherine Jeffries ('00) Graduated from Lockheed Martin's Leadership Development Program; currently working as a program manager in new market development.

Chris Cassino ('00) Successfully defended his master's thesis at Virginia Tech; continuing on for his Ph.D. His thesis: *Detection of Fiber Fracture in Unidirectional Fiber Reinforced Composites using an In-Plane Fiber Optic Sensor*. Works at the Center for Adhesive and Sealant Science (CASS), developing commercial FE models for performance based design of structural adhesive and composite systems.

ENGINEERING
By Design



News from Rowan University
College of Engineering

Dean

Dr. Dianne Dorland

Associate Dean

Dr. Steven Chin

Writer /Editor

D. A. Barsotti

ENGINEERING By Design

is published 2 times a year by the College of Engineering. Its purpose is to inform industry partners, donors and other regional and local businesses, alumni and prospective students about the achievements and successes of engineering students and faculty.

Address: Rowan Hall

201 Mullica Hill Road
Glassboro, NJ 08028

Phone: 856-256-5300

E-mail: engineering@rowan.edu

Web Site: www. engineering.rowan.edu